IGF 2010 - Developing the Future Together

The Fifth Meeting of the Internet Governance Forum

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MESSAGE BY SHA ZUKANG
United Nations Under-Secretary-General for
Economic and Social Affairs

The Internet Governance Forum (IGF) was established by the World Summit of the Information Society in 2006. Since then, it has become the leading global multi-stakeholder forum on public policy issues related to Internet governance.

The value and importance of the IGF has been increasingly recognized in recent years. In 2010, the United Nations General Assembly extended the IGF's mandate for another five years, as recommended by the Secretary-General of the United Nations, Mr. Ban Ki-moon.

This publication includes materials from the meeting - "IGF 2010 – Developing the Future Together" – which was held in Vilnius, Lithuania in 2010. This international meeting convened representatives from the public sector, business, civil society, academia and the technical community.

The main sessions, best practice forums, dynamic coalition meetings, as well as more than 100 workshops meetings, took place over four days and addressed a wide range of topics. Participants tackled emerging issues such as the role that Internet governance plays in human and social development and the impact of cloud computing, as well as continuing IGF themes such as Managing Critical Internet Resources; Access and Diversity; and Security, Openness and Privacy.

In the years ahead, challenges for global policy makers involved in Internet governance will continue to grow, thereby increasing the importance and relevance of the IGF. Indeed, in this past year we witnessed the significant role that the Internet and other information and communications tools can play in a knowledge-based society. Among other benefits, these important tools can contribute to socio-economic development, as well as active civic participation. While it is people and not technology that lead these participatory actions, the Internet, through social media channels, is a highly efficient vehicle of communication. Its ability to transmit information at a rapid pace contributes to an accelerated rate of change. Moreover, broadband and mobile global penetration is increasing at an astonishing pace, especially in developing countries. With such connectivity now in place, the need for accountable, fair and transparent policies governing the use of the Internet is crucial for all countries.

Information and communications technologies have proven time and again to be powerful enablers for social inclusion and sustainable development. They can also play a vital role in implementing internationally agreed development goals, including the Millennium Development Goals. We must ensure that these socially and economically uplifting tools are available to those who need them most. Let us work together, through the IGF, to ensure that we stay on a path of progress towards global connectivity, information-sharing and prosperity.

Thank you.

I. INTRODUCTION

The First Five Years

The Internet Governance Forum or towards new models of participatory global governance

By Markus Kummer

This article looks at the first five years of what started as an experiment in international relations and established itself as a new and innovative model for multistakeholder cooperation and participatory global governance: the Internet Governance Forum (IGF). The author has an insider perspective as, during that period, he served as the Head of the IGF Secretariat.

The concept of an IGF arose between the two phases of the World Summit on Information Society (WSIS). The first phase of the Summit, held in Geneva in 2003, requested the Secretary-General of the United Nations to set up a Working Group on Internet Governance to develop a working definition of Internet governance; identify public policy issues relevant to Internet governance; and develop a common understanding of the respective roles and responsibilities of various stakeholder groups. Among the findings of the Working Group was the recognition that there was "a vacuum within the context of existing structures" and there was a need to address "issues that are cross-cutting and multidimensional and that affect more than one institution are not dealt with by any institution or are not addressed in a coordinated manner"[1].

The second WSIS, held in Tunis in 2005, endorsed much of the report of the Working Group on Internet Governance and produced the Tunis Agenda. Heads of State and government gave a mandate to the Secretary-General "to convene a new forum for multi-stakeholder policy dialogue… called the Internet Governance Forum (IGF)"[2] to deal with the broad range of issues related to Internet governance.[3] The IGF was to be a dialogue between the worlds of government and the Internet community[4] in an effort to bring together the informal, bottom-up structure of the Internet community and the pyramidal, top-down process common to governments. The dialogue was to be focused on the major Internet governance public policy issues, with the aim of fostering the Internet's sustainability, robustness, security, stability and development. The IGF was meant to develop a common understanding of these issues and raise awareness of the development dimension of Internet governance.

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1   Report of the Working Group on Internet Governance, Paragraph 40. http://www.wgig.org/WGIG-Report.html
2   Tunis Agenda for the Information Society (hereinafter referred to as the Tunis Agenda). paragraphs 67 and 72
3   As defined by the Tunis Agenda in the section relating to Internet governance, from paragraph 22 to 82
4   UN Secretary-General Kofi Annan in his address at the inaugural IGF meeting

The IGF was not meant to be a traditional United Nations process. The IGF serves to bring people together from various stakeholder groups as equals, but not to make decisions or negotiate. Instead, they discuss, exchange information and share good practices with each other. While the IGF may not have decision-making abilities, it informs and inspires those who do. The IGF facilitates a common understanding of how to maximize Internet opportunities and address risks and challenges that arise.

Through dialogue the IGF seeks to develop a common understanding of these issues and to raise awareness of the development dimension of Internet governance. By setting development and capacity-building as it's cross-cutting and overarching priorities the IGF made it clear that Internet governance is not an end in itself, but should be responsive to the economic and social dimensions of development. The IGF also aims to be a space that gives developing countries the same opportunity to engage in the debate on Internet governance and to facilitate their participation in existing institutions and arrangements. Ultimately, the involvement of all stakeholders, from developed as well as developing countries, will be necessary for the future development of the Internet.

As a governance model the IGF is built on 'soft governance' and 'soft power'. It has no decision-making authority and no vested self-interest, except from being recognized as a meaningful platform for debate. However its UN mandate gives it convening power and the authority to serve as a neutral space for all actors. As a space for dialogue it can identify issues to be addressed by the international community and shape decisions that will be taken in other forums. The IGF can thereby be useful in shaping the international agenda and in preparing the ground for negotiations and decision-making in other institutions. So while the IGF has no power of redistribution, it has the power of recognition – the power to identify key issues.

Given the pioneering nature of the IGF process, there was no ready template to use when convening the first meeting as a platform for multistakeholder policy dialogue. With hindsight, this absence of established procedures proved beneficial, as it allowed the IGF to experiment and develop a new format for an open and inclusive international meeting under a UN umbrella. The preparatory process started soon after the Tunis summit. Two rounds of consultations in 2006, open to all stakeholders, allowed us to develop a common understanding of how the IGF should operate. A small Secretariat was set up in Geneva to support the IGF, and the Secretary-General appointed a group of advisers, representing all stakeholder groups, to assist him in convening the IGF. The Multistakeholder Advisory Group, as it was later known and usually referred to by its acronym - MAG - developed the broad outlines of an agenda and a programme for the first meeting, to be held in Athens, Greece in November 2006.

During this preparatory process it became clear that the expectations of the various stakeholders varied widely as regards the possible outcomes of the IGF. There were those who would have wanted the IGF to be result-oriented – and they pointed to many open issues that needed to be resolved. They emphasized that the mandate specifically provides for the IGF to make recommendations on emerging issues.

Others, however, saw the merit of the meeting in the meeting itself; in the facilitation of discussion between representatives from government, private sector, civil society and the technical communities who would exchange information and share best practice.

There was a further complicating factor. While the mandate allows the IGF to make recommendations on emerging issues, it was also underlined that it contains the qualifier "where appropriate"[5]. This qualifier is a classical instrument in the hands of those who oppose any proposal; diplomatic tradition has it that the term effectively gives any opponent a right to veto any action – it is sufficient for any delegation to claim that it would "not be appropriate". It should be borne in mind that it would be highly unlikely that such a heterogeneous multistakeholder gathering could – almost by miracle – agree on any of the highly contentious issues related to Internet governance. Furthermore, the IGF is an open forum, which has no members. And without a clearly defined membership structure it is arguably impossible to develop any decision-making procedures that would allow for agreement on any text.

For all these reasons, no negotiated outcome document was expected to emerge from any of the annual IGF meetings, from Athens to Rio de Janeiro, Hyderabad, Sharm El Sheikh and Vilnius. However, from Athens onwards, a Chairman's Summary Report of the meeting was made available and the transcripts of the meetings were not only made available on the IGF Web site, but also in print version in the form of books that document the IGF discussions.

From Athens to Vilnius, from the first to the last meeting of the first phase of the IGF, there was a progression from generalizations and issue segmentation to closer linkages between the main themes. It became clear that some themes were closely linked and had to be discussed together. Discussing security without also addressing the Internet's openness and issues related to freedom of expression would not give the full picture. The same need for strategic confluence emerged when it came to issues of access and diversity. Thus, the IGF made the complexities of Internet governance apparent.

There have been some criticisms of the IGF, but there has also been much praise. Some governments have expressed the concern that they do not have enough influence in global Internet decision-making processes and they hoped that the IGF would reverse this situation. Some civil society representatives expressed their disappointment, as they expected more from the IGF in terms of issuing recommendations for action. However, others have praised the IGF model[6] and, on the contrary, see the apparent weakness of the IGF – its lack of decision-making power – as its strength. For example, the UK government says that the IGF's lack of decision-making power is "one of its fundamental strengths." Since the IGF is not "subject to the constraints of an international negotiating forum, it is able to bring together …key stakeholder experts

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5   Paragraph 72 g) of the Tunis Agenda: "Identify emerging issues, bring them to the attention of the relevant bodies and the general public, and, where appropriate, make recommendations".
6   Comments on the IGF as posted on the IGF Web site: http://www.intgovforum.org/cms/index.php/component/chronocontact/?chronoformname=FormalConsult032009ListView

from across the globe to identify best policy approaches …and the way forward for innovators." The IGF is thus seen as providing a "crucial … international platform."[7] Seen from this perspective, the IGF can serve as a laboratory, a neutral space, where all actors can table an issue. The IGF provides a space for dialogue where interested actors can take up an issue without any fear. Nothing they say at the IGF can be held against them. Nobody needs to be afraid of the IGF, since it cannot take "the wrong decision".

While there was much scepticism to begin with, there is now a broad recognition that there is a complementarity of functions between the IGF and international organizations and institutions dealing with Internet related policy issues. The approach taken within the IGF is always to look at an issue from multiple angles and to take all stakeholder groups into account, whereas most of the existing institutions have a more narrow focus and examine issues through the lens of one specialized group of experts. And because the IGF is not a decision-making body, there is no overlap in terms of function with these other organizations.

Five years after its inception, it seems that the IGF has found its place in the constellation of international institutions dealing with Internet-related public policy issues. It is gratifying to see that what began as a shaky experiment is now the subject of important intergovernmental deliberations in the Commission on Science and Technology for Development (CSTD), in the Economic and Social Council (ECOSOC) and the General Assembly of the United Nations. As a sign of increased recognition, the IGF has been referenced and recognized as a relevant venue for policy dialogue by Intergovernmental Organizations, such as the OECD and Council of Europe at their respective Ministerial Meetings in Seoul in 2008 and in Reykjavik in 2009 as well as the G8 at their Deauville meeting in 2011. Governments, such as the United Kingdom and the United States, also mention the IGF as a key reference in their national strategies.

The Secretary-General, in his 2011 Report to the ECOSOC on *Enhanced cooperation on public policy issues pertaining to the Internet* writes that the IGF "was considered to have had a significant role in shaping public opinion on relevant issues, provided an opportunity to discuss the management of critical Internet resources; and had an important influence on decisions taken elsewhere. The Forum was also considered to have facilitated the sharing of information and experiences, consensus-building, technology transfer and capacity-building. Above all, the Forum has provided a platform for developing a common understanding of Internet governance issues among all stakeholder groups and a cooperative framework to begin addressing them."[8]

It was also noted by many of the participants at the annual meetings that the IGF has matured over the years and has become a space where difficult issues could be

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7   Digital Britain – Final Report. Department for Media, Culture and Sport and Department for Business, Innovation and Skills. Pg 191. Downloadable from: http://www.culture.gov.uk/images/publications/digitalbritain-finalreport-jun09.pdf.
8   United Nations, Report of the Secretary-General, A/66/77–E/2011/103

addressed. The respectful and informed discussions about critical Internet resources that have taken place at each meeting since Hyderabad can be seen as an example of this development.

The IGF multistakeholder participatory model is thus emerging as a viable form of global cooperation. This form of soft governance, though atypical in the UN context, is proving to be an effective and inclusive form of decision-shaping. The European parliament states that "an aspect of Internet governance that has contributed to its success to date has been the use of multi-stakeholder processes to initiate and develop consensus on Internet governance policies."[9] It is also worth mentioning in this context that the IGF is now viewed by some as a model for other international policy arenas.[10]

The spread of regional and national IGF-type initiatives is an unexpected consequence that validates the IGF concept of a platform for policy dialogue. This development has contributed to raising awareness of the IGF and promoted the multistakeholder approach as a new form of participatory democracy and led to moves toward cooperative models of regulation. This approach was new to many governments and has changed the nature of Internet governance in those countries.

The IGF experience thus far illustrates how complex and multifaceted Internet governance is. There is merit in open discussion, with all actors involved. While there are no easy answers to most of the issues addressed by the IGF, there have nevertheless been some common threads that emerged from the discussions:

• Multistakeholder cooperation was seen as a pre-requisite to tackle existing problems: the Internet is the sum of its users; all users are part of the Internet and all actors have a shared responsibility to find solutions.
• While there was a need to discuss Internet governance issues globally, there was a need for acting locally: it is often more urgent to find solutions at the national and regional levels.
• There was a general understanding that there were no 'one size fits all' solutions: all countries have to find their own solutions, corresponding to their own situation. Through the sharing of best practices and the exchange of information they can find solutions that are adapted to their needs.

The role played by developing countries in the IGF has evolved. In terms of meeting attendance, it is worth noting that the participation of developing countries has improved significantly from Athens to Vilnius. Over the years, considerable efforts were made to facilitate the participation of people who were not able to physically attend the meeting through means of Internet-supported technology. All meetings

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9   Internet Governance: the Next Steps. Communication from the Commission to the European Parliament and the Council. Pg 3 http://www.ipex.eu/ipex/cms/home/Documents/doc_COM20090277FIN
10   John Mathiason. Internet Governance: The New Frontier of Global Institutions. Taylor & Francis, 2008. Pg 149

were webcast, with video and audio streaming provided from all meeting rooms while the proceedings of the main sessions were transcribed and displayed in the main session hall in real-time and streamed to the Web. As a result, remote participants had the opportunity to participate via online chat, email, discussion boards and blogs. At the 2008 meeting in Hyderabad, so-called "remote hubs" were introduced as a means of facilitating remote participation. At the Hyderabad meeting, there were nine registered remote hubs, five of them located in the developing world. The remote hubs were primarily located in educational institutions, such as technical colleges, and allowed groups of interested people to follow the proceedings collectively via webcast and interact with the participants of the IGF meeting. From the humble beginning at the Hyderabad meeting with 522 remote participants this number grew steadily in subsequent meetings. At the Vilnius meeting there were 32 remote hubs, 27 of them located in developing countries, with a total of over 1300 remote attendees. There were over 2750 total participants in Vilnius – combining present and remote participants – who represented 107 countries, where more than 95% of the world's Internet users are located.[11]

A better representation of developing countries has also been noted in the MAG as time went by. In 2006, 24 members came from developed countries and 22 members came from developing countries. In 2010, this has changed to 20 members from developed countries and 35 members from developing countries. In percentage terms, developing country representation moved up from 48% to 64%.

Over the years, the gender balance also improved noticeably. In 2006, 37 MAG members were men and nine were women. This balance was improved in 2010, with 19 women and 36 men. In percentages, the number of female members increased from 20% to 35%, well above the generally accepted benchmark of 30%. Similarly, during the initial five-year mandate the participation of young people grew considerably from the inception of the IGF, all the way to Vilnius.

In Tunis, Heads of State and government accepted the principle of a multistakeholder policy dialogue; however they gave the IGF five years to prove its worth. After this first five-year period they wanted to assess its performance before deciding whether or not to renew its mandate. The Tunis Agenda also called for a "formal consultation with Forum participants" to inform the decision making process. The consultation was initiated by a broad-based online process and informal consultations open to all stakeholders throughout 2009. The formal consultation on the possible extension of the IGF mandate, as called for by Article 76 of the Tunis Agenda[12], was held at the fourth IGF meeting held in Sharm El Sheikh, Egypt in November 2009. The general thrust of this process was overwhelmingly in favor of continuing the mandate within existing parameters, as a non-binding platform for multistakeholder dialogue without

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11   ITU's Internet World Stats http://www.internetworldstats.com/
12   "We ask the UN Secretary-General to examine the desirability of the continuation of the Forum, in formal consultation with Forum participants, within five years of its creation, and to make recommendations to the UN Membership in this regard."

any negotiated outcome. Based on this review, the United Nations General Assembly agreed in December 2010 to extend the IGF's mandate for another five years and it endorsed a proposal by the CSTD to set up a Working Group to make proposals for improving the IGF.

This process is under way. The CSTD met in May 2011 and recommended that the mandate of the Working Group itself be extended by another year, given the complexities of the issues related to the IGF. The Chairman's report on the deliberations of the Working Group seems to indicate a continuation of the discussions held in Sharm El Sheik, with three basic positions, that is those who call for change:

• within existing parameters;
• beyond existing parameters; and, lastly;
• outside the mandate set out in the Tunis Agenda.

Many suggestions for improvement are linked to financial and human resources. Most of them had been tried or thought of internally, but were not pursued, due to lack of resources. The IGF is financed through voluntary contributions and, during the first five years of its existence, it operated on a shoestring budget. This should be taken into account, when discussing improvements. Without any doubt, additional resources are welcome and necessary to support the IGF and its increasingly complex operation. However, any proposal for innovations should be assessed in terms of resources. Are there sufficient resources to implement all these suggestions? Incorporating the IGF into the regular UN budget, as suggested by some, would solve some of these problems. However, it would be outside the scope of the IGF mandate, as the IGF was not set up as a new UN body, but as an activity carried out under the auspices of the Secretary-General which cannot be financed through the regular budget.

Looking back at the first five years, the IGF has proved a remarkably resilient organism. It has been evolving since its inception and has set a broad but thoughtful agenda for discussion, consisting of a judicious mix of technological and societal issues. The IGF is not perfect and all participants have suggestions on how to improve it. The spirit of continuous reform is central to the IGF and it has become a tradition of the IGF to constantly evolve and learn from past experience. The IGF has continuously questioned and reviewed its working methods and strived to improve them on an ongoing basis in the light of comments and suggestions made by all stakeholders.

The IGF's main success perhaps was the validation of the multistakeholder Internet governance model, the bottom-up collaboration between many different institutions, where no one is in charge and many organizations work closely together.

The IGF is about the Internet and the Internet is about openness - openness in all its dimensions. The Internet is based on:

• an open architecture and open technical standards; this enables innovation at the edges of the network;

- open, transparent and collaborative governance models, which are expertise driven, with freely accessible processes for technology and policy development.

This principle of openness encourages the free flow of ideas and the exchange of information across borders; it enables innovation and spurs economic growth and thus contributes to social and economic development.

More than 60 years ago, the General Assembly adopted the Universal Declaration of Human Rights. Negotiators then could not possibly have imagined that a quarter of a century later there would be a new invention, the Internet. And yet, it seems that they had the Internet in mind, when they drafted Article 19:

> *"Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers."*

This Article encapsulates the very essence of the Internet and its borderless nature. Whatever future political, technological, economic and social challenges we may face, these core characteristics of the Internet need to be preserved. They are key to the Internet's success and, most importantly, they meet the aspirations of mankind.

EDITOR'S INTRODUCTION

EDITORIAL APPROACH:

The process of editing the proceedings of the 2010 IGF in Vilnius was quite demanding. Fortunately, this is the fourth volume to be published by the United Nations and therefore I was able to follow and call upon the preceding volumes for assistance throughout the process. I must thank in this regard the previous editors, Avri Doria, Wolfgang Kleinwachter, Don MacLean and William J. Drake for their tremendous past efforts and the template they collectively provided.

The initial hurdle in the development of the book was formatting and performing an initial edit of the of 'verbatim' transcripts from the main sessions. Once this was done, the reports of the workshops and other events that took place were retrieved and organized, formatted and given a light edit when appropriate. The primary challenge, however, came in the second phase of the editing process.

Whilst moving slowly through the transcripts, the overall goal was to bring them to a reasonable length while still capturing the flow and essence of the conversations that took place. Oftentimes, statements were made by individuals in English despite the English language being their second or even third language of choice. In these and other cases when the transcriptions failed or were interrupted for various reasons, despite using the video webcasts for some clarification, the resulting text was sometimes very hard to understand.

As a result of these obstacles, while everyone who participated had very unique and usually brilliant things to contribute to the dialogue that took place, the written text of these statements came out a little differently. Some participants read from prepared speeches while others spoke in a 'stream of consciousness' or in immediate response to what others were saying. So in addition to the usual edits performed in previous years, such as eliminating introductory statements, thank you remarks, repetitive and off-topic comments and opinions, personal stories and exchanges and breaking up long strings of text into paragraphs, the bulk of the time spent editing was on cleaning up the grammar and language to create a readable and concise record of what went on while not losing any of the good messages that were delivered that may have been hard to understand because of language barriers and other obstacles. For these reasons, some statements may be easier to understand and have better grammar than others, but I hope what was captured most importantly, was the exchange of opinions and ideas that make the IGF so transformative and unique.

The reports of the workshops and other events were, for the most part, included as submitted by the organizers. Some light editing and formatting was performed to keep them consistent. Only reports that were formally submitted in the appropriate manner to the IGF Secretariat were included, but all of the transcripts from each workshop and event that took place, in addition to the full and un-cut transcripts from the main sessions, can be found on the IGF website.

ABOUT THE BOOK:

Just like the editing process itself, the format and organization of the book followed in line with the previous volumes. In general the book follows the chronological order of the meeting itself. Unlike some previous volumes, background papers and information on the preparatory process were not included this time around. Instead, the volume concentrates on the meeting itself only. Like last year's volume, the reports of the workshops and other events are grouped thematically and follow the transcripts from their corresponding sessions.

The book opens with a message to all IGF stakeholders from Sha Zukang, United Nations Under-Secretary-General for Economic and Social Affairs, which provides perspective about the growing importance of the IGF itself and its path moving forward.

An introductory chapter from former Executive Coordinator of the IGF Secretariat Mr. Markus Kummer is also included in the introductory session. The introductory section also contains a shortened version of the programme for the 2010 meeting. This document, though written now in past-tense, is included to provide both background and a framework of sorts for the rest of the book. It includes information on how and why the sessions were organized the way they were and on the IGF's pioneering remote participation process, among other things.

The second section of the book contains the Chairman's Summary of the meeting. Dutifully prepared immediately after the close of the meeting by the IGF Secretariat, this concise yet comprehensive summary is included for ease of reference and to give the reader a broader picture of what took place before the detailed transcripts of proceedings are presented.

The following two sections make up the bulk of the book, the Preliminary Events and Proceedings. They contain the transcripts edited as described in the section above and are ordered chronologically and contain the transcripts and corresponding reports of the workshops and other events.

The fifth section takes stock of the Vilnius meeting. Included here is a summary of the physical stock taking consultation that took place in Geneva on 22 November 2010 and a summary of written contributions sent to the IGF Secretariat on the topic. Both summaries capture the general comments from participants about what worked well at the meeting, what worked not so well, and suggestions for the future.

Finally, the Appendix provides two pieces intended to help the reader get through the admittedly dense material. A glossary of Internet Governance Terms gives definition to the oftentimes very technical language used amongst the experts during the meeting and straightforward meaning to the many acronyms that are used. The attendance statistics are included to again help paint the overall picture of the four day meeting, allowing the reader to perhaps visualize the broad range of stakeholders from around the world that convened in Vilnius.

INTERNET GOVERNANCE FORUM (IGF)

Programme for the 2010 Meeting

I.   Programme Overview

The objective of the programme is to maximize the opportunity for open and inclusive dialogue and the exchange of ideas; to try and create feedback loops between the different types of sessions; to create opportunities to share good practices and experiences; to listen, engage in dialogue and learn as well as to identify key themes that could, in the future, benefit from the multistakeholder perspective of the IGF. The 2010 programme builds on the previous meetings and especially the programme for 2009. It introduces some innovations in light of comments made both in formal and informal settings in Sharm El Sheikh and during the open consultations on 9 February 2010. It builds on the outcome of the meeting of the Multistakeholder Advisory Group (MAG), held on 10-11 February 2010 and the broad agenda as contained in the invitation extended to all stakeholders by Under-Secretary-General Sha Zukang. The programme underwent further development at the open planning meeting held on 10-11 May 2010 and was finalized at the open planning meeting on 28-29 June 2010. Among the tasks that were dealt with during the planning meetings were decisions on which of the workshops proposals would be used to feed into the main sessions and which ones met the requirements for scheduling as stand-alone workshops.

Remote participation will be strengthened this year in cooperation with the remote participation working group. In order to move from remote observation to real remote participation each main session and all workshops and other events are required have a remote moderator. Every organizer of workshops and other events had been requested to arrange for a remote moderator. Events may be cancelled if a remote moderator is not named and trained prior to the meeting in Vilnius.

Throughout the preparatory process there was a general feeling that there was a need to do more to engage young people – children, youth and young adults - and to take into account the variety of their experience and their needs. This extended to adapting session formats to make them more accessible to young people by mainstreaming youth participation throughout all sessions and by enlisting their help as main session resource persons, workshop panellists and remote moderators.

There was also a common understanding that there is a continuous need for improvements as regards the linkages between workshops and main sessions. Furthermore, many felt that there were too many workshops with overlapping themes, and suggested imposing a ceiling on workshops. Due to decisions related to lengthening the time allocated to workshops and the strict adherence of the schedule to certain rules, such as no workshops scheduled during lunch, there were fewer workshop slots than in previous years. Given the fact that over 100 workshop applications were received, there was a need for bringing down this number, preferably by merging

workshop proposals. Some workshops were designated as feeder workshops to the main sessions and were marked for scheduling at the May planning meeting. The remaining workshops were selected based on their relevance, the completeness and coherence of the proposal and their diversity in terms of geography, viewpoints, gender and stakeholder participation. The willingness to merge was stated as a prerequisite for a workshop proposal being accepted.

The workshops chosen for the final programme were allocated on the basis of available slots after the requirements for the feeder workshops were satisfied.

The list of speakers/moderators of all sessions is attached at annex to this paper. It is preliminary, as not all the information about speakers has been completed.

II.   THE AGENDA OF THE VILNIUS MEETING

"IGF 2010 – developing the future together" is the overall theme for the Vilnius meeting.

The key themes used in the previous IGF meetings have proven their validity and they were maintained for the Vilnius meeting. A new key theme – 'Internet governance for development (IG4D)' - was chosen to replace the theme entitled 'Internet governance in the light of WSIS Principles' from 2009. Additionally, the 'Taking stock and looking forward session' has been refocused to 'Taking stock of Internet governance and the way forward.'

The agenda for the 2010 meeting includes the following key themes:

- Managing critical Internet resources
- Security, openness and privacy
- Access and diversity
- Internet governance for development (IG4D)
- Emerging issues: cloud computing
- Taking stock of Internet governance and the way forward

III.   KEY THEMES AND SUB-THEMES

The MAG discussed a wide variety of sub-themes that fall under the main heading of each key theme. The policy sub-themes have been woven into the various sessions and are, for the most part, matched to workshops that will feed into these sessions. During the open planning session held on 11 May, the attendees divided themselves into a number of thematic groups corresponding to the main sessions. These groups, each with a convenor chosen by the attendees and remote participants at that meeting, reviewed the lists of sub-themes as well as the workshop submissions and created a first draft of the main session plan. Part of the continuing task of the groups included working with workshop organizers to identify workshops that would feed into the main sessions ('feeder workshops') selecting moderators and remote participant

moderators as well resource persons. These thematic groups were also instrumental in brokering some workshop mergers.

Managing Critical Internet Resources

The critical Internet resources session will follow the same model as in IGF 2009. Issues will first be explored in the designated workshops followed by a moderated session where rapporteurs from the feeder workshops will be invited to initiate the conversations on the following sub-themes:

- Status of IPv6 availability around the world; examples and cases;
- The internationalization of critical Internet resources management and enhanced cooperation;
- The importance of new TLDs and IDNs for development;
- Maintaining Internet services in situations of disaster and crisis.

Access and Diversity

The session will focus on access to infrastructure with the related sub-themes of enabling environments and legal frameworks. Because of the addition of the Internet governance for development session it was decided to reshuffle some of the sub-themes between sessions, e.g. topics related to regulatory issues and frameworks for investments were transferred to Internet governance for development. In addition, some aspects related to access to content will also be considered. These include issues that involve the geolocation of hosting platforms, the global reach of social networks and the linkages between access to knowledge and security solutions both in terms of hardware and software. In the access to content discussion, the focus will be on the side effect of the tools and methods used to block content. It was observed that filters installed to block illegal or harmful content or differential access due to the absence of network neutrality could deprive populations from the access to content they would need to realize the Internet's full potential.

Security, Openness and Privacy

It was understood that privacy, openness, and security should not be traded off against one another or seen as opposing priorities. All three need to be considered in every issue that falls within this theme. The sessions from previous years have shown the inextricable interconnection of the three policy areas and have shown that they were all equally important and equally complex.

In 2010, instead of segregating this theme into three silos, the session will orient itself to a few specific and timely issues and investigate them in the light of security, openness and privacy considerations. In order to manage this session, there will be three moderators to ensure sufficient expertise and facilitation of the dialogue on the three themes in relation to the issues.

The areas to be covered will be derived from the workshops and through discussion with workshop sponsors.

Internet Governance for Development (IG4D)

This session will explore the possible effects of global Internet governance arrangements on the development of the Internet and people-centred information societies in developing countries. The discussion will consider the institutional processes and substantive policy outputs of governance arrangements and whether these may raise developmental concerns that have not received sufficient attention to date. The session will be divided into four parts:

1. What do we really mean by Internet governance for development (IG4D);
2. Examples of specific global governance issues that may have particular relevance to development. Possible sub-themes include, among others, the governance of names and numbers, technical standardization, security, international interconnection, intellectual property, and transnational consumer protection, as well as the procedural or institutional aspects of key governance arrangements;
3. How developing and other countries organize and manage their national-level engagement with global Internet governance in the context of their wider national ICT strategies; and
4. How to take an IG4D agenda forward in the IGF and other international settings.

Emerging Issues: cloud computing

Cloud computing has been designated as the theme for the 'emerging issues' session in Vilnius. This session will bring together an overview of the issue from both the policy and the technical perspectives of the area and will provide an initial exploration of the possible Internet governance considerations within cloud computing.

Panellists will introduce each one of the three following sub-themes, after which there will be a discussion, where participants from the workshops feed into the session. They include the following:

- Concept: what is 'cloud'? How can it be used and why should users use the cloud?
- Infrastructure, hardware, and environment.
- Privacy, integrity, confidence in the cloud, public policy, regulation.

Taking stock of Internet governance and the way forward

This session will take stock of the evolution in the overall Internet governance landscape since the first IGF meeting in Athens in 2006. It will serve as a checkpoint on the changes, if any, in the practice of Internet governance over the first five years. It will also serve as a baseline from which to measure the changes over the next five years

leading up to the ten-year review of implementation of and follow-up to the outcome of the World Summit on the Information Society (WSIS) in 2015.

In order to prepare the session, a request for contributions on this theme will be issued on the IGF Web site. All contributions received by 15 July 2010 will be reflected in a synthesis paper that will be prepared as an input into the discussion in this session.

Contributors are asked to focus on the status of Internet governance in the Internet of 2010 and how it has changed since the IGF was created. In particular, they are requested to comment on the following questions:

- Are the main themes of 2005 still relevant today?
- Are there new themes that are being overlooked in Internet governance discussions?
- From Athens to Vilnius: Has the context of the discussions changed, and, if so, how?
- Has Internet governance globally advanced over the five years of the IGF?
- Capacity building: where were we five years ago and where are we now?

IV. PROGRAMME OUTLINE

Internet governance – Setting the Scene

On the first morning, there will be a session providing background on the evolution and current state of Internet governance discussions in the IGF. The objective of the session is to provide participants with some historical context on and an introduction to the main issues of the Vilnius meeting. The session will assess how dialogue on the IGF's main themes evolved over the first four years of the forum, and the extent to which there has been progress in terms of collective learning and consensus building. This year the session will have as a take-off point for the discussion brief presentations by five of the experts who authored background papers for the book documenting the proceedings of the 2009 meeting. Each speaker will present one of the principal themes of the IGF meetings and will outline how the respective theme has been discussed in the main sessions from Athens (2006) through Sharm El Sheikh (2009); assess the level of progress attained over the course of these four meetings in terms of promoting collective learning and mutual understanding among stakeholders; and offer some recommendations on how to productively take the discussion forward in future IGFs. Two speakers drawn from government and private sector will then offer synthesizing responses to the presentations.

Regional perspectives

The 'regional perspectives' session will bring in different regional and national perspectives as they emerged from various meetings held throughout 2010. This will be a moderated session with representatives of the various regional meetings held in 2010. The goal is for this session is twofold. This session will:

Provide regional input on the thematic themes of IGF 2010 to give participants a cross regional perspective;

Allow the representatives of the regional and national meetings to inform IGF 2010 of concerns and topics beyond those included in the programme for IGF 2010.

Panellists will be asked not to read out a report, but to focus on key priorities as they emerged from the session and identify commonalities with other meetings as well as differences, and to convey messages, wherever applicable. Written reports should be made available well in advance of the session and will be posted on the IGF Web site in the section devoted to regional and national initiatives. Remote hubs will be given the opportunity to interact with the meeting. Organizers of regional and national IGF-type initiatives will also hold separate sessions that will allow them to give a full in-depth report of the meeting. In addition, a round table session will allow all organizers of regional meetings to exchange experiences and to discuss how to improve their linkages with the global IGF.

Opening Ceremony/Opening Session

The traditional opening ceremony/opening session will be held in the afternoon of the first day.

Main session on key themes

One main session of three hours duration will be devoted to each key theme, as defined above.

Closing Ceremony

The traditional closing ceremony will be held on the afternoon of the fourth day.

V.   WORKSHOPS

One of the main objectives of the 2010 is to enhance the linkages between workshops and main sessions. Workshop organizers were invited to submit proposals related to the suggested sub-themes.

Feeder workshops

Selected workshops, called feeder workshops, are being woven into the proceedings of the relevant main sessions. As was done in previous years in the session on critical Internet resources, the moderators of other sessions will call on workshop rapporteurs to relate the viewpoints expressed in the feeder workshops. Each feeder workshop will be asked to assign a rapporteur, whose role will include attending the relevant main session, giving a brief overview of the session's discussions and being available to act as a resource to the moderators of the main session. To the extent possible participants

from the feeder workshops are also encouraged to attend the main sessions related to the feeder workshops in order to broaden the discussions on the sub-themes of the sessions.

Other workshops

The remaining workshops were selected based on the completeness of the respective proposals, their diversity in all aspects and their willingness to merge, if and when they were asked. There are two ways in which related workshops were merged, fully or sequentially. In a full merger, two workshops with the same subject manner were asked to develop a single workshop proposal. In an integrated merge, two workshops with the same subject matter developed a common workshop proposal. In a sequential merge, each of two or more related workshops will use a sequential portion of the allotted time. It was not possible to give a slot to all workshop proposals, as the proposals outnumbered the available slots.

VI.   SCHEDULE

The main schedule is as follows:

	Tuesday 14 September	Wednesday 15 September	Thursday 16 September	Friday 17 September
10:00 - 11:30	Internet governance – setting the scene	Managing critical Internet resources	Security, openness and privacy	Emerging issues - Cloud Computing
11:30 - 13:00	Regional perspectives			
13:30 - 14:30	**Lunch**			
15:00 - 16:30	Opening ceremony/ session	Access and Diversity	Internet governance for development	Taking stock of Internet governance and the way forward
16:30 - 18:00				**Closing ceremony**

VII.   GENERAL PRINCIPLES

The following principles were established for the Vilnius meeting:

•   All organizations that hold official events (workshops, best practices, etc.) are asked to commit themselves to submitting a report on their event. Non-submission of a report will disqualify the organization from scheduling an event for the following year;

- Those who did not submit a report for their 2009 event, are not to be included in the schedule;
- Only Dynamic Coalitions meetings which have submitted activity reports/ meeting reports for 2009/2010 are included in the schedule;
- All official events will end at 1800 hours;
- No official events will be held during the lunch-break between 1330-1430 hours;
- The efforts for remote participation in 2010 will be enhanced based on experience gained in 2009 in order to enable effective and interactive remote participation;
- In addition, there will be an opportunity for ad-hoc meetings to be scheduled which will not be part of the official programme.

There should be no prepared statements read out during the main sessions. However, prepared statements can be recorded by any participant and will be made available on the IGF YouTube channel. Efforts will be made to improve the promotion of this possibility. Prepared statements can be recorded and submitted in advance to the IGF Secretariat.

VIII. Meeting types and structure

It was agreed to follow the basic format of past meetings. The objective of the programme is to maximize the opportunity for open and inclusive dialogue.

All main sessions will be of three hours duration. There were demands for different formats, such as two hour sessions. This is not possible, as it is not in line with UN practice and rules, in particular concerning the working hours of interpreters. However, main sessions can be split into two 90 minutes slots, as was done in previous IGF meetings.

All other sessions will be of two hours duration, taking into account wishes expressed by workshop organizers. Some workshops that feed directly into main session or are mergers of various workshop proposals were given three hour slots.

There were calls for tangible outcomes involving the issuing of messages from the IGF. The Chairman's Report of the Sharm El Sheikh meeting points in that direction. It refers to a message addressing the needs of people with disabilities that, at the Session Chair's request, was endorsed by acclamation. Similar outcomes could be envisaged also in future meetings. It was suggested that such messages should come out of each of the sessions. The MAG held extensive discussions on whether the IGF should adopt this practice and systematically issue messages that would come out of each of the sessions. While agreeing that efforts should be made to enhance the visibility of the Chairman's Summary Report, the MAG was unable to reach a consensus on changing past practice. The view was held by some that a focus on main messages would change the nature of the discussions and introduce an element of negotiations. However, the Secretariat committed itself to work with the Chairman to make the Chairman's

Summary Report more reader friendly and to bring out the main points more clearly, maybe in the form of bullet points.

As some MAG Members expressed their preference for the sharing of good practices as opposed to focusing on main messages, the Secretariat informed the IGF community about plans to make an inventory of good practices in Internet governance as a sustainable and dynamic online resource. This initiative is also in line with suggestions made at the Sharm El Sheikh consultation on the mandate of the IGF. While this data bank on good practices would not replace the messages some called for, it will be a more tangible 'take away' than in the past. Good practices that are discussed in Vilnius will be added to the database. Coupled with a more attractive and reader friendly Chairman's Summary it will also be a step towards a more output oriented IGF.

A. Main Sessions

Each of the main sessions will be an opportunity for productive exchange between all stakeholders on policy approaches, challenges, and practical options to address them. Each session will have a chair appointed by the host country and one or two moderators depending upon the session topic. The goal is to discuss practices or issues and their relevance to all stakeholders.

Each of the thematic main sessions will include rapporteurs from selected feeder workshops related to the session themes or sub-themes. The rapporteurs will be asked to respond to questions posed by the moderators at various points during the session.

All of the main sessions will take place in the main meeting hall and they will be organized around the key themes. The will all have live transcription in English and interpretation in all six UN languages. The transcription will be streamed in real time on the Web and all main sessions will be video cast.

(a) Open Dialogue Sessions

Most of the main key theme sessions will take the form of an open dialogue among participants. The dialogue sessions will have neither panellists nor designated respondents, but will have a chairperson and moderators to lead and stimulate the discussion. The goal of these sessions will be to bring as many participants into the dialogue as is possible and will allow for a discussion with maximum interaction among the participants.

(b) Panel Sessions

For some sessions such as the emerging issues session on cloud computing, it was felt that a small introductory panel could be helpful to give the definitional setting for the session and answer questions as they arise. The access and diversity session as well as the 'setting the scene' session and the session on 'regional perspectives' will also be held as a moderated panel discussion

(c) Other sessions

The afternoon of the first day will include the Opening Ceremony/Opening Session, while the afternoon of the fourth day will include a Closing Ceremony. On the morning of the first day, there will be a curtain raiser with a setting the scene session, providing background on the evolution and current state of Internet governance discussions in the IGF and a session on regional perspectives, involving the organizers of the various regional meetings that took place in the course of the year.

B. Workshops and good practice forums

Workshops are designed to explore detailed issues related to the main themes from different perspectives. As in previous years, a precondition for workshops to be included in the programme was a balance of stakeholders and viewpoints.

The aim of the good practice sessions is to demonstrate, in a multi-stakeholder environment, some of the good practices that have been adapted with regard to the key IGF themes in general and to the development and deployment of the Internet in particular. The sessions can have either a thematic or a country focus. Presentations should not only cover practices that were successful, but also focus on challenges and mistakes. Thus, 'lessons learned' are an important output of these sessions. The aim is to provide a space to discuss what constitutes a 'good practice' and to share relevant information that can be transferred to other situations and strengthen capacity-building activities.

Some of the contributions submitted to the open consultations suggested revisiting the concept of round table discussions, but there was limited support for this proposal. However, the set-up of three workshop rooms will be in the form of a hollow square, as was the case in Sharm El Sheikh, thus allowing a round table format. Organizers interested in holding their workshop in form of a round table were requested to indicate this when submitting their workshop proposal. This format could be particularly conducive to result oriented discussions on issues where there is a reasonable chance of participants agreeing to take action together.

The scheduling of all workshops will be determined by the IGF Secretariat on the basis of maintaining a balance across the issues, efficient use of meeting space and an attempt to avoid conflicts in topic or speakers.

Duration of workshops and best practice forums: two hours.

Each workshop and best practice forums will be required to produce a background paper and report on the event.

C.   Open Forums

All major organizations dealing with Internet governance related issues as well as the regional fora were given a slot, at their request, to hold an open forum in order to present and discuss their activities. The meetings should focus on the organization's activities during the past year and allow sufficient time for questions and discussions.

Duration of Open Forums: two hours.

Each Open Forum will be required to produce a background paper and a report on the meeting.

Regional and/or national IGF meetings were offered the opportunity to schedule an Open Forum meeting, in addition to the session on regional perspectives scheduled for the opening day. Special attention was paid to scheduling and setting up these sessions to allow for active participation by any corresponding regional hubs. A slot was also provided for an open forum where all regional meetings and national meetings can exchange experiences and discuss the linkages with the global IGF.

D.   Dynamic Coalitions

The meeting will provide space for active Dynamic Coalitions to meet and to further develop their efforts. Meetings of Dynamic Coalition should not be workshops. They should be action oriented and make an effort to ensure that a broad range of stakeholders can bring their expertise to the discussions.

All Dynamic Coalitions were requested to present a report on their achievements so far in general and on their activities in 2009 and their meeting in Sharm El Sheikh in particular. The reports are posted on the IGF Web site.

Only Dynamic Coalitions that have submitted such a report will remain listed as Dynamic Coalitions on the IGF Web site and were given a meeting slot in Vilnius. All other Dynamic Coalitions will be listed under the heading 'inactive Dynamic Coalitions'.

Organizers are encouraged to work with Dynamic Coalitions in the preparation of related sessions.

Duration of Dynamic Coalition meetings: two hours.

E.   Other Meetings

In general, meeting rooms that are not otherwise booked will be given, as available, to interested stakeholder groups on a first-come-first-served basis, in accordance with United Nations procedures and practice. A number of rooms will be reserved to accommodate ad-hoc requests.

IX. Remote Moderation

Each session will benefit from a remote moderator. All event organizers are requested to arrange for a remote moderator to help in the process of moving from remote observation to genuine remote participation.

The main functions of the remote moderator are the following:

- to connect online with the remote participants (all the equipment and software needed will be provided);
- to moderate the online discussion of remote participants and link it up to the discussions in the meeting room;
- to follow-up for archiving purposes and in view of improving future remote participation efforts.
- to answer questions after the session they moderate in order to get feedback on how to improve the process.

II. THE CHAIRMAN'S SUMMARY

Fifth Meeting of the Internet Governance Forum (IGF)

Vilnius, Lithuania, 14-17 September 2010

Chairman's Summary

The fifth meeting of the Internet Governance Forum was held in Vilnius, on 14-17 September 2010. It focused on the overall theme of 'IGF 2010 – Developing the Future Together'.

With close to 2000 badges issued and 1461 participants, attendance at the Vilnius meeting was similar to the 2009 meeting in Sharm El Sheikh.

Parallel to the main sessions, 113 workshops, best practice forums, dynamic coalition meetings and open forums were scheduled around the broad themes of the main sessions and the overall mandate of the IGF.

The IGF programme and meetings were prepared through a series of open multi-stakeholder consultations, held throughout 2010, in accordance with the IGF's interactive and participatory process.

The entire meeting was Webcast, with video streaming provided from the main session room and all nine other meeting rooms. All proceedings were transcribed and displayed in the meeting rooms in real-time and streamed to the Web. This set-up allowed for remote participants to interact with the meeting. All main sessions had simultaneous interpretation in all official UN languages. The text transcripts as well as the video and audio records of all official meetings are archived on the IGF Web site.

Remote participation was strengthened in cooperation with the remote participation working group. Remote hubs in 32 locations around the world provided the means for more than 600 people who could not travel to the meeting to participate actively in the forum and contribute to discussions.

OPENING CEREMONY

In his opening address to the meeting, Mr. Jomo Kwame Sundaram, Assistant Secretary-General for Economic Development at UNDESA, expressed gratitude to the Government and people of the Lithuania for their warm welcome and generous hospitality on behalf of Mr. Sha Zukang, United Nations Under-Secretary-General for Economic and Social Affairs. Mr. Sundaram remarked that the theme of this year's gathering "developing the future together" was particularly appropriate given the achievement of the IGF to date, the commitment of the Geneva and Tunis outcomes and the goals of the World Summit on the Information Society. He noted that while

Internet use was increasing, it was growing faster in the developed world than in developing regions and that the digital divide was growing instead of shrinking.

Her Excellency, Ms. Dalia Grybauskaite, President of the Republic of Lithuania, told the meeting that Lithuania enjoyed one of the highest Internet speeds and mobile phone penetration rates in the world. She noted that the Internet had become an integral part of our everyday life. It was impossible to imagine modern business, public services, and the spread of information, cultural exchanges, person-to-person contacts, entertainment and leisure without the global electronic network. Furthermore, the development of the Internet was crucial to worldwide progress and the interests of all stakeholders. However, she also introduced a note of caution. While the Internet is essential to the development of knowledge society, it also posed new challenges relating to privacy, data security and the threats related to child abuse, e-theft, and intellectual property rights. These were issues that the IGF could address so that we could all take action to help to overcome these newly emerging challenges. A closer and more open dialogue between the interested stakeholders was required. The international community had no other choice but to work together so that we could create a more reliable and more secure Internet for tomorrow.

H.E. Mr. Eligijus Masiulis, Minister of Transport and Communications, Republic of Lithuania, assumed the chairmanship of the conference on behalf of the host country and thanked Forum participants for the honour of chairing the meeting. He noted that the Internet plays an integral and very important role in the economic development of all countries. In his own role as Minister responsible for information and communication technologies and also for transportation, he commented that the Internet played an important role in efficiently developing the roads, the railways and other means of transport. It also made trade better, facilitated the export of services, stimulated the business environment, and promoted competitiveness. The Internet had shown that it contributed to the growth of the GDP of all countries and that the Internet and information technologies were of utmost importance to contemporary society. The policy issues associated with these issues were a priority for Lithuania and the focus of the IGF. Lithuania recognized the importance of the IGF and would continue to be active in it.

Speakers representing all stakeholder groups addressed the session. Several themes appeared throughout the various talks. Almost all speakers made it clear that they supported the continuation of the IGF. It was noted that the IGF process was gaining momentum and a number of speakers commented on the valuable outcomes from the Forum and the ever-increasing number of national and regional IGF derived meetings. The government of Kenya offered to host the sixth UN-IGF meeting in 2011 and sought the support of participants for its expression of interest.

A number of speakers pointed out that it was important for the IGF to remain multi-stakeholder in nature. The forum's nature as a place for open exchanges without the pressure of having to negotiate outcomes should be maintained. While improvements were called for, it was important that this happened without losing the

special characteristics of the IGF as a multi-stakeholder process that gave the IGF its legitimacy.

Several speakers mentioned the importance of 'the Internet way', a decentralized open and inclusive multi-stakeholder collaboration that allowed for innovation and creativity at the edges. They stressed the importance of Internet governance continuing in a decentralized way. As the Internet has unleashed the creativity of people around the world, likewise the IGF has inspired the growth in creativity the multi-stakeholder model brings to policy making. The Forum has provided a way to exchange opinions, ideas, and concerns and has allowed for the improvement of Internet governance.

Other speakers reminded the Forum of the importance of the user, from the poorest to the richest, in the governance discussions and spoke of the importance of universal access while guaranteeing security and promoting diversity. The importance of creating and maintaining a civil rights framework for the Internet, including the rights of privacy and the right to be forgotten, was mentioned as well. Another common theme was the protection of rights generally, particularly those of children, women, persons with disabilities and vulnerable members of society.

The importance of maintaining focus on the expansion of the Internet to the billions of users who did not yet have access was emphasized by several speakers. As part of this general theme, it was pointed out that a factor to consider over the coming days was that as the number of Internet users grows worldwide, emerging economies will soon have more Internet users than the European Union and the United States combined. Several speakers noted that the Forum must recognize that the Internet is a globally important infrastructure and must agree that its governance also be global in nature.

THEMATIC MAIN SESSIONS

Managing Critical Internet Resources

The session was designed around a number of feeder workshops that provided input for discussion around the four main sub-themes:

- Status of IPv6 availability around the world; examples and cases;
- The internationalization of critical Internet resources management and enhanced cooperation;
- The importance of new TLDs and IDNs for development;
- Maintaining Internet services in situations of disaster and crisis.

On the situation of IPv6 deployment, the point was made that governments, as early adopters and providers of important services, have a clear role to play in procurement and can act as a model of good practice for others.

The deployment of IPv6 was likened to the migration from leaded to unleaded petrol: for a period of time unleaded petrol was only available in a few places, but quickly the

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situation reversed and leaded petrol became difficult to find. The same pattern was seen to be emerging for IPv6 on the Internet. A number of speakers commented on the role of governments as a major buyer in the communications markets and consequently they had power to influence technology direction through their procurement policies. Tendering processes could include the requirement that equipment be IPv6 ready. It was noted that ISPs in developing countries had less legacy equipment and, therefore new ISPs in developing countries often had more modern, IPv6 ready equipment. Another speaker commented that some of the first all IPv6 networks would probably be available in a developing country environment.

The second section of the meeting dealt with "The internationalization of critical Internet resources management and enhanced cooperation". The Chairman of the Internet Corporation for Assigned Names and Numbers (ICANN) introduced issues his organization had worked on in the last year. In particular, he highlighted improved cooperation and coordination with governments and the Government Advisory Committee (GAC). A number of speakers noted two important deadlines, the end of the root server contracts between the government of the United States and ICANN and VeriSign respectively. These were opportunities for further progress in enhanced cooperation. Any evolution should ensure the same level of protection and security that the current system provides and the management system needed to be perfected to ensure global resources were shared equitably.

The Chair of a review team created from the Affirmation of Commitments (AoC) told the meeting that the work on accountability and transparency focused on how ICANN manages its public input processes, its policy development processes and decision-making.

The third sub-theme of the session was "The importance of new TLDs and IDNs for development". ICANN had created a working group to look at the issue of the impact of new gTLDs on developing countries. The working group focused on what different kinds of support might be offered to new gTLD applicants from needy and underserved groups.

A speaker from the Haitian registry reported on the remarkable achievement of his ccTLD in ensuring continuity of service despite the destruction of the local infrastructure following the earthquake in January 2010. One of the lessons learned was that it was necessary to adopt best common practices regarding DNS operation. It is also important to have a geographic network diversity to avoid a point of failure. In Haiti, efforts were now being made to develop local capacity. This was important, as in some developing countries there were often only one or two people operating the ccTLD.

The representative of the ITU described the work the organization had done following the recent floods in Pakistan and other natural disasters. The ITU had appealed to the international community to help the Pakistani administration to restore their communication infrastructure, which was badly hit by this disaster.

In his own closing remarks, the Session Chair noted that the Internet only exists because consumers –either businesses or individuals– wanted to remain connected and consume Internet products. The management of critical Internet resources must ensure access to content needed by Internet users.

Access and Diversity

The session focused on access to infrastructure and access to content and considered a range of issues from geo-location, the global reach of social networks and the linkages between access to knowledge and security solutions, both in terms of hardware and software.

In terms of infrastructure, the need for continued broadband expansion was seen as crucial by several of the speakers. The importance of inexpensive, but powerful wireless handsets and other devices was also listed as a critical ingredient in achieving global access. The tools that would enable hardware and software developers to develop networks and devices according to universal design principles were also necessary. The biggest drivers on connectivity were poverty, education and geographic location, with people in developing countries less likely to have access than those is developed countries.

Discussions also revolved around the reasons why access was important. For developed regions it is often spoken of in terms of an everyday tool for communication and social interactions, as well as a mechanism to conduct online services. In developing regions, it was needed as access to knowledge, for example in healthcare or providing information on building water purification systems that could save lives. Access to the Internet was described as an indispensible tool to the quality of life for those disadvantaged by poverty, migrant status, disability and gender.

For a multilingual Internet three things were needed: internationalization of domain names, the availability of local content, and localization of applications and tools. The first of these was in the process of being met with the introduction of IDN ccTLDs, so that Web sites could be named in local scripts and languages. Several speakers referred to the next critical need, which was for local content in local languages and local scripts. Without this, most populations in the world, who were not familiar with English or with the Latin character sets, would not have real access. For this to happen, there needed to be development in the mechanisms for producing and distributing relevant local content.

Beyond the language aspects of diversity, speakers described the need for universal design, so that people with various levels of ability and disability would have equal access. The right to a multilingual, accessible Internet was seen as a citizen's right and a government's obligation and not something to be left to market forces alone.

The increase in the use of filters installed to block content considered illegal or harmful was also discussed. The need to balance autonomy with protection of the public good

was also raised and it was argued that filtering had a negative impact on access to knowledge, particularly by students. In his closing remarks, the Chair made the point that access without openness loses its purpose.

Security, Openness and Privacy

Openness and privacy were examined through three thematic lenses:

- Issues related to social media.
- The nature and characteristics of Internet networks, technologies, and standards.
- International cooperation and collaboration on security, privacy and openness.

Most of the new technology devices that we use to manage our daily lives would not be powerful enough to hold all the applications or data we needed. Those would need to be located in the cloud. This would mean having to trust those remote data storage facilities and services. The question was how to provide reasonable privacy and security for individuals and entities that are using this new computing continuum.

From a human rights perspective, the right to privacy was a fundamental permanent right and security was a necessity for exercising all rights. So what was needed was not to balance security against privacy but to work out how to enhance both simultaneously and not allow one to erode the other.

New social media enabled a new type of interactive communication that enhanced our communication between groups and individuals. As information is shared, we also had to be concerned about the security of the data we shared and needed to protect the privacy of personal information. Writing on the Internet was different from the ephemeral nature of spoken communication, which was lost, while what we communicated online remained. A number of speakers noted that these personal data had tremendous commercial value, and that new laws to address this situation should be considered.

The point was made by many speakers that new actors had entered the media system so that the traditional means of regulating the media were no longer applicable. Media now included search engines as well as social networks. However, a representative from a social network company said it was a mistake to think the Internet was an unregulated space, when many laws and regulations existed. Online companies had to respect and work with regulators and different authorities on a daily basis. A clear point was made that we have not solved crime in an off-line world, and while that should not stop efforts to address crime online, there was also a need to be realistic.

A UNESCO commission report on policy approaches that shaped freedom of expression on the Internet had found that with increased access to information in cyberspace, censorship and filtering was done not only by government, but also by private companies.

The session also addressed issues of international cooperation and collaboration, and considered human rights norms and conventions. The Budapest Convention was mentioned as one of the tools that addressed cybercrime standards and norms. It had the force of law and could potentially be applied worldwide and had been drafted with the participation of non-European countries.

Threats to cybersecurity came from a number of sources, such as outdated legal architecture, bad practices and natural disasters that contribute to cyber insecurity. The moderator noted that the speed at which cybercrime evolves is so fast that legislation is not well suited to address it.

In his closing remarks the Session Chair noted that it was of paramount importance that the Internet was made safe for children and youngsters. He also noted that the lack of skills of ordinary users was itself a serious threat to the security of the Internet. Capacity building was essential to the future security of the Internet, he concluded.

Internet Governance for Development

Internet Governance for Development has been a crosscutting priority of the IGF since the first meeting in Athens in 2006. For the 2010 meeting it was introduced as a new theme for a main session.

The session explored the possible effects of global Internet governance arrangements on the development of the Internet in developing countries. The discussion considered the institutional processes and substantive policy outputs of governance arrangements and whether these may raise developmental concerns that have not received sufficient attention to date.

The session looked at the meaning of Internet governance for development (IG4D). Among others, the following points were made:

Internet governance for development

- Needs to be understood from the perspective of a sustainable development that meets three needs: social equity, preserving the environment, and economic efficiency;
- Is governance that adequately and proportionally represents developing countries in its mechanisms and processes;
- Must enable innovation in developing countries;
- Advances the development of the Internet in developing and transitional countries and promotes Internet enabled development;
- Takes a global view and is governance for both the developing and developed worlds.

Other points made included the following:

- The Internet was critical for the development of developing nations;
- The demographics of the Internet were changing and the voice of the developing countries needed to be included in the way the Internet was governed and managed;
- Internet governance for development must be seen in terms of the impact it had on ordinary people and in terms of human development;
- Development had to be considered in every Internet governance decision.

The session subsequently discussed how developing and other countries organize and manage their national-level engagement with global Internet governance in the context of their wider national ICT strategies

Several speakers described the process in their countries or regions:

- Brazil discussed their multi-stakeholder national governance process with representatives from government, the private sector and civil society. It was described as a lightweight process that was not expensive. Mention was also made of the Internet principles that Brazil had standardized and which were being acknowledged in many IGF sessions and workshops;
- Senegal pointed to their national IGF and to their Head of State who was very involved in ICT and the WSIS process. The focus in Senegal had been to build out the broadband infrastructure. The country had also put a lot of effort into their research and education network. One challenge facing ICT Senegal was how to serve a population with a 70% illiteracy rate;

The session then proposed methods of how to take an IG4D agenda forward in the IGF and other international settings, such as:

- An evaluation of different Internet governance initiatives should be carried out to understand their impact on development;
- National and regional IGF type meetings should be held in developing countries.

In his closing remarks the moderator remarked on the fact that on one hand the Internet was highly complex and that on the other it was very easy to use. This created a disinterest in Internet governance with most people, as they just could not see the need, unless it was related to the cost of local access.

The Session Chair concluded by mentioning an old saying that there was only a short distance between strict dictatorship and uncontrollable anarchy and mentioned his believe that multistakeholder governance could help us avoid those extremes.

Emerging Issues - Cloud Computing

This session brought together an overview of the issues from both the policy and the technical standpoints in the area and provided an initial exploration of the possible Internet governance considerations within cloud computing.

In his introduction, the Session Chair described some of the challenges in meeting the promise of cloud computing including both the challenges in terms of computer science and expense as well as in terms of security and privacy.

Perspectives on the cloud included the following:

Panellists described the cloud as a continuation of the network that existed in the past. Within the cloud one is not only able to programme software, but also able to programme the whole infrastructure of the Internet and offer it as a service. The benefit to consumers is significant as the cloud functions essentially as a black box. Services operate consistently regardless of the underlying systems. The cloud offers the Internet with the same advantages that the distribution of electricity had offered in the past. Just as consumers of electricity no longer had to generate their own electricity, now consumers of information technology no longer need to maintain their own information technology infrastructure. As the mobile world continues to rapidly expand the cloud plays a crucial role as current portable devices lack the storage capacities and power of full size machines and seek the cloud to provide them with their core services.

A panellist raised concern with the security measures in and around the cloud and whether user records stored require adequate, effective and enforceable protection in order to generate the confidence for users to take up these services. Cloud service providers would have to be transparent and accountable for their services, including modification requirements and independent data security audits to ensure the safety of the data.

Another area of concern for the cloud was the difference in policy between countries on what could be done with undisclosed personal data. Law enforcement would have easier means to access this data. The cloud should be protected by the same safe guards against public and private interference as is data today on our desks or on our hard drives.

Among the questions raised were the following:

- Would the cloud become dominated by a few large companies that acted like the major utilities firms as had been seen in the field of electrical distribution?
- Would the utility nature of the cloud help or hinder innovation, and what policies would be needed to mitigate any negative effect of the cloud?
- What framework would be needed, given the complexity of cloud computing, to build trust in the cloud, especially in terms of confidentiality and privacy?

The Session Chair concluded by looking at the various facets of cloud computing ranging from the infrastructure to social and policy issues. He mentioned the security problems involved and noted that efforts to secure our data and computing procedures are getting more complicated. He also linked this emerging issue cloud computing to the Internet of things, which in his view was the emerging issue for future IGF meetings.

Taking Stock of Internet governance and the way forward

The session took stock of the evolution of the overall Internet governance landscape since the first IGF meeting in Athens in 2006. It established a checkpoint on the changes seen in the practice of Internet governance over the first five years of the IGF. It also set a baseline from which to measure the changes over the next five years leading up to the ten-year review of implementation of and follow-up to the outcome of the World Summit on the Information Society (WSIS) in 2015. Contributors focused on the current status of Internet governance in the Internet and on how it had changed since the IGF was created.

It was generally felt that:

• The themes defined in 2006 are still very relevant today
• The discussions have matured and deepened over the years.

The meeting discussed whether the context of the discussions had changed from Athens to Vilnius. Several speakers noted that as the context of the Internet had changed, so had the discussion in the IGF. It was pointed out that the Internet had grown in the last five years and that the Internet of 2010 was not that same as the Internet in 2005. The IGF was seen as having grown alongside the Internet.

While speakers acknowledged that there was still much work to be done, the discussions had matured and moved from basic explanations to good practices and deployment issues. On some issues like internationalization of critical Internet resources speakers felt that progress had been made. The discussions had moved on from the need to explain the importance on multilingualism, to the methods of deploying internationalized Domain Names and of user content in diverse languages and scripts. Another way in which the context change of the conversations was described was that they moved from a theoretical discourse to practical discussions.

Several speakers, including several parliamentarians, mentioned the IGF's success and growth over the years. One of the significant examples was the widespread introduction of regional and national IGF type meetings that have occurred over the last two years. The national IGF initiatives, had contributed to the debates between government, parliamentarians, industry and civil society. This had changed the nature of Internet governance in those countries and had led to moves toward cooperative models of regulation. The maturation of the discussions over the years was mentioned as evidence of advancement in global governance. Specific topics such as the growth of

IXPs and the awareness of the addressing issues concerning IPv4 and IPv6 were listed as examples of the progress in global governance during the five years of the IGF. The multistakeholder model, largely initiated at the IGF was also seen as an advance in global Internet governance. This included the ability of all stakeholders to speak and listen to each other. Many speakers attached great importance to capacity building. They described the proliferation of national and regional IGFs as a testament to the growth in both individual and institutional capacity.

While several speakers talked about the need for a more results oriented IGF, others saw in the IGF practice of not negotiating outcomes one of its strengths, as it allowed for open discussions free from the pressure of negotiations. Several people used the example of the multistakeholder dialogue and sharing of information and good practices as proof for the IGF's viability. Papers such as the Inventory of Good Practices that was posted on the IGF Web site shortly before the Vilnius meeting were mentioned as examples of more tangible results.

The increased participation of young people in the 2010 IGF meeting was seen as a positive development. A member of the youth coalition held the view that including more youth participation and listening more to the youth participants would help in producing outcomes of greater depth in areas like censorship, privacy and the digital divide. The participants were also reminded that the young people were the experts and that they brought a much-needed expertise to the Forum. "Let us not waste time talking about the youth, but let the youth talk", he concluded.

The representative of Azerbaijan offered for his country to host the 2012 IGF in Baku, provided if the IGF mandate were renewed.

In his closing remarks the Session Chair concluded by observing that power is devolving from governments to other actors through interconnected networks and that the IGF is part of this trend.

Closing Session

The closing session was chaired by Mr. Rimvydas Vaštakas, Vice Minister of Transport and Communications of Lithuania

The Speakers, representing the various stakeholder groups, commented on multistakeholder cooperation and the growth and maturation in the past five years of the IGF. Recurring statements in the speeches included the IGF's success through its flexibility and ability to keep up with emerging technology such as cloud computing, a topic that was unheard of at the IGF's inception in 2005. The multistakeholder vehicle has proven to be a great success in creating relationships between members in different areas of society. The multistakeholder IGF needs to continue to be refined allowing for a broadening of the process permitting greater participation and cooperation.

Speakers also looked ahead toward future IGFs giving suggestions to what needs to be discussed. A speaker commented that while the IGF provides a forum for dialogue, it

has not yet begun to make recommendations to the organizations involved in Internet governance, as had been the expectation by some at the time of the Tunis Agenda.

In closing the 2011 IGF meeting, the Chairman acknowledged the progress gained by the participants in shared understanding and knowledge of Internet governance issues. He reminded participants that the main focus of this IGF was "Developing the future together". The meeting had looked at ways on how to give better access to the Internet, how to make better use of the Internet and how to prevent its abuse. He recalled that the Internet offers unprecedented opportunities, but it also creates new challenges. In his view, the IGF is here to help maximize the opportunities and to minimize the challenges. The discussions held in the IGF have made it clear once again that achieving these objectives is possible only by collaborative action by all stakeholders.

He thanked all participants for contributing to the success of the meeting. They came to Vilnius not just to listen, but also to contribute actively, to organize workshops and other meetings and to engage in dialogue. This was maybe the most important feature of the IGF: all stakeholders engage in dialogue as equals. He described dialogue as a two way street that means more than reading a prepared speech; it also means listening to what others have to say. He went on to say that this sustained interest in the meetings of the IGF, in all regions of the world, clearly shows that there is a need for this kind of multistakeholder dialogue. Before closing the meeting, he said that the Government of Lithuania would make its voice heard in the forthcoming debate of the United Nations General Assembly, adding that it was important to renew the IGF mandate as a multistakeholder platform for non-binding multistakeholder dialogue.

ANNEX

Introductory Sessions

Internet governance - Setting the Scene

The objective of the session was to provide participants with the historical context of the IGF and an introduction to the main issues of the Vilnius meeting. The session began with brief presentations by the editor and five of the experts who authored background papers on the principal themes of the IGF meeting in the proceedings of the 2009 meeting in Sharm el Sheikh, Egypt. The purpose of the background section (section II) of the book, *Internet Governance: creating opportunities for all*, which had been distributed to all participants and which was made available on the IGF Web site to provide the historical context of the IGF. Each article was intended to serve three purposes:

- Review how the dialogue on each of those themes had evolved from Athens through Sharm el Sheikh, reviewing the main points and the recurrent themes;
- Assess the progress that might have occurred and review whether there had been growth in the convergence of perspectives;

- Offer the authors' recommendations on how the IGF might take the issues forward.

The author of the paper on critical Internet resources explained the sensitivity of this theme from its origins during the WSIS process. She remarked that the issue had become more tractable within the IGF and offered a few reasons, including the inclusion of civil society and the Internet technical community in a discussion that before had been limited to the intergovernmental actors in WSIS. She also saw the non-decision making nature of the IGF as key to defusing the polemics surrounding the discussions of this issue.

The author of the paper on openness spoke first of the progression of the discussions related to this theme in the IGF meetings. They had moved from freedom of expression in the Internet and its relation to human rights, intellectual property and the rights of authors and consumers to the links to privacy and security and the implication in social networking. Over the five years the theme had shown the need for balance among the requirements for access to knowledge, freedom of expression the need to maintain security and the essential privacy of individuals.

Linguistic diversity was the focus of the chapter on diversity. The author made the point that the participants of the IGF understood the need for diversity implicitly as they were a very diverse group of stakeholders. She spoke of the importance of the common belief that the Internet was for everyone, from the most knowledgeable technicians to the indigenous people with disabilities in remote regions.

The co-author of the paper on access started by outlining the sub themes that had been central to the IGF meeting over the previous years. In Athens, the IGF discussed Internet Exchange Points (IXP), in Rio the topic moved on to policy, regulation and the respective roles of stakeholders, in Hyderabad the discussion centred on the failure of markets, or perhaps the absence of capable markets, to improve the access in many countries and in Sharm there was a converging on the need for an enabling policy and regulation environment to be established.

The author of the paper on security spoke of security as an evolving need in the Internet. Security at the IGF had dealt with the fears expressed by many and had attempted to create some understanding of the processes and solutions available. Some of the focus has been on the discussion of cyber-crime and the degree to which this was a new category of crime or was essentially the same crime as had always just existed just perpetrated via the Internet. A final point that was brought up was the lag between awareness of an issue within the technical an operational communities and the discussion in policy venues. In this regard, the IGF provided a good platform for capacity building on security issues.

The two commentators gave their impressions at the end of the session. One of them described the book as capturing the process of the IGF in a "manner that could be called continuity in change". He noted that the IGF had delved more deeply into

development as the years went on and that because there were no specific outcome negotiations, the national participants had taken what had been discussed in the IGF and used it, and augmented it, in a regional and national context. The other commentator described the book as a reference not only for today but for years to come and not only as a description of the Sharm El Sheikh IGF but an explanation of how these issues have evolved over the last years.

Regional Perspectives

The moderator introduced the session by reminding participants that the spread of the IGF multi-stakeholder model through the proliferation of regional and national IGF processes was one of the notable successes of the forum. This year's IGF devoted more space to these IGF initiatives. The main aim of this curtain raiser session was to compare the various regional initiatives, to explore their differences, to find commonalities and improve the linkages with the global IGF.

Panellists described the key priorities that had emerged from their respective meetings. The third East Africa IGF brought together stakeholders from Rwanda, Tanzania, Burundi, South Sudan, Uganda, and Kenya to identify, explore, and build consensus around common Internet Governance priority issues. The EA-IGF model followed a bottom up multi-stakeholder approach that does not mimic the agenda of the global meeting, but is informed by it, and serves to bring the views of the region to the global forum. Participants at the EA-IGF emphasized the need to harmonize regulatory frameworks to facilitate cross border network operations.

The goal of the West African IGF was for the regional processes to feed into the global IGF through both messages and the experience of participants who had worked in the national and regional discussions and could bring the knowledge to the global level. The theme of the West African IGF was promoting the multi-stakeholder model for further Internet development in Africa, which is very much in the spirit of the theme for the global Internet Governance Forum. Participants recognized and acknowledged that in many West African countries, democracy has yet to take firm hold and that was why it was particularly important to have a process like the IGF to further strengthen the democratic spirit and the concentration on policy formulation and development.

The IGF process in Latin America had evolved in an interesting way. It had followed the global IGF agenda, the intention being to identify the characteristics and the challenges on the regional level of each of the global themes. However, discussion of security and privacy in the regional initiative had evolved beyond that of the global level. They had separated the topic of openness from privacy and security which made it possible to make it more relevant for the region, focusing, for example on the topics of freedom of expression, access to knowledge, free flow of information, open governance, infrastructure, and open technology.

A participant from the audience drew attention to the Caribbean IGF, now in its sixth year and the oldest of all the regional IGF meetings, pre-dating the global IGF itself. Organized by the Caribbean Telecommunications Union and CARICOM Secretariat, the meeting addressed many of the same issues as the Latin American meeting.

The Asia Pacific Regional IGF was the first regional IGF type meeting in the Asia Pacific region. It followed the global IGF agenda, and decided to follow a simple outcome approach where the meeting would deliver "learning's" rather than outcomes. There was a consensus on a common interest in Internet governance for development. Participants recognized that participation from governments was important and, at the same time, also suggested that non-IT civil society engagement on Internet governance needed to be better developed and encouraged.

A great deal of effort had been undertaken in the Arabic region since the IGF meeting in Egypt, most notably around the issues of implementing IDN ccTLDs. This work had been a success, and the IGF had played a role in achieving this important progress. A technical team responsible for Internet issues had begun work, cooperation with the ITU had progressed, and a regional association of Internet service providers had improved coordination across the region. In what was seen as an important development, organizations had begun encouraging and taking public comments and multi-stakeholder input on policy process. Holding an Arab region IGF type meeting in the near future would help develop a clearer vision about all needs within the region.

One of the features of the Pan-European dialogue on Internet governance (Euro DIG) was the presentation of outcomes from the process, called "messages from Madrid". The messages are not negotiated texts; they were compiled by rapporteurs, in consultation with the organizing teams of each session and serve as key outcomes from Europe into the global debate. Euro DIG has an all-inclusive policy, inviting not just European participants but all interested parties. The meeting served to bridge the issues across all the national IGFs of Europe, as well as welcoming inputs from outside the region. The overall goal was to raise some key messages from Europe to the global debate.

The Commonwealth IGF initiative saw an overwhelming need for capacity building, a safer online environment, the greater attention to the multi-stakeholder approach, and concerns about the future of the global IGF. When the Commonwealth organized programmes addressing ICT issues, the Commonwealth IGF attempted to introduce a module into the agenda related to Internet Governance and Internet policy. The goal was to draw interested people into the relevant governance processes.

All panellists agreed that there would be merit in strengthening the linkages between the regional IGF initiatives and the global IGF and also in exchanging information and experiences between the various regional initiatives.

III. PRELIMINARY EVENTS

INTERNET GOVERNANCE – SETTING THE SCENE

14 September 10

Co-Moderators:

- William J. Drake, Senior Associate, Centre for International Governance, Graduate Institute of International and Development Studies, Geneva
- Markus Kummer, Executive Coordinator, IGF Secretariat, Geneva

Panellists:

Authors

- Jeanette Hofmann (on Critical Internet Resources), Senior Researcher, London School of Economics; Political Science and the Social Science Research Centre Berlin, London/Berlin
- Olga Cavalli (on Openness), Professor, Universidad de Buenos Aires; Director, South School on Internet Governance; Advisor, Ministry of Foreign Affairs of Argentina, Buenos Aires
- Hong Xue (on Diversity), Professor of Law and Director, Institute for the Internet Policy and Law, Beijing Normal University, Beijing
- Anriette Esterhuysen (on Access), Executive Director, Association for Progressive Communications, Melville
- Alejandro Pisanty (on Security), Professor, Facultad de Quimica, National University of Mexico, Mexico-City

Commentators

- Ravi Shanker, Joint Secretary, Department of Information Technology, Ministry of Communication & Information Technology, Government of India, Delhi
- Arthur Reilly, Senior Director, Strategic Technology Policy, Cisco; Chair, Council for International Business's ICT Policy Committee, ICC-BASIS

Remote Moderation:

- Ginger Paque and Marilia Maciel

EXTRACTS FROM THE TRANSCRIPT OF PROCEEDINGS

Markus Kummer:

Let me start by welcoming you all to Vilnius. We have interpretation in all U.N. languages and simultaneous interpretation, in Arabic, Chinese, English, French, Russian and Spanish. And we also have real-time captioning. This will also be streamed over the Web so people can read wherever they are what is happening. And of course, all the meetings will be webcast from the workshop rooms. Lastly, a word about remote participation, we have over the years stepped up our efforts to facilitate remote participation, and this year, we have, for the first time, made sure that all sessions, not only the main sessions but all the workshops, have a moderator who will focus on remote participation.

William Drake:

This is a now standard part of the repertoire of sessions that we do in the IGF but this year, we're doing it a little bit different and taking advantage of the fact that we have in the book that you have in your bag that we put together some background papers by a variety of authors and the idea there was fairly straightforward. At the time that we were organising the book project, it seemed that with the IGF's renewal being a topic of discussion, and people trying to take stock of what had been achieved by the IGF, and a growing discussion about what, if any, improvement might be made, it was time to perhaps reflect on what contributions the IGF has made to the discourse at the international level and mutual understanding around the issues that have been its main themes. And to do that, we put together an international set of authors, most of them coming from an academic sort of background, but all of them having fairly rich array of links to all the different stakeholder groups that make the IGF what it is. Of the 8 authors, there were three Europeans, two Latin Americans, two Africans, one Asian and one North American who lives in Europe, and what I asked the authors to do was to look at the themes that we have talked about across the first 5 IGFs in particular, Critical Internet Resources, openness, access, diversity, and security. So I think we have the grounds for an interesting and useful discussion that will help to set the stage as it were for people about how the IGF discussions have evolved and where we are today.

Jeanette Hofmann:

I was asked to write about the way the IGF approached this in many ways really sensitive topic of management of Critical Internet Resources. This topic is about the management of the Domain Name System and the Internet address space; it is about ICANN but also about political oversight by the U.S. Government. This is a very sensitive topic because it became such a major controversy throughout the World Summit of the Information Society. And in several ways it was also a founding conflict of the IGF. The fact that WSIS turned out to be unable to resolve the issues, the ideological issues, about Critical Internet Resources, provided for many observers

evidence of the need of a global forum, a public space, where people could discuss the future management of the Internet. And this is also why it is so interesting to look at what the IGF has achieved over the last 5 years. Was it able to sort of resolve the conflict? How did it approach this very sensitive topic? To begin with, the IGF had serious problems talking about Internet Governance at all. Many people who were involved in organising the IGF were very afraid that the IGF would mainly sort of reproduce the conflicts we had through WSIS and would thereby undermine the whole process of establishing this global forum.

So for the first two years, this topic was hardly touched at all, but then starting with the third meeting, the management of Critical Internet Resources became the subject of two main sessions, and it turned out that the IGF was very well able to talk about these issues without getting into ideological 'deadlocks' that would just divide people.

The difference between WSIS and the IGF was that the IGF approached the management of Critical Internet Resources in a much more practical and also pragmatic manner. The focus was less on matters of principles. It was more on practical matters, and often even operational matters.

One of the reasons for this changed focus probably is the different composition of the audience that attends IGF meetings. There are lots of practitioners from the private sector, but also from civil society who are in the audience, and they bring to the fore their own perspective on Internet Governance which differs in many respects from an inter-governmental forum as a U.N. World Summit. I think a second reason why the IGF was able to approach this topic in a different and much more constructive way is that the IGF is not a decision making place. There was no need to find consensus on specific wording. The audience could tolerate differences of view to a much higher degree than it was possible throughout WSIS. So people are now much more confident to address topics where it is well known that people have different views, and they're also more confident addressing topics where no convergence of views is in sight. I think thanks to the IGF, we discuss these issues in a more educated manner, and also in a way that is less threatening to many people who feel they have to defend their views. One of the major achievements of the IGF is that we have created a non-threatening environment where people can express their views, and are willing to listen to other people's views who might differ from their own views. And the second achievement is this mutual capacity building, capacity building not in a way where experts educate lay people, but rather in a way where many experts with different cultural and disciplinary backgrounds talk to each other so that everybody who attends these meetings learns a lot. Even controversies over issues related to Critical Internet Resources can gain an educational dimension because we learn about other people's views and thereby about pros and cons of various options of managing the internet.

Olga Cavalli:

I'm going to talk about openness in the Internet and protection of freedoms. Openness and freedom of expression are key factors in the overall Internet exercise and at the

same time they have turned into one of the topics with the greatest discussion and challenges in terms of their control. So they are relevant for all of the stakeholders in this meeting, and they're fundamental for the future of the Internet. Basically, in Athens in the first IGF meeting, the concern for freedom of expression in the network and their relationship with human rights was one of the relevant topics. There was a fear about the censorship of online content especially the involvement of users who are now actors who are generating content, in other words. A good part of the attention paid to the meeting in Athens was about the role of the major enterprises that could use their technological power, and that they could block certain contents, and the role of Internet providers was also seen with some degree of fear as if they could maximize their control and filters in countries that have restrictive laws and present obstacles for free movement of information.

Intellectual property copyright and how to defend the rights of authors were discussed, and the consumers, as well, who wish to use this content. The Internet was seen as a huge library which would be available to one and all especially for countries that are very far from the centres of information. In Rio de Janeiro at the second IGF the focus changed somewhat and added to the production of culture and the production of content which is related to scientific knowledge, especially in particular the interoperability is fundamental for a developing country to be able to use the Internet as a tool for development, and the topic of search engines came up as key elements to be able to find information. And therefore, they have to have a neutral role in this quest for information. Now, coming up with legislation that is modern that can be adapted that is flexible for this cyberspace world began to be seen as one of the major challenges of this new Internet.

In Hyderabad, the third IGF meeting, there were topics that were closer to privacy and security which come in with openness. How can one strike a balance? And that became one of the main themes. How can one strike the proper balance between security on the one hand and privacy on the other? Risks to free movement of information and use of technology filters blocking system servers, tariffs, taxes, all of these are barriers that stand in the way of access and freedom. Finally, in Sharm el Sheikh, we went a little beyond this and began to talk about social networks, openness and privacy. The right of people to express not only their ideas, their culture, their traditions, their languages and their right to reproduce all of this content without any limitations whatsoever and without any censorship turned out to be one of the very important topics. The only limitation that there could be would be to protect a superior, higher human right, because there is something greater that needs to be protected.

Having said all of this, and after 4 years of dialogue and listening and participating, what have we actually learned? Well, we've learned that copying digital content is easy, simple, has no cost practically and has new regulatory challenges attached to it. There are new negotiation areas and developing countries all agree that interoperability is necessary to be able to use the Internet as a tool of development. The operators of the network have to be able to monitor the traffic, but at the same time they have to act in a neutral way when they provide their services. Some content, such as reference

to certain cultures or religions, can be problematic for certain countries. It depends very much which country you're talking about, how the content is taken on, how it impacts, and we know that there are several cases of censorship of social networks and exchanges of information, and in some cases, content may be legal in one country and not in another.

So the key appears to be for us to strike a balance between all of these forces that act jointly. The only way to do this is through dialogue and an exchange of information that allows all of the stakeholders to have ideas and solutions to problems that appear in the open structure, open architecture, of Internet. There have to be practical solutions related to certain problems. Having a multiparticipative environment and to have the synergies exchanged amongst us is a part of what we want to achieve in the IGF, and the international community has a right to protect its culture and its image in the Internet content but this protection shouldn't prevent others from being able to communicate and use this technological platform. This is why we're here, to come up with solutions to problems like these.

Hong Xue:

Diversity has been talked about at IGF for all their meetings. Internet is inherently diversified. At IGF meetings we can see very diverse stakeholder groups' present diverse perspectives. There is a common belief that Internet is for everyone. Whether you are a knowledgeable technician of the Internet or you are indigenous people with a disability in a very remote place, Internet is for you. Diversity is one of the principles highlighted in the WSIS process. In the WSIS principles it is stressed that diversity for culture, for language and also for media are important for our culture creation and production on the Internet. At IGF meetings, diversity has been our main session topic. From meeting to meeting from Athens to Sharm el Sheikh, our understanding on diversity has been deepening. IDN has also always been a key issue discussed as IGF diversity workshops. A subarea for diversity is how to facilitate the people with disabilities on the Internet. All aspects of diversity are related and they involve technical standards, social policies on culture and languages and even legal issues such as copyright protection and trademark protections. This has been improved through all four years. Multistakeholder participation is really the spirit and the heart of the IGF process. Other progress I can see is the capacity building. Indigenous populations and people with disabilities are able to join the discussion and to debate with other stakeholder groups. This is very important for these people to be able to communicate, to be able to participate and to contribute to the global policy discussion. In the future what I believe we need are more concrete outputs, more deliverable things. It is being emphasized by many colleagues and I want to echo their wills. IGF is not only a process for discussion. It is important for the IGF discussion to highlight the key issues, to bring them to the public's attention, and most important of all, to make recommendations. The IGF diversity discussions have delivered some very concrete proposals emerging from different perspectives. They could be used for the basis of recommendation. I hope the IGF process continues to improve and that there will be more concrete outputs to facilitate Internet governance in all areas, in all countries.

Anriette Esterhuysen:

Access has been a primary concern from the outset of the IGF. It was a primary concern during the WSIS and it is identified in the IGF mandate as a priority for us to consider. In Athens, we talked primarily about international interconnection costs, a topic that eventually slipped off the agenda, and IXPs, Internet exchange points, a topic that developed very richly within the IGF with a lot of capacity building, as well. In Rio we talked about more fundamental issues around policy and regulation and roles of different stakeholders, how do Governments, public sector actors, communities and the private sector collaborate to address access? And what type of policy framework can enable that effectively? In Hyderabad, we talked about the failure of this to work. We talked about market failure. We talked about efforts to address competition that were failing in many countries, and some speakers suggested that the root of that problem lied in Governance. The point was made that to create an enabling policy and regulation environment for access you need to develop it locally and organically, not just pay consultants. Sharm el Sheikh was interesting because there we looked more at mobile, so there was less discussion of some of the fundamentals of access, and more of a focus on what is seen as the solution of the future.

We do feel that the access issue has been explored broadly from the last mile through international backbone. We also feel that there's been some consensus, there's agreement or there was largely agreement that access is not just about the supply of cable, or physical infrastructure. It is about building capacity to use networks, to develop local content and local languages, and to build demand for access. It is also about the freedoms needed to use the access for personal expression and to support democratization and more inclusive societies. Dialogues on access at the IGF started at the height of a boom in 2006, and then continued right into the global financial crisis. And that's also quite interesting, because I think it did influence what people found were the primary solutions to the access gap. It is interesting to see that repeatedly, many of the points hone in on the proper role of public and private sectors, so this is clearly an issue which I think we've not exhausted, but we've reached much more consensus on it. And competition and the value of competition has been acknowledged but it has also been recognized that competition doesn't just happen naturally, and there's still a lot of distortion, and you need strong policy and regulation to make sure it works. I think as one speaker said at one point, the problem in Africa is not that markets don't work, but there are no working markets. And the way forward, we think, is to continue to explore this dynamic of how to create an appropriate, effective regulatory environment and to try and push access beyond the final frontier, which is where there is access for all.

Strengthening the development agenda within IGF can make it a valuable Forum for looking at many of these issues. We also think that the IGF could do well by focusing more on different forms of access, public access for example, access in libraries, access in public institutions, access in marketplaces, bus stations, places where people are, and where people who do not have individual access and probably never will can easily

access the Internet. There has been very little focus on that in the IGF. We also think that looking at access more from the perspective of social and economic and cultural and civil and political rights would be valuable. A pitfall that the IGF should avoid at all costs is to make the assumption which certainly many people are making, I think, that equitable access is no longer a priority. Just the fact that there are more technical solutions available to us through mobile Broadband does not mean that we've solved the problem. In fact, we can look at the Broadband divide and other divides. It is also important to look at access as a means to be an engaged citizen, as more economic and political and social transactions take place on the Internet, access does become a means to participate in society at large. The dialogue and diversity of discussion enabled by the IGF format has been very valuable.

There's been a lot of informal capacity building and learning, but there have also been gaps. Lack of competition in international fibre and satellite connectivity has never, to my knowledge, really been addressed at the IGF, nor has the impact of vertical integration in the mobile industry, where, in fact, there's a reduction of competition when we are told that competition is the primary solution. There's also an assumption sometimes that any access is better than no access, and that assumption should be explored more carefully. There's also the issue of exclusion, on-going exclusions and old exclusions but also new exclusions based on age, gender, ability and class and that also should receive attention. A rights approach to access has not been given much consideration. Many participants appear to feel threatened by the language of rights, when we talk about access, even though some Governments participate in this Forum have now declared Internet access a right. In fact, they should view the IGF as an opportunity to discuss how we can strengthen public interest in Internet Governance and a rights based approach is a way of doing that. The primary weakness, we think, with regard to access has probably not been in the discussion. The discussion has been very rich, but more in who has been the participants in the discussion, and we're going to reach a ceiling in discussing access if we don't bring the people that really suffer the consequences, who experience the daily reality of not having affordable access into the debate so that is definitely something we should address. The development agenda can help us do that, but we with also need to hear the voices, not just talk about development. We also need to hear the voices of the people who experience the consequences of not having sufficient access.

Alejandro Pisanty:

Security is of course a huge concern on the Internet. It has been a very important issue from the very early design of the Internet. It is usually said that security was not a concern in the design. I believe it was and though some of the assumptions that were made were not totally warranted, there was consideration from the start. Security has been dealt with in the IGF in particular to allay some fears that were expressed during the WSIS process, and to try to build some solutions, at least to build some understanding of the process and solutions. This has happened at different levels of understanding, at different degrees of aggregation. The key to some of the most

enlightened discussions has been when security has been understood as a key for trust on the Internet and the fact that even the perception that the Internet could have some insecurity will keep people away from using it exhaustively like for e-commerce and so forth. Some of the issues that have been discussed over the years have been cybercrime; whether there are new crimes invented or created around the Internet or as many believe and have been expressed during the sessions, its old forms or old crimes taking new forms because there are new tools to commit them.

A large weight of the discussion has been carried by the co-existence of the issues of security, privacy, and openness. There are views that some security measures actually impinge on negatively on freedoms of access, on openness and speech, or on the privacy of people. A countervailing discussion has looked at the enhancement of privacy through the use of security or technology. These are open issues that have been discussed in a lively way during the IGF sessions and sometimes have been brought together. There have been some requests and some proposals in a few of the regional preparatory meetings to again have sessions in some of the future IGF meetings that are concentrated on security. But co-existence of these issues makes it very important to discuss them together. There have been discussions about malware, its origin, its spread, and the ways to confront it. Not at the technical level always, but in ways that has been enlightening in two directions that would say there's basically two sides to this, which would be the technical community and the policy-making participants of the IGF. One can expect of course that there has been some capacity-building for the policy makers by listening and discussing what the technical community has to say. There has also been a lot of growth and understanding by the technical community of what the policy issues are.

One interesting aspect of the evolution of the security issue during the previous four years of the IGF has been the emergence of the word "Cybersecurity" which is very scarcely used by the technical community and by the practitioners of Internet operations and security. Cybersecurity was introduced in some workshops in the second IGF meeting. It spread out and then became more of a generic topic. It has been linked to a category of public security, and also became very interesting for a time in the previous IGFs as an issue of national security, the protection of assets, of information assets through the Internet that are relevant for the national security of countries. This came to the highest point in the third IGF meeting where there was a speech calling for a cyber-treaty, a treaty for managing acts of war, understanding and managing what could possibly be acts of war in cyber space. This issue faded completely away from the IGF in Sharm El Sheikh. We have seen this issue of a cyber-treaty and cyber ware emerge now in national contexts in some countries and in the UN general assembly context without being a plenary issue. I think there's also something very important about what authority is being delegated to the IGF by some significant Governments. Though the IGF continues to be important to discuss Internet issues, the key national security issues are now being taken to other forums.

The other important finding while preparing this chapter was that I mapped the issues that were being discussed in the technical and practitioner communities and technical

setting and technical communities, and during the IGF sessions. It is really incredibly clear to see there's a time lag between issues becoming important in a technical community then becoming important in the mainstream Internet communities, and then becoming issues for let's say a main session in the IGF. This timeline is generally of about two years. And one can start to see also what happens on the way back, what happens with people who come to the IGF, come in contact with an issue, and then go back to their countries or organizations or companies or civil society and get some work done. This for me is one of the most significant reasons to ensure that we have this freedom to discuss in the IGF. These discussions in the IGF are extremely valuable, but they can only stay extremely valuable if they are kept in this very open, very free context where people can act upon them at different stages in time depending on where they stand.

Everton Lucero:

I just would like to say that the notion that the IGF was able to resolve the conflict that previously existed in WSIS on security issues, yes; I can agree with that to a certain extent, but not fully. If you take into account that the IGF promoted discussion, engagement, and therefore lowered the barriers of the debate, yes, that's an achievement and that has been very helpful. The action on the issues that were brought up during WSIS though is still lacking on behalf of the mechanisms for Internet governance in general and unfortunately, at the IGF we haven't been able to proceed with such actions.

Jeanette Hofmann:

I think there is no convergence of views yet; the views on how the Internet should be managed still differ fundamentally, but we talk about it in a different way. And what I end up with in the book chapter is that personally I think unless we have a common vision of where we want to go; there cannot be any practical action. We need to have a broader consensus of how the future of Internet governance should look like in order to really agree on action. And the IGF is not a place to decide anything anyway. So I think unless we have that common vision, we cannot expect the changes that many people asked for throughout WSIS.

Ravi Shanker:

The book captures and capsules the process of IGF in a manner which could be stated as continuity in change. Continuity in change for the simple reason that the core issues that were discussed at Athens - access, diversity, openness and security -- continue to be discussed further ahead at all the IGFs. We had the introduction of the management of Critical Internet Resources which featured prominently at Rio, and that also has been discussed subsequently. Hyderabad was an inflection point in that since the theme of Internet for all encapsulated all the previous discussion points of access, diversity, openness and security as well as the management of Critical Internet Resources, and sort of moved towards a development agenda, if you can say so. We

further had progress in this direction at Sharm El Sheikh where the opportunity for all was the theme and today we are converging here for developing the future together. I think this reflects a very important aspect of the idea about continuity and change. I would think if there is one particular facet of this IGF, it is less high tech and more high touch, the sense that we are more and more involved in the developmental process. Technology is definitely an aspect that is being discussed, but it is the process of cooperation that is being sought and promulgated. While the development agenda in the broad gambit of what we would call the UN MGDs are something which needs to be looked at even within the context of the UN IGF, we recognize the fact it does not have an outcome orientation. Notwithstanding the fact that there is no outcome orientation, countries have chosen to take the issues that have been discussed at the IGF forum as an important benchmark or transiter to see what can be done in the ICT arena in the respective countries. Regional ideas and national ideas have sprung up. That all goes very well for this particular aspect of the continuance of the IGF per se. The fact that several regional ideas and national ideas have come about, and they have decided to draw up an agenda. It sort of indicates that a non-outcome-oriented body has given birth to several institutions who seek to have outcome orientation in their respective arena. I think that is an important aspect. The fact of the matter that we come to this forum to have consensus and also respect differences I think is the key factor of the IGF.

Arthur Reilly:

I'm taken, as I listen this morning, to the various discussions on the topic of whether or not the four topics from Athens are still very relevant today. As I listen to the various discussions on each one and how each topic has evolved over the four years, I'm also struck by the fact that there has been a recognition within each one that they cannot be looked at in isolation but rather as part of a broader fabric, and that the IGF represents an opportunity for not just an isolated discussion of one stakeholder group, but for all stakeholder groups. Not a discussion of one issue, but many issues, any issue that we would like to discuss also in terms of their interrelationships and the interdependencies that exist. And so you heard today about how we started with the discussion of openness, and then openness linked to security, and it linked to issues of privacy and how all of those had to be looked at in their relationships. And it may be that within different cultures you come to different conclusions with regard to what's the best operating point for each one is. Recognizing that interdependence is very important though and the panel has brought that out.

One of the strengths of the IGF is that it is a place where you can literally discuss any issue. I think Jeanette's point of the process here at the IGF in terms of the way we introduced a topic during the WSIS and during the first IGF seemed to be something that people were, you know, very reticent to engage in, the issue of Critical Internet Resources, but it was put on the table at the second IGF, and it is been a continuing subject for discussion at subsequent IGFs. And even though it was very controversial and there were concerns about introducing it, we learned quite a bit. We learned I

believe that it is the nondecision-making nature of the IGF; it is the frankness and openness of discussions at the IGF that allow us to do that. If we had a situation in which we were going to have negotiated text on a subject that was controversial, the nature of that discussion would be much more inhibited. If we want to in fact have a frank discussion to allow for the fact that we have here in this room, and in the halls surrounding it, leaders from all of the stakeholder groups within the Internet governance universe, the information society. So we have the opportunity to engage them and to learn from them, and to provide our views to them. And the best way we could take advantage of the next several days is to have that open discussion. And that is only possible if we have a situation in which we do not have to worry about negotiated text and the decision-making is not part of the process. Does that mean that we do not have people who make proposals provide their ideas? As leaders, as we go back into our individual communities, to be informed over the next year on what we think will be the important issues and how those might best address the issues as we've learned about them here.

If we go back to the WSIS in 2005, there were about a billion users on the Internet. Today there are about 1.8 billion users. In 2005 at the time of WSIS there were 2 billion mobile subscribers; today there are about 4.6 billion mobile subscribers. In both these areas there has been tremendous growth; almost doubling in the sense of the Internet and more than doubling in the case of the mobile subscribers. Over the last year we have added another 200 million Internet users and about another 400 million mobile users. So we can reasonably expect over the next year to have comparable sorts of growth, an additional 200 million Internet users and 400 million mobile subscribers. And so as we are here today and over the next several days discussing the issues, we have to recognize that given that this is the collection of the leaders within the Internet governance community, the organizations that are involved in it, we have the opportunity to shape how those additional 200 million Internet users and 400 million mobile subscribers, the kind of services, the kind of environment, the kind of information society that they will have in years to come. And so I think that's a unique opportunity for us. The capacity building that we do here and that you've heard about, I think is critically important to each of us, to provide us not only with a chance for us to share our views, but to learn from others. There have been several mentions of the remote participation and I think we had the point that perhaps during the access discussions we didn't have all the people in the room who might have contributed to that and it would be helpful as we go forward to have that. At this session we do in fact have, as mentioned, access to each of the workshops in the main sessions remotely. And perhaps each one of us, as one of our activities today, might take to go back and send information to colleagues around the world and encourage them to take advantage of that capability. So that we do in fact build not only upon those who are in the room, but actually draw upon that larger community so that by virtue of our remote participation we can actually as part of our process here, this session is setting the stage. Maybe we can set the stage by setting expectations and actually contributing to having a more inclusive Internet Governance Forum by taking advantage of that. And that's something that's within our hands.

Mike Sax:

This is my very first time at IGF. I am from Belgium, but I have a software company in the U.S. and I have been reading this book and the problems and challenges that lie ahead. In the middle of that I wanted to share that for a number of years my company has been working with a software developer who is based in Cape Verde in Africa and over time this person has become one of our primary business partners. The software created by this person in Africa has been used in thousands of businesses all over the world. As the quality of the Internet connection improved, through partnerships between Governments and the private sector, our partnership became closer and now this software is being used all over the world. So whatever you're doing, this magical process really seems to work. And I want to thank you and let you know that this process really touches real people and makes things possible that we could only dream about before. So keep doing it.

Steve Del Bianco:

Some have expressed disappointment that the IGF hasn't resolved the crisis in managing CIR, and we're always going to be disappointed about a process that doesn't actually resolve and make everything go away. I'm reminded as a parent; I can never really resolve managing the critical resources that my kids need because their needs change continually. So I always have to manage the critical resources my kids need over time. That's an evolving process. We'll never actually arrive at solving CIR.

In regards to the argument that the IGF has not taken action on creating new mechanisms, I recall especially during the Hyderabad IGF when at the time we called upon Governments, private sector and all stakeholders to use the mechanisms that we already have as well as creating new mechanisms. I was very concerned; I remember expressing in Hyderabad that not enough Governments were sending high level and technical personnel to participate in places like ICANN where we were actually working on policy or policy for new TLDs. I'm happy to say today though that we have had phenomenally greater participation and deeper participation of Governments at places like ICANN to work out the policies around new TLDs and IDS. So we can always look at IGF and say it is not all that it can be, but let's realize it will never actually finish the job on resolving all issues, and let's realise that it is really made phenomenal improvements in just the last couple years. Thank you.

Jonathan Zuck:

I think the IGF has been incredible in bringing about discussions on a wide range of issues. I want to echo the other comments about the deep politicalization. A lot of the issues surrounding the Critical Internet Resources topic shift from a political discussion to a practical one and I think this is critical. And it can't be emphasized enough, there are so many challenges facing us, the Internet and bringing on the next billion users, etc., that we don't have the luxury to prioritize fixing problems that don't exist or fixing things that aren't broken because there are so many things that still

need to be done. And so I think depoliticizing the issues and focussing on access and infrastructure development is important, which is the more critical Internet resource issue that should be the priority of the IGF.

Markus Kummer:

Professor Muami asks about access for people with disabilities. He asked the question of where we are in terms of applying the United Nations convention on the rights of persons with disabilities and the WC3, access initiatives. To that I would just like to point out we have an extremely active dynamic coalition on this issue and access for people with disabilities. There are a number of workshops devoted to this issue and also the dynamic coalition and I would certainly like to promote that initiative. It is very worthwhile. And it is very important that we recognize the rights of these people. We had a special session on this issue in Sharm El Sheikh, and the dynamic coalition will further push this.

Salanieta Tamanikaiwaimaro:

I agree with what is said in the book in terms of there's an increasing need to address vertical market forces, competition, because they have a direct impact on universal service on access and on a lot of the sub threads that sort of are linked to Internet governance. The question I have is for the entire panel. If we are to begin to engage in increasing dialogue in that particular aspect, how do you propose that's going to be done? Do you suppose there is going to be a need for a comparative study first? Or would there be some sort of sequence order? I think it is a complex phenomenon that requires something like this.

Comment From The Floor:

These issues on developing the future together, this is an argument for future generations. It is of great importance that the forum focuses on young Internet users. Young people are concerned by the issues raised during these discussions. They are affected by the management of the Internet. They are concerned with freedom of expression as well as diversity, openness of the Internet and access to the network. Young people are also concerned by cybercrime and these issues are raise by our association and the civil society throughout the world. Once again, I emphasize our slogan: We're building the future together. We wish to have participation from all social categories and classes, and particularly young people who are so crucial in this field. These issues must be examined in detail.

Anriette Esterhuysen:

I want to start with vertical integration in the mobile industry, and what we mean by that is that you have the same providers providing voice and banking and entertainment and transactions with local authorities or the Government. Who knows what's next, there are complexities around this, the right issues and the lack of competition issues.

We have on the one hand mobile Internet and to some extent that hopefully addresses the last question as well which is a new frontier that could in fact create opportunities that have been limited because of the high investment cost. These opportunities are being restricted because you have relatively few, very large corporations becoming the primary providers of multiple services. So I think there is a need for research. I think we need to look at the social impacts of that as well as the economic impacts. And particularly the impact on diversifying and strengthening the ICT industry and business at a local level and the opportunities for local businesses and small businesses and opportunities for content producers, for example, opportunities for local language and or cultural production. I think that the challenge is having background research, but I think sometimes these topics are complex. And to raise them in the IGF you need to organise a workshop, you need to have relatively good knowledge, they're technical. And I think that can be quite difficult. But I think it is definitely something that needs to be done. So perhaps people that want to do that should get together and we can do that.

I think on the question about the principles of the next billion as opposed to the first billion, I think it has a lot to do with the technology, how the next billion is going to be connected. And we need to look at policy and regulation that is going to protect consumers and also maximize access. And so there are new things but then I also think there are some of the principles that have not been sufficiently applied already such as access as a basic right. And I think that could also be a very useful way. So there's a rights based approach that we need to look at and also the very specific policy and regulation approaches that has to look at approaches like net neutrality in the mobile industry.

I also think we don't just need remote participants remotely listening and asking questions, we need them setting the agenda and we need them speaking. On the point made about ability and access for people with disabilities I think it brings up the challenge in the IGF. We discuss these issues, but where do we take them next? If we actually want policy decisions made about access for people with disabilities, we don't want to make them in the IGF; it is not its role. But can we more effectively make that leap into the spaces where policies are actually made? That's a question I'd like to put to the participants.

REGIONAL PERSPECTIVES

14 September 2010

Moderator:

- Markus Kummer, Executive Coordinator, IGF Secretariat, Geneva

Remote Moderator:

- Ginger Paque

Speakers:

- Alice Munyua, Member of the Board of Directors, Communications Commission of Kenya, Nairobi; Convenor, East Africa IGF
- Edmon Chung, Chief Executive Officer, DotAsia, Hong Kong (SAR)
- Joseph V. Tabone, Chairman, COMNET Foundation for ICT Development, La Valetta
- Sebastien Muriel, General Manager Red.es, Madrid
- Katim Touray, Member, Board of Directors Internet Cooperation for Assigned Names and Numbers, Banjul
- Valeria Betancourt, Coordinator – Communication and Information Policy Programme in Latin America, Association of Progressive Communications, Quito

Markus Kummer:

We'd like to start with the second part of this morning's session, which is devoted to regional perspectives. Regional meetings have sprung up over the past two years, also mentioned in a previous session as one of the very concrete outcomes of the IGF. They were not part of the negotiated outcome in Tunis but they did come up as very much bottom up initiatives. Here our objective is a comparison between the different initiatives, what was similar, what was different, and also to listen to regional substantive inputs in the global meeting. I don't plan to do two rounds of panel discussions before we turn to the floor. In the first round, I would like to ask them whether they had the same agenda in their meeting or whether they had a different agenda, if the agenda was different, what were the issues the global IGF was not dealing with, and then also what were the two or three priorities as they emerged from their meeting. The interesting thing is, and I visited and I took part in a number of them, is that they each have their different flavor. Each region seems to have a different approach and each region seems to have different priorities.

Alice Munyua:

Just a way of a background, the East African Internet Governance Forum has been taking place the last three years; the first one was in 2008. The third one was in 2010 hosted by Uganda and each one of them is hosted by a different East African country. The next one has already been taken up by the Government of Rwanda. They were started from the acknowledgment and recognition that our region was not really represented meaningfully in the Internet Governance policy processes at the global level but also looking for more meaning in terms of policy impact at the regional level that is not the nature of the global IGF, so we were looking for something much more significant to us at the regional level. Our model is slightly different in that it is a very bottom up approach and starts usually with mainly discussions at the national level in the five East African countries, then to national face to face Forums and the national face to face forums form the building block for the Regional East African IGF held each year prior to the global IGF.

We usually have tended not to mirror the global IGF programme specifically and rather allow national IGFs to identify the issues at the national level so as our issues continue you can see the progress. At the very beginning in 2008 it was about access, access to infrastructure, access to the Internet, access to local content, a lot of access and development issues. But this year in 2010, the issues were more to do with now we have access, what do we do with it? We've had three fibre optic cables that have landed in the East African Coast and so now we are beginning to deal with the challenges and opportunities that with come with that. So this year's programme included issues having to do with cybersecurity and cybercrime in addition to involving the youth in IGF and innovation. Beginning to look at issues of policy and regulation, issues of

content again, acknowledging there's not enough content and also this year's theme was based on strengthening Critical Internet Resources and specifically strengthening our East African ccTLDs. One of the important emerging issues continues to be access and affordability but this time to Broadband and to Internet and also the issue of having a programme, creating a framework for developing ICT skills and capacity.

We have discussed also the kind of impact we want the IGF to have at the regional level and there was a very strong consensus that we would want to go beyond, we don't want to be constrained by the same challenges and constraints with the global IGF, we want to see much more policy impact because the IGF itself has already impacted the way we conduct ICT policy processes at the national level. A good example is a Kenyan example where our Government has provided a policy window and there's a new way of developing policy where all stakeholders are involved. There was a very strong consensus around that, around looking at the 2011 East African IGF and seeing how we are going to take some of these issues forward. One of the best examples has been taking one issue that was identified in 2008, the issue of strengthening African ccTLD, subjecting it to research and coming up with very concrete ways of dealing with strengthening our ccTLDs from issues of redelegation all the way to issues that we're now currently talking about, whether or not ccTLDs should be involved in content regulation or not, or how we deal with our engagement with generic Top Level Domain names and other issues like that. Mainly though this year's issues have been strengthening Critical Internet Resources and looking at the issue of now that we have access, what do we do with that access and is it really making an impact?

Valeria Betancourt:

The third Latin American and Caribbean Preparatory Meeting for the IGF was jointly organized by LACNIC (Latin American and the Caribbean Internet Address Registry), APC, and APC member NUPEF Institute. The meeting was held in Quito, Ecuador in August 2010. It convened more than 120 people from 25 countries representing all the stakeholders of the regional Internet community. The meeting was focused on the topics surrounding the Internet Governance Forum, identifying the characteristics and regional challenges for each of these issues. Over the past three years, the preparatory regional meetings in Latin America have followed the agenda of the IGF; however, it is important to mention that Openness has been a theme in itself separated from the Privacy and Security issues. It has allowed us to have dialogues focused on topics that are relevant to the region such as access to knowledge, freedom of expression and free flow of information, open governance, open infrastructure and technology, among others. In fact, one of the main suggestions made for the global IGF is that Openness should have a more clear focus in its specificities. This could be done by encouraging and ensuring the continuing involvement and participation of FOSS, Intellectual Property Rights and Access to Knowledge activists in order to feed in those perspectives to the debate. It is also important to mention that the need for the LAC region to build an Internet governance agenda that responds to regional particularities and countries priorities came out strongly in this last meeting.

There is clearly the need to integrate the technical expertise with the political and rights dimensions of the themes. It would not prevent from but contribute to enhancing the engagement of the LAC region in global processes like the IGF, the participation in other related Internet governance institutions and, primarily, this would establish linkages between national Internet governance public policy priorities with the perspectives of developing countries. In terms of priorities, the importance of universal affordable Broadband access was highlighted as a pre-condition for innovative and competitive environments that generate new types of income without limiting or affecting people´s rights. The need to broaden the approach to the access theme was stressed. Commercial agreements with developed countries that determine the conditions to access to information and knowledge should be also addressed if the Internet is meant to significantly impact people´s lives. In order to accomplish significant access to knowledge, have free flow of information and freedom of expression, it was proposed by some speakers that a new system of intellectual property should be created to facilitate the access to knowledge in the framework of the Information Society, appropriate for digital media and for development needs.

The Internet Governance for Development session focused on the need to build capacities for increasing the participation of developing countries in decision-making mechanisms and processes in global and regional fora. Additionally, the importance of addressing the economic, social, cultural and political impacts of the Internet in societies was highlighted. Participants identified as a priority the right of people to control their own personal information, the access to it, to modify or delete it, or to oppose to its collection. Participants stressed that the multistakeholder model, with the participation of all stakeholders, should remain and be strengthened for the management of IP addresses.

Edmon Chung:

I think this is the first time that we put together an Asia Pacific Regional IGF but of course, we remember that Hyderabad and India hosted global IGFs so those were important steps for Asia as well. In terms of the format, we generally followed the global IGF streams, I think providing an open platform was most important. Right from the start, we tried to create this non-threatening environment for society and business to engage in a Governance dialogue and I think the whole structure and format was developed with that in mind. Instead of outcomes I think there were a number of learnings that came out from the coordination of the event. The entire discussion and the direction of the discussion were allowed to be developed in a bottom up manner. I think that's sort of important in the context of Asia in that Asia is a very diverse region and the other part is that a lot of it is a relatively authoritarian culture so allowing a bottom up process to develop the agenda itself and the IGF approach of multistakeholder participation itself I think is an inspiring message. The development of consensus and respecting differences were the primary goals of the first Asia Pacific Regional IGF. It is actually three events put together in one week. We have the Asia Pacific Regional IGF roundtable which was two days. The Hong Kong (SAR) Internet Governance conference which again is two days and then we also had a youth IGF

camp. In the youth IGF camp we did not follow the global agenda, the agenda itself was developed by the youth, the mission Ambassadors, and what is inspiring from there is the interesting topics that were discussed were actually developed from their own discussions. Overall, the format itself I think generally followed the global IGF meetings, in terms of the streams, but I think one of the learnings that we've received both from civil society and Government is that they wanted more air time. One of the most important results is that people wanted to do it again next year.

Khaled Foda:

A lot of effort has been put in throughout the past period towards Internet governance issues mainly by the technical team responsible for Internet issues that work under the technical information council of ministers, with a lot of cooperation from international and regional organisations like the ITU and the Arab ICT, the Arab organisation responsible for ICT. The efforts have been mainly directed towards access issues and towards internationalized domain names, mainly IPv4 to IPv6. The team has also been participating very closely with ICANN in a lot of its efforts towards internationalization or institutional accountability, and in internationalized domain names, as well, and we produced an RFC about the linguistic guidelines for the use of Arabic script in domain names. Some efforts have been made towards security, and it was all within the Government bodies in cooperation with international and regional organisations.

We're starting maybe a new phase and putting more efforts towards security. We're putting more efforts towards other Internet issues as well, and we are also trying to seek public consultancy. We're seeking more participation of different public entities, all different stakeholders involved. We have a huge project about Arab domain names that we are adopting as the league of Arab states. We're interested in involving all parties in that project, and in taking actual roles in managing and in running that project. We also have recently started an initiative with ESCWA for Arab dialogue on Internet Governance; this initiative involves meetings, studies, setting a road map, public consultancy about Internet Governance that could lead us to an Arab IGF, a regional IGF. Even though the technical teams responsible have been always organising regional workshops before, the IGF used to be, before the IGF time in Sharm el Sheikh, we did that, and before the IGF here, we also did another workshop, and invited all different Arab Member States to those workshops. We have also been issuing reports about the Arab vision towards Internet issues, and publishing them over the Internet for Arab participants to share those visions or those concerns about Internet issues. We have a technical team that's actually a self-regulated group. This group has been working on identifying problems about the use of Arab script in domain names, and it has also participated with ICANN very much in many policy issues regarding this matter. We hope that we can set a much clearer vision within the coming period for the issues that we have not been focusing on during the past period, and we hope that with the ESCWA initiative, we can reach an Arab IGF; we can reach a clearer vision about all needs within the region.

Sebastien Muriel:

We see it is an open platform to discuss and debate about all the Internet Governance issues not only across Europe, as we want an all-inclusive philosophy. In fact, we see a middle ground between all the national Internet Governance Forums that we have in Europe, in France, Denmark, Italy, Portugal, Ukraine, Russia, the U.K., Germany and Spain, and the British raised some key messages from Europe to the global debate. In addition to that, we have in Europe another and very relevant outcome from the discussion which is of high impact. It is the relationship with the policymakers and all the European institutions. In fact the European Commission, Council of Europe and also the Parliament, are very involved which leads us to raise some of the messages to them. In fact during this last six months of the Spanish presidency, we finished the detailed agenda for Europe for 2015, and in that agenda, in that strategy, we put a lot of issues from the Internet Governance Forum. The Parliament had raised also a resolution on the 15th of June of this year, and Parliament supported the continuation and development of the entire IGF model on a global, regional of course national level and we think that this is very valuable. The multistakeholder vision to have all people involved, from Government and academic, from the civil society but also with the business and enterprises is our goal. Some of the highlights of this bottom up are discussions on some hot issues like the net neutrality and the importance and the need of deployment on the IPv6, and also one thing related with the TLDs and some of the challenges that we are facing and especially with the new generic TLD programme and the issue that the one size fits all approach is one of the major reasons for the delay of this programme. This is because sometimes it is very difficult to switch a global perspective with the local issues we're facing in some regions even in the small areas within a country. So that's what we mostly talk about in Europe, and we are continuing the debate in a very interactive format, not only in decisions where we have less panellists but more interactive with the audience, but also online using streaming conversations.

Katim Touray:

The West African IGF was held this year in Dakar, Senegal, in early September, with the active and full participation of quite a number of countries. We certainly did not get all the countries to participate but we're very happy in the end with the level of participation that we got from the various countries in the sub region. It cut across the Board. We had Government officials and civil society participants as well as some elements of private sector participation. The meeting in Dakar was actually preceded by a few national Internet Governance Forums that were of different forms. In some cases they had online discussions on Internet Governance followed by face to face meetings. In some cases they had face to face meetings but all in all, the idea was that we will have the national IGFs and then this will feed into a regional IGF, and of course hopefully the regional IGF would feed into the international IGF that's being held in Vilnius. With regards to the theme, it was very much in the spirit of the theme for this global IGF, basically the theme for the West African IGF was promoting

the multistakeholder model for further Internet development in Africa, which is very much in the spirit of the theme for the global Internet Governance Forum, which is developing the future Internet together, or developing the Internet together.

I think the regional IGF was a very important event, a very important process, because you remember that presently this year, many countries in West Africa are celebrating their 50th independence anniversaries from Colonial rule. We realise and acknowledge that in many West African countries, democracy is yet to take hold and that's why it is important we have processes like the IGF to further strengthen the Democratic spirit and to concentrate on policy formulation and development. I'd also like to mention that we had very active partnerships and collaboration across all sectors to realise the organisation of the West African IGF. In particular, I'd like to mention we had very significant support from the open side initiative for West Africa which bases itself in Dakar, Senegal as well as from ICANN. The consortium that organised the West African IGF was led, in fact, by the free software and open source foundation for Africa, otherwise known as FOSSFA, and we had very able coordination from a member of FOSSFA, her name is Judy Okite and she's here with us today and I'd like to acknowledge her presence and the wonderful contributions she made. We had strong support from the Government of Senegal as well as from its regulatory agency and one of the Telecom operators, so it was a classic example of public- private partnership at work.

Regarding the various subthemes, we discussed open Access and Diversity, in that regard, in the case of Access and Diversity, the conclusions and the recommendations we arrived at was that, one, there should be greater effort to provide increased Broadband Internet access in the sub region. This shows we're really at a very different ballgame from what happens in East Africa with the landing of the cable submarine cables, they're now talking about content development and access for them is no longer a primary issue. For us in West Africa we thought this is still a significant theme that should be addressed. We also talked about the need to support the creation of local content relevant to the needs of the sub region, as well as the need to have greater civil society participation in the Internet in the sub region. With regards to Internet Governance for Development, the overwhelming feeling was that we should redouble our efforts to make sure that we have the protection of intellectual property rights, as well as domain names, and identity issues of the sub region, and people in the sub regions especially as we move forward with efforts to generate more domain names.

There's also the concern expressed that we suffer in the sub region the very pernicious problem, the sinister problem of having our IP addresses blocked by providers so that for instance, if you are from Nigeria and you want to access some sites, you might find it difficult simply because of the fact your IP address has been blocked, or in some cases for instance, your IP address has been black listed and pretty much anything that's sent out for email really doesn't get delivered the way and manner it should be if at all. There was also the concern and the expressed desire on the rubric of Internet Governance for Development that there should be increased ownership of the process by national Governments and regional Governments as well as the regional

economic community of West African states known as ECOWAS. In the area of privacy, security and openness we deliberated on the issues also and basically called for a multistakeholder approach to the policy development process to developing privacy laws and policies and that there should be efforts to have a regional approach also to data production and the protection of personal data and privacy.

We also thought that it was important that we redouble our efforts to partner with the global Internet community to improve the image of Africa on the Internet. The overwhelming feeling was that we really are getting a bad reputation and this has a lot of consequences in terms of both the usage of the Internet by Africans as well as how Africa and African content is perceived on the net. With regards to managing critical resources, again the underlying theme there was the emphasis on a multistakeholder process, the multistakeholder approach to the process, and in particular, there was a call for greater regional integration, greater regional effort, to basically provide all these services, the critical Internet services. In this regard, we called for the active participation and involvement of the service providers, the ISPs and also the IXPs, those are the Internet exchange points, and indeed, calling for the formation of regional IXPs and strengthening of national Internet exchange points. We also called for and advocated for the introduction of regional data centres to provide more robust and more effective resources and infrastructure for use by people in the sub region. We also had a discussion on Cloud Computing and the implications of this emerging technology, especially when we're talking about so much data from Africa and about Africa being more and more hosted outside in clouds.

With regards to the way forward, it is important to note that we actually have established a website for the U.S. African Internet Governance Forums, - www.waigf.org. There are discussion lists that have been established with the idea that the discussion wouldn't stop with the conclusion of the WAIGF. There are some people saying they're going to have their national IGFs after the conclusion of the international IGF. And of course they're also talking about having subsequent IGFs in the coming years and they've expressed interest in hosting those. We're looking forward to having more engaging IGF discussions in the future. There's also very interesting discussions and I think in a sense reflect a very uniquely African perspective, talk about the nomenclature of the Forum itself because there was the feeling for some people that once you talk about Governance in Africa you create a threatening atmosphere as it were especially for some Governments that really do not want to stand to scrutiny. So there was talk that at our local level we could change it from Internet Governance Forum to just call it an Internet Forum to make it more innocuous and less threatening to the authorities. So all in all, it was a very good meeting that we had, we felt that it was very important to have the space and to continue the discussion and the dialogue, and of course to participate in this Forum to engage in discussions and dialogue and exchange of ideas with our peers and our colleagues, and fellow Internet enthusiasts in other parts of the world.

Joseph Tabone:

The Commonwealth IGF has been in place now for just over a year and was set up within the context of the Commonwealth and ICT for development programme, which is called Commonwealth Connect and has been around for a few years. I should point out that the Commonwealth is made up of 53 member countries spanning the 5 continents; they range from the largest to the smallest and the richest to the poorest. The purpose of setting this up in the first place was largely to spread information about the Internet to the extent that it is possible for the sharing of good practice, and for capacity building purposes. The initiative has really to a large degree been driven by the U.K. and the Maltese Government and I'd like to thank my colleague Mark Carvel for his support in doing this. What we set out to do last year leading up to the consultations for the IGF was to get a sense from various interest groups throughout the Commonwealth about the interest and the need for such a group, and the feedback that we had was really supportive and enthusiastic, particularly these countries who have had no exposure and little access to Internet related activities.

In terms of what has been done in the course of this year, we have set up a website which contains a fair amount of information relating to ICANN and various GAC specific activities. In focusing our activities we tried to really get a sense from stakeholders about what they saw as priorities. There was an overwhelming list of issues, and at the top of that list was really the need for capacity building, the need for a safer online environment, a greater attention to the multistakeholder approach, and again a concern about the future of the IGF. We concentrated our efforts this year on capacity building, and have introduced a module relating to Internet Governance in Commonwealth activities and I think in the course of this, we've found ICANN very helpful in making resource people available. I think that these modules are really informative for a lot of people who really do not know very much about the setup of the Internet, the institutional setup of ICANN and the existence of the various bodies within that. The Government Advisory Committee has tried to draw in participants in these countries into the appropriate Internet Governance process. Two other really major activities that we have focused on in the course of the past year have been the compilation of two repositories, one on cybersecurity and a second one on online child protection. The cybersecurity repository is essentially a compilation of information relating to legislation, national legislation, international conventions, policies and good practice, in addition to information about various sources for capacity building purposes, which organisations can draw on. There is also useful information on infringements of intellectual property rights, computer related forgery and fault, computer misuse, legal access, legal interception and data interference which people find very useful. The online child protection repository, led by John Carr, one of the foremost U.K. experts on the subject, in conjunction with the American institute for child protection is on the CIGF website and will be a main subject of the workshop that we have scheduled on Thursday.

Moving forward the Commonwealth will continue to dedicate a fair amount of time to Internet Governance in its regional meetings. The participation in these regional meetings is typically Deputy Minister level and they are finding these Forums and these sessions really particularly useful. We have also really been trying to put out information relating to the Internet Governance Forum, it is origins, how it came about, it is objectives and the issue relating to the continuation of the mandate for the IGF, and we've been doing a fair amount of work in putting out information to member Governments relating to this, to the importance of the continuation of it in its really present format. We would like to find a way of focusing some more efforts on the capacity building. This is really something that a lot of countries and organisations seem to be crying out for, and particularly capacity building in the area of Cybercrime. We would also like to focus on youth participation.

Deidre Williams:

The Caribbean IGF is the oldest regional one. This year in August I attended the 6th Caribbean IGF in St. Martin in the Caribbean. So I'm very glad to be able to speak for it. And I think many of the same issues were dealt with. Mostly I think that I wanted to make sure that everyone remembered that the Caribbean is there too.

Claudio Lenoci:

Thank you for the opportunity to offer a reflection of the Italian Government inside this very interesting session on regional perspectives. Last year during the G8 meeting, the Minister of Innovation launched some e-Government projects with North African countries in the area of the Mediterranean to strength the prospects for access in a context of cooperation and collaboration. During recent years we have also been very active in creating and establishing Internet rights and Human Rights standards for the Internet. IGF-Italy and the Italian Government have the same vision today of the Web of Internet governance. We hope to continue to group stakeholders together, strengthening the intuition of the Tunis World Summit on the Information Society to promote a bottom-up regulation process as a result of concerted efforts. We should collect all principles, orientations and best practices in order to progressively elaborate an internationally recognized method

Our vision of an international response to Internet Governance issues is that it should take the form of a process of sharing and comparison. We want not top-down governance, but a bottom-up approach, utilizing widespread principles and practices. As in the case of maritime international navigation, today it is clear that Internet would not accept the top-down governance. Our proposal does not claim to be revolutionary, as it fully reflects the aim of the debate developed during the IGF meeting of all these years. It is clear in pursuing our collective goal; we need to join other global initiatives on the subject and to promote a real exchange of ideas and information. In order to facilitate this process, we plan to open soon a consultation at the global level through the English version of our website.

Dixie Hawtin:

I would like to talk about an initiative that I have worked on as part of the dynamic coalition on Human Rights at regional Internet Governance Forums. It is based upon the idea of this session, that there are really important conversations going on at the regional IGFs and that it is important to try and gather these together and see where there are areas of similarities and differences. What we did was send a rapporteur to attend each of the IGFs and write a report based on the discussions that went on there. We put these together into a global report and I just want to say some of the key findings. First of all, we found out that human rights issues come up at all of the regional IGFs; however, Human Rights language is rarely used when discussing them. This is something we thought was quite interesting given that Human Rights have a lot to give to our conversations given that they are well developed international standards which are applicable everywhere, they should apply to the Internet as well.

Multistakeholder participation was celebrated at all of the regional IGFs; however, there were also absent or underrepresented stakeholder groups at all of them including indigenous groups, women, people with disabilities, end users, nonusers and future users, as well as some of the more traditional stakeholder groups such as Government, businesses and civil society. Internet access was the foremost Human Rights topic at all of the regional IGFs, slightly less though at Euro DIG. Under that topic people were looking at infrastructure, educational programmes and capacity building, regulatory approaches as well as the need for the Internet to recognize more languages and to house more content which is relevant on a local scale. Personal data privacy was another huge issue at many of the IGFs. And there were many calls for new data privacy standards. Limitations to online content were also discussed, and many different issues under this heading were discussed such as political censorship, which was a big topic at the Asian Pacific IGF, whereas at the central African IGF they were talking about how great the Internet is because it circumvents traditional censorship or more traditional Medias. The value to children and young people were recognized at all of the regional IGFs particularly in education. All IGFs recognized the need for educational programmes to allow young people to take advantage of all the opportunities of Internet and also for the need to involve young people in Internet governance discussions.

Salameta Tamamkaiwaimaw:

The 'Pacific' in case most people don't know, is in the southern hemisphere and is made up of at least 16 to 18 sovereign nation states each with voting rights in the United Nations. Our first Pacific IGF next year will be held in April and we are really looking forward to that. In terms of differences and similarities, it was very fascinating hearing about the different developments. We are learning from Europe in terms of how they have been negotiating their treaties and what not, being able to draw from that. And we also have drawn richly from the Caribbean IGF in terms of the ICT strategies. The difference with East Africa is that while East Africa has just gotten access, the Pacific has had access for a while; we have cable all across the Pacific. One

of the things that is happening now in the region is the opening up to other networks. There are also rumors of Pacific fibre being built between Australia and New Zealand to increase capacity.

One of the huge issues is cost of access. For this issue we need to engage in diaglogue about competition and markets. The good news is we're having an IGF in April, and everyone is looking forward to it.

Markus Kummer:

There is a question on the sustainability of national and regional IGFs and also their funding. Funding is of course always an issue. What I would like to hear from the panel is whether from your perspective, is the global IGF dealing with the right issues or should it be dealing with different issues to satisfy your community? And then also, how do you see the interaction between the regional meetings and the global meeting, or also should there be some form of interaction between regional meetings, let's say Latin America and Caribbean or East African and West African?

Alice Munyua:

In terms of the relationship between the African IGF and the global IGF, I think since we started in 2008, it is been very clear to us that while there's been a major impact because of the recognition that we were not represented meaningfully. Since then the regional IGF went beyond that and began to look for relevance, local relevance. We are linking to the global IGF, but for us what is most important is that it is relevant to our needs and concerns and issues at the regional level. That's why for each East African regional IGF there's always a linkage to policy processes at the national level. We keep saying that we do not want to be constrained by the global IGF constraint and that's why for us we look at it as a sustainable process and that I think responds to the issue of sustainability.

When we look at the 2008 IGF, yes, we do have international partners that provided financial and in kind resources, I'll name some of them: ISOC, and ICANN, and AT&T, and IDFC, and others. Most of the support though came from the Kenyan Government and the Kenyan private sector even though one of the major challenges is that our private sector at the local level does not really understand what Internet governance is about. Contrary to the West African IGF, where the Government had an issue with 'governance', for the East African IGF it is the private sector that has an issue with the wide governance. This means we do have a lot of work to do in terms of creating awareness and understanding of the process. Working closely with Government has helped and you can see the results quite clearly, especially I think in Kenya, Uganda and Tanzania. The Kenyan ICT policy is a good example, the Government does not release any piece of policy without using the model that we use at the East African level where a piece of policy is first presented to a Kenyan ICT action network. We are actually right now beginning to consider discussing

Cybersecurity piece of policy. That's why the global IGF has been very important, especially because of the multistakeholder model.

Katim Touray:

I'd like to strongly advocate for greater collaboration between the IGFs at the sub region level in Africa but also call for greater collaboration between the various IGFs, especially those in the developing countries. This would enable the exchange of ideas across the various sub regions and regions of the world and we would be able to share the best practices that often are not really confined to any one location around the various parts of the world or Africa. I think it would be great opportunity to also help build capacity. We all know that in these developing countries, especially in Africa we complain often and rightly so about the dearth of capacity that exists. I think where we basically have better cooperation mechanisms we will be able to establish order and address serious capacity constraints that we have.

Regarding the sustainability of the IGFs, I see here an opportunity and a challenge. The challenge here is how we can ensure that in the future we will be able to get the funding levels that we will require to have the regional and the sub regional IGFs, especially with face-to-face meetings. It is not that much of a big deal to set up a mailing list and have an on line discussion. The problem is getting people flown in for a place for two days or three days or whatever to have face-to-face discussions. I think what we need to do is to tap more and more into local sources of funding especially because of the fact that we have more and more telephone companies that really have the resources to put their money where their mouth is. We have to look at how we can leverage the Internet to reduce the cost of hosting the online forums so that we can precede face to face meetings with a lengthy and intense online discussion so that at the end of the day the duration of the face-to-face meetings can be reduced and thereby save cost. Finally I see the day when we can leverage infrastructure so we can have Internet Governance Forums that are based on video conferencing or all the sub regional capitals so people can participate remotely at the regional IGFs.

Valeria Betancourt:

The global Internet governance space is a key opportunity to address the global dimension of issues; however, as global issues have impact at regional and national levels, it is important to look at the complementarities of the different spaces. The regional feeds the international and vice versa. These spaces should be in dialogue, with each space benefiting from the other's experience and expertise. Defining the priorities at the IGF should take into account the possibilities of balancing and combining agendas. The global debate should not eliminate the regional particularities and the regions should not predominate in a way that prevents the global dimensions of the issues from being clearly identified. Participants pointed out that it would be important to establish a more formal interaction between the regional and global meetings. It would contribute to make the regional priorities more visible in the global

debate. Some recommendations have emerged in regard of the interaction between the global and the regional meetings:

1. It would be useful for the IGF secretariat to prepare in advance a summary of the contributions from the preparatory events.
2. Making the interaction more formal could contribute to make messages coming out from the regional meetings more visible as inputs for the global discussion.
3. The global forum could be the place for regional actors to interact with each other as such, as long as there is meaningful preparatory process that would enable effective interaction.

Edmon Chung:

In the preparations for the Asian Pacific IGF, we talked about eventually finding different people as well, including the Pacific IGF and we're very much happy that that will happen next year. That leads me to the second item, which is sustainability. The funding is obviously always a problem. Another item in Asia is the diversity and the dynamics between potential hosts, I guess. On funding, I think in Asia we are fortunate, we're willing to support an APNIC and Internet related groups are very interested in supporting the sustainable dialogue in Internet governance and that leads to us having some surplus which allowed us is this year to send I think eight students over here from the youth IGF camp in Hong Kong (SAR).

In terms of the interaction between the regional and the global, I think continuity of dialogue between the various forums and workshops is critical. The other part is from the global to the regional, what we found is that it is very challenging as it is more of a bottom-up initiative, to invite ministers and Governments. Perhaps on that aspect the UN Secretariat and IGF Secretariat can help us more in inviting Governments' participation.

Kahaled Fouda:

In preparation for the global IGFs, I think that in addition to discussing the global IGF, maybe other issues should be explored that could be specific to the regions. It should also involve all different stakeholders. On sustainability we should be working on a five-year plan and road map.

Sebastien Muriel:

The European Internet Governance Forum plays a role not only in getting a common European focal point and enhancing coordination between all the countries, but also in the transmitting the key messages to the IGF and the European institutions that I mentioned: The commission of Europe, the Parliament and also the council of Europe.

Joseph Tabone:

In terms of the interactions between the various IGFs, this is very important and we should try to invest very sound time to find out how best this can be done. Coordination and the dissemination of knowledge is a key aspect of this. Sustainability and continuity is a challenge to most of us and we need to dedicate some resources to this.

IV. PROCEEDINGS

OPENING SESSION

14 September 2010

Keynote Speakers:

Mr. Jomo Kwame Sundaram**,**
Assistant Secretary-General for Economic Development, United Nations Department of Economic and Social Affairs (UNDESA)

H.E. Ms. Dalia Grybauskaite
President of the Republic of Lithuania

H.E. Mr. Eligijus Masiulis
Minister of Transport and Communications, Republic of Lithuania

Speakers:

- H.E. Dr. Tarek Kamel, Minister of Communications and Information Technology, Arab Republic of Egypt, [video presentation]
- H.E. Ms. Neelie Kroes, Vice President of the European Commission
- Ms. Maud de Boer-Buquicchio, Deputy Secretary General, Council of Europe
- Ms. Lynn St. Amour, CEO and President, The Internet Society (ISOC)
- Mr. Augusto Gadelha Vieira, Secretary General, Ministry of Science and Technology, Brazil
- H. E. Ms. Nathalie Kosciusko-Morizet, Secretary of State for Forward Planning and the Development of the Digital Economy, France
- Mr. Andrew McLaughlin, Deputy Chief Technology Officer, The White House, United States of America
- Mr. N. Ravi Shanker, Joint Secretary, Department of Information Technology, Ministry of Information Technology, India
- H.E. Mr. Jānis Kārkliņš, Assistant Director-General, UNESCO
- Mr. Rod Beckstrom, CEO and President, Internet Corporation for Assigned Names and Numbers (ICANN)
- Mr. Subramanian Ramadorai, Chair, ICC BASIS; Vice Chairman, Tata Consultancy Services (TCS)
- Mr. Sami Al-Basheer, Director, ITU Telecommunication Development Bureau (BDTITU)
- Mr. Jean- Paul Philippot, President, European Broadcasting Union (EBU); CEO, Radio Télévision Belge de la Communauté Française (RTBF)
- H. E. Ms. Annemie Turtelbloom, Minister of Internal Affairs, Belgium
- Ms. Ginger Paque, Co-Coordinator, Internet Governance Caucus
- Hon. James Rege, Chairman, Parliamentary Committee on Energy, Transport and Communication, Kenya

Jomo Kwame Sundaram:

President Grybauskaite, Minister Masiulis, Ministers, Excellency's, ladies and gentlemen, colleagues, it is a great pleasure to be with you in this historic city of Vilnius for the 5th meeting of the Internet Governance Forum. On behalf of Sha Zukang, the United Nations Under Secretary General for Economic and Social Affairs who regrets not being able to be here with you today, I would like to thank the Government and people of Lithuania for their warm welcome and very gracious hospitality. The theme of this gathering is "Developing the Future Together." Considering all that has been achieved in the last five years, this is fitting. It embodies the spirit of the Geneva and Tunis outcomes of the World Summit on the Information Society and reminds us that we are here in pursuit of development for all and thus a better future. The Internet Governance Forum was established by the United Nations General Assembly in early 2006. Since then, it has helped Government ministers, Civil Society representatives, the private sector, technical community, and U.N. agency leaders to understand the challenges and potential solutions to the digital divide. The Forum's central aim is to afford all people the benefits of the Internet. At this fifth meeting of the Forum, we will carry discussions further and cover new ground. Your insights on topics such as the management of Critical Internet Resources, Security, Openness and Privacy, Access and Diversity, and Internet Governance are as relevant as ever, as are your views on the emerging issues of Cloud Computing.

This meeting is especially timely because next week, the United Nations will convene a summit in New York to accelerate global action on the Millennium Development Goals. More than 100 Heads of State and Government are expected to attend, along with leaders from the private sector, foundations and other Civil Society organisations. With only five years left until 2015, we need to work urgently towards achieving the Goals. There are so many ways that the Internet can help developing countries reach them through both simple and sophisticated techniques, the Internet can help eradicate poverty, educate people, sustain the environment, and create healthier populations. Let us recommit ourselves at this Forum to identifying the barriers that prevent stakeholders from using the Internet for development, and to suggest ways to bring down those barriers.

Globally, there were some 1.8 billion Internet users by the end of last year, according to the International Telecommunications Union. About 60% of them were in developing countries, up 30% from six years ago. Internet usage has increased sharply in the last few years in all regions. Between 2005 and 2009, the number of users in Africa surged from 16 to 69 million, in Arab states from 26 to 64 million, in the Asia Pacific region from 347 to 744 million and in the Commonwealth of Independent states, from 30 to 99 million. In the Americas, the number of users went from 322 to 447 million, and in Europe, from 277 to 387 million. 60% of people in developing regions have cellular telephones and more and more are using mobile Broadband. These numbers

are indeed cause for some celebration and yet, other metrics show that the digital divide between developed and developing regions has been widening. For example, in 2005, there was a 43% gap in the proportion of people using the Internet between developed and developing countries. By 2009, the gap had widened to 49%. In 2005, there was a 4% gap in the proportion of people with mobile Broadband and by 2009, the gap had widened to 37%.

This tells us that while developing countries are making progress; developed countries are moving even faster. Let us use this IGF session to brainstorm on how to address this disparity. What strategies work best when it comes to expanding Internet and Broadband access? How can we best influence policy makers? We need your regional and national inputs, experiences, and suggestions. Feedback from participants from the least developed countries and countries emerging from conflict will be especially valuable in discussions on Internet service during disasters and crises. I hope they will speak openly and often in this session and others. Digital inclusion and multilingualism which will be discussed in the session on Access and Diversity continue to be paramount concerns. The reach and power of social networks adds new dimensions to these issues. Help us to deepen our understanding of these topics, especially with regard to how poor and vulnerable populations may be positively or adversely affected. Discussions will also centre on the freedom of expression and the right to privacy in personal, national and regional contexts. I look forward to a dynamic debate among the security specialists and philosophers in the session on security, openness, and privacy. Cloud Computing will add an interesting new twist to many of these issues.

As most of you are aware, the five year mandate of the IGF expires this year. The Secretary General has recommended that the Forum's mandate be extended, and that a number of improvements be made to the Forum. These matters are now before the United Nations General Assembly for its consideration before the end of this calendar year 2010. Excellency's, colleagues, friends, the Internet can assist us in reaching the Millennium Development Goals. It can help improve the lives of millions if not billions of people. Its Governance is a serious responsibility and on that note, let us begin an engaging, illuminating and productive discourse. In accordance with the custom of the Internet Governance Forum, I now have the honour to invite His Excellency Minister Masiulis, Minister of Transport and Communications of the Republic of Lithuania to assume the Chairmanship of the meeting on behalf of the host country.

Dalia Grybauskaite:

I want to welcome you very much for gathering here, we're very happy that Lithuania can host you for these three days. Distinguished participants of the Internet Governance Forum, your presence here is very important to us and it proves the necessity of this Forum. The Internet, which was born not so long ago, in the second half of the 20th century, has become an integral part of our everyday life. It is impossible to imagine modern business, public services, and the spread of information, cultural exchanges, person to person contacts, entertainment, and leisure without the global electronic

network. The development of the Internet is crucial to worldwide progress. It provides a very special space for people of arts and letters, the business community, researchers, and also human rights activists.

It is very pleasing that the Forum launched in Athens has now moved to Vilnius. Lithuania has achieved truly good results over the past decade. Today we have one of the highest Internet speeds and mobile phone penetration rates in the world. We must continue to invest into technological development and accelerate the implementation of national and European digital agendas. The Internet not only contributes to the development of a knowledge society, but also poses new challenges relating to privacy, data security, and is very important for Europe. It also is related to child abuse, e-theft, and intellectual property rights. There is also the problem of dishonest Internet users, as the number of security incidents on the Internet has increased tenfold in the past several years. The use of illegal software is also on the rise and the crime is becoming global. That's why actions taken only on the national level will not necessarily help to overcome the newly emerging challenges. We therefore need to have a more close and open dialogue between the interested stakeholders: national and international institutions, businesses, consumer protection groups, and other Non-Governmental Organizations.

The international community has no other choice but to work together to find the necessary global solutions. We have to create a more reliable and more secure Internet for tomorrow. We have to consolidate the efforts of all countries to engage in joint research and to explore new options. Each and every one of us can make a fitting and appropriate contribution to foster the sustainability and development of the Internet. Let us have the interests and expectations of all legal Internet users at heart. Let us respect the principles of the Internet as a free space and at the same time, let us search for the means and methods to stop malicious and criminal activity in the cyberspace. I wish the participants of the Forum many new ideas, resolute decisions, and meaningful interesting discussions.

Eligijus Masiulis:

Your Excellency, Dalia Grybauskaite, President of the Republic of Lithuania, Mr. Jomo Kwame Sundaram, assistant Secretary General for Economic and Social Affairs, Honourable Ministers, members of Parliament, delegates, distinguished experts, ladies and gentlemen, it is indeed a great honour for me to be asked to chair the 5th meeting of the Internet Governance Forum 2010. I thank all of you for expressing your confidence in me and I'm counting on the continued and full support of all stakeholders participating in this Forum in the work that lies ahead of us in the next three days to make our meeting a success. It is indeed a great honour to welcome you here to the 5th Internet Governance Forum that is being launched in the heart of Lithuania, its capital Vilnius. The Internet Governance Forum is one of the biggest events that has ever been launched in Vilnius and is the greatest event in the field of information technologies. There is no doubt that the Internet plays an integral and very important role in the economic development of all countries. Being a Minister,

I'm not only responsible for communications and information technologies but also for transports, and I have to say that Internet development plays an important role in efficiently developing the roads, the railways and other means of transport. It also makes trade better and facilitates the export of services, stimulates the business environment, promotes competitiveness and contributes to the growth of GDP of all countries.

The Internet is at the moment the driving force that helps to transmit information. It helps to create jobs and helps promote the implementation of innovations and contributes to the sustainable development of our economy. The Internet influences and determines not only economic but also social factors and helps to create the sense of community, increase human capital, enhances communication between the business sector and other groups of people. The investments to Internet infrastructure helps to improves both healthcare and the education system. In the most advanced countries of the world, the right to the Internet is a given. It is a fundamental human right, as the right to work, to freedom, to health care, or property. Many new countries have actually enshrined this right into their legal rights. The Internet plays an important role for the Democratic process, for the rights of people and promotes the involvement of people into digital space.

The Internet and Information Technologies are of utmost importance to the contemporary society, and also play an important role in the efficient running of private and public sectors and in providing the access and quality of electronic services for people. The application of technologies have become an inseparable part of our everyday life. According the International Telecommunications Union, in 2009, there were 1.8 billion Internet users, and this number is increasing everyday. Everyday we send 247 billion emails. The Internet and modern technologies have to serve for the well being of our communities and our people, and only then our users can feel confident in exchanging emails and using information technologies and exchanging information. That's why we have to really pay attention to the security and safety of the Internet. A few factors determine the accessibility and reach of the Internet. national regulation environments could play an important role for the development of the Internet. The national tools can actually promote the growth of Internet and can create a good legal environment for e-governance and e-trade.

We have to promote the development of broadband and ensure competitiveness in providing Internet services. We have to see the vision for our future prospects and have our objectives and aim to implement them. In the digital agenda of the European Union, it is foreseen that by the year 2013, 100% of the inhabitants have to have the opportunity to access Broadband, and by the end of 2015, the usage of Internet should reach 75% in the European Union, and by the year 2015, more than 50% of Europeans should be able to use services. I would like to emphasize that Lithuania, as a member of the European Union, will implement these objectives of the digital agenda. We will especially focus on the implementation and development of Broadband and Internet safety and security. We firmly believe that communication technologies will help Lithuania and the entire world overcome the crisis to strengthen economic and

social potential. To conclude, I would like to say that I do hope that in the coming four years, we'll discuss the problems and find the solutions so in the future, we'll avoid the mistakes and will never repeat them. Lithuania aims to continue the IGF activity, and I wish you fruitful and interesting discussions in the sessions and the seminars.

Tarek Kamel (via video recording):

The main issues I want to mention are the issues of international domain names and multilingual domain names. It had been announced during the IGF in Sharm El Sheikh by the ICANN that there will be a process for certification of multilingual domains globally. Egypt was glad to be the first country to apply for a multilingual TAD, and we're glad to be one of the first countries to be awarded this last May. We are now in the sunrise period promoting and branding our normal domain name and CCTNT. This really shows that the IGF process is committed to openness and to globalizing access. It is very important to make sure that normal access becomes available for people all over the world in their own native languages. I believe that multilingual domain names and IDNs will gain in the future additional potential and will provide more and more opportunities for investment, for content development as well as for access for newcomers in global business. I wish the event in Lithuania this year in 2010 a lot of success. The challenges are immense but I think that the IGF community has proven maturity and has proven that it is able to meet the challenges. It is a multistakeholder process that shows success and we hope that it will continue with the same success within the next five years. We still have challenges in security issues globally. We still have challenges in creating more openness. We still have challenges in freedom of expression and many issues related to Internet governance. Egypt looks forward to the success of this event and will contribute with maximum effort within the process for the next five years.

Neelie Kroes:

As many of you know, the European Union has been very active in the field of Internet governance since the early days. In fact, the first EU activities took place in the 1990s even before the term was first coined. The need for coherent and appropriate public policy for Internet-related activities has since reached all continents, as was demonstrated vividly by the attention given to the subject during the World Summit on the Information Society in Tunis back in 2005. During this coming week, many different aspects of Internet governance will be discussed but there is one particular element that I believe underlies why we are all here: We all know that the Internet is a globally important infrastructure and we agree that its governance must also be global in nature, and with the number of Internet users growing worldwide, this aspect becomes even more important. Just look at the figures: The emerging economies will soon have more Internet users than the EU and the United States combined. Internet governance is therefore equally relevant to all public authorities around the globe and not just the prerogative of the developed countries. For that reason, five years after committing to the Tunis Agenda, more progress towards enhanced cooperation must

also now materialize as we must go beyond just another round of consultations on the subject.

Public authorities across the world must now be able, on an equal footing, to effectively carry out their roles and responsibilities when international public policy issues are at stake. There are already some signs of progress, and I see that ICANN is reviewing its working methods. I'm hopeful that similar steps can be made when it comes to IANA functions. We need reform; but we don't need a revolution, and the IGF can help us get new ideas for this in a sensible manner. The IGF, as a platform for international multistakeholder dialogue, is a unique opportunity for debate between stakeholders from around the globe. That is why the EU supports the continuation of the IGF as a nonbinding forum, and we therefore particularly welcome that Kenya has already formulated and offered to host the IGF for next year. That will certainly help to continue to reinforce the diversity of perspectives towards Internet Governance.

We should also continuously seek to improve the IGF itself, for instance, there is certainly room for even more outreach. In the past four years the IGF has achieved quite good results in terms of the diversity of participants and having said that, the rotation of the forum across geographic regions also constitutes an important factor in bringing new voices. Still, if we want to see more outreach and more diversity, and eventually richer debates taking place here, we will all benefit, and all of us have to continue to put more efforts into this. I'm particularly pleased that more and more parliamentarians, in particular from the European Parliament and National Parliaments in the EU, are participating in the IGF.

One important debate is that related to multilingualism online. We have seen progress regarding the launch of some internationalized domain names at the top level and I believe that it is of most importance that citizens now have the option to use the scripts of their language for their domain names, e-mail addresses and so on, just like in their everyday life. A key underlying principle in those processes is of course the respect for Governments and other relevant public authority decisions, allowing each territory to decide for itself how it wishes to implement Internet developments. The open character of the IGF is also very important in this context. It is open to all stakeholders and to all themes; just as the Internet should be. Furthermore, the openness of exchanges in the IGF is facilitated by the lack of pressure to achieve negotiated outcomes. In a way, the IGF is shaped like the Internet itself. Openness is and will remain the key to the Internet's success. It must also be said that there are other ongoing challenges amongst many successes of the Internet. The IGF is also right in addressing issues that concern citizens directly such as security and privacy, and the need to ensure freedom of expression and combatting the digital divide are other examples where efforts must be continued. Freedom of expression is not only a basic human right; it is also a key element for tomorrow's social and economic development. It allows the free movement of ideas and allows the free movement of innovation.

The Internet is defining communications technology of our age. We should all work hard to ensure its full potential as a medium for creativity, for innovation, and

expression if realised. Part of the challenge is to ensure that the benefits of the Internet accrue to all on the planet, and not just a privileged few. CTs play a critical role in helping shrink social and economic disparities around the world. In conclusion and in follow-up to the meeting of the United Nations Economic and Social Council, I see many opportunities to move from reflections to action on enhanced cooperation and improvements of the IGF as an open, multistakeholder and nonbinding forum and I'm absolutely certain that this week's exchanges in Vilnius will generate some innovative ideas. At the same time, we have to capture the best thinking and turn it into actions. That is what people are expecting us to do and I sincerely hope that all the exchanges over the coming days will be truly fruitful.

Maud De Boer-Buquicchio:

It is said that the best way to predict the future is to create it. This IGF is devoted to the development of the future together. To achieve a meaningful result we have first to share a vision of what we want to have that future to be. We then have to contribute to shape it with the means each of us have. As a Human Rights organisation the Council of Europe's vision of the future can only be a world in which fundamental rights and freedoms are respected both on line and off line. We have therefore invested in the development of a modern set of legal instruments which take into account the challenges of evolving technology and complement our main Human Rights instruments. These instruments are made in Europe but they are not meant for Europe only. They contain standards that are inspiring legislations and policies around the globe. Our convention on cybercrime has become the legal framework of reference to protect Internet security and fight cybercrime at the global level. It is a legally binding instrument for 30 countries already, and more than 100 countries use the convention as a guideline, reference, standard or model law. Through our convention on the prevention on terrorism, we have criminalized and are monitoring the practices of public provocation and the recruitment and training of terrorist acts on the Internet.

The child convention on human rights and biomedicine protects people against inappropriate offers over the Internet; moreover, two draft Council of Europe conventions contain reported Internet regulations. Our draft convention on violence against women and domestic violence protects women and girls from all gender-based forms of violence including abuses such as stalking and harassment committed via the Internet. The draft Council of Europe convention on the counterfeiting of medical products and similar crimes that threaten public health includes Internet related provisions. Last, but not least, through the modernization of our convention for the protection of individuals with regard to automatic processing of personal data, we expect to address the challenges emerging from new technology, globalization, and increasing storage and surveyance powers of computers. For the years to come our ambition is also to provide guidance for privacy-compliant legislation and practice regarding profiling. The idea is to address profiling by state and non-state actors who are capable of creating personality profiles of virtually all citizens and track their movements, thus creating the diffusely threatening feeling of being watched, which can impair a free exercise of fundamental rights. Our freedom to connect should

be enjoyed without interference and regardless of functions. We are mindful of the need to preserve the openness and universality of the global Internet and are therefore developing legal standards on the Trans-boundary flow of content and freedom of expression.

The Council of Europe believes in the multistakeholder approach to Internet governance and is supporting the European Internet Governance Forum. States, in cooperation with other actors, have the responsibility to ensure that activities within their control or jurisdiction do not cause damage to the connectivity, stability, security and openness of the Internet in other states. The Council of Europe is currently addressing issues such as: what are the rules and responsibilities of states to deter and protect the Internet from interference or attack? How can states cooperate together and with other actors to protect and preserve Internet freedom? How can cybercrime be fought effectively by respecting the fundamental rights and freedoms of individuals? How can we effectively protect privacy in a borderless world while ensuring transborder flows of personal data that are vital for our economic well being and a fight against crime? Ladies and gentlemen, Abraham Lincoln once said that the best thing about the future is that it comes only one day at a time. So let us use each of our future days to improve our governance skills and progressively shape the Internet as a space of freedom, justice, and democracy.

Lynn St. Amour:

The theme for this Internet Governance Forum, developing the future together, is a very important one and it raises many of the key principles that the Internet itself was built on and on which it continues to thrive. We've given this collection of principles a name -the Internet model, and this togetherness, or collaborative model, lives in an even larger context called the Internet ecosystem. The Internet ecosystem encompasses the diverse set of organizations and communities that work together, guided by the shared principles of the Internet model to develop, manage, and operate the Internet. The Internet model, the Internet ecosystem, and the Internet itself depend on collaboration, openness, transparency, inclusiveness, and a broad, uncensored input and often robust debate. Clearly there is a lot in common between the Internet's development and the IGF, and one could legitimately say the Internet model was a forerunner for what is now referred to as multistakeholderism.

Since the last IGF, the Internet society, its global community of chapters, as well as all the other Internet organizations have undertaken many impressive and enabling activities with the aim of expanding access to and participation in the Internet, and in the organizations and communities that make up the Internet ecosystem. As we meet this week, the challenge remains to extend the Internet to the billions more who should also be benefiting from it. With almost 2 billion people on line, the Internet model's decentralized approach, enabling permission-less innovation, and promoting shared responsibility for the development, operation, and management of the Internet has been the catalyst for boundless innovation and creativity. It is the key to reaching those next billions, as well as to addressing the new challenges the Internet is facing.

The Internet is a platform that intrinsically enables new developments and hence is imminently suitable to addressing current and emerging challenges and I would like to speak briefly about one of these challenges. The Internet society firmly believes that in order to preserve the long-term health of the global, open Internet, we must remain true to the principles of the transparent, open, and inclusive Internet model. I hope you agree that it seems extremely unlikely that closed processes will lead to policies that support a truly open Internet. There is a lot of commonality between the IGF and the Internet itself. Some stakeholders approach this novel form with trepidation, expressing fear, uncertainty, or doubt. The same could be said of the early days of the Internet's development. Along the way though, we have seen the value of an open, global Internet, just as we have seen the value of healthy, open debate as embodied in the IGF here today. The issues we face are complex and have many dimensions, making it all the more important that we work together in open, multistakeholder, easily accessible, and mission-appropriate venues. The forum's leadership and the willingness of all stakeholders to sit and work together with the aim of contributing to making Internet governance work have been key enablers of this fascinating and rewarding journey.

While the road we are on has perhaps become clearer, our final destination has not. We find ourselves in a curious place where it is possible today that key Internet policies may be decided by small groups of people or companies. For example, some national net neutrality policy processes, while initially quite open, are increasingly being held as closed sessions with small numbers of participants. Yet it is we, the Internet users, who have to live with the outcome of these closed discussions. The anti-counterfeiting trade agreement, ACTA, while affecting individuals across the world, was initially negotiated behind closed doors with little to no transparency or active multistakeholder engagement. Steps were taken earlier this year to address this shortcoming, and we hope to see continued progress in this direction. Similarly, many current discussions about Cybersecurity, which often masquerade as protection for citizens, are more about hardening or locking down the Internet than about finding the right balance between openness and protection. Rather than focussing on a single solution, innovative approaches such as trust, privacy, and identity management being considered in venues such as the Internet engineering task force, as well as other communities, can help to address these very real challenges and must also be considered. To truly realise the benefits the Internet promises us requires that we all support the Internet model of development and work even more collaboratively to develop the Internet together. This will ensure we have an Internet that will be all it can be, for each and every one of us on this planet. The IGF is one venue, and a very important venue, that embodies this approach. Clearly, the Internet society supports the continuation of the Internet Governance Forum.

We believe that the IGF has more to offer going forward; we believe for it to founder now would be a serious blow to advancing Internet governance. We urge that the future of the IGF be decided in ways true to its multistakeholder foundation. The Internet society and the other organizations that make up the Internet community take the responsibilities for the overall health of the Internet, for the benefit of

end users, very seriously. As such, we do not make calls like this lightly. We urge all stakeholders: Governments, private sector, civil society, the Internet community, and intergovernmental organizations, to come together to protect and preserve the open Internet and its collaborative development model, for the undeniable benefits it provides to all of us. The new opportunities and challenges created by the Internet bring technology and policy together in ways not previously experienced. We believe it is vital that all stakeholders actively strive to make their policy and decision-making activities open and inclusive. Where this has been done, it has clearly shown its worth. In closing, let us build on the success of the Internet model, the Internet ecosystem, the IGF, and the Internet itself, and not squander a once in a lifetime opportunity for the Internet to be all it can be to all of us.

Agusto Gadelha Vieira:

The Internet is now the main channel for communications between people and organizations, for financial transactions and a cultural life of our time. It is a dynamic and powerful tool for development and public policies must guarantee universal access to the technological infrastructure as well as the knowledge it produces.

At the same time, when addressing Internet's continued evolution, the key word is openness. Openness of its governance, of its technologies and standards of the opportunities it enables. To establish the Internet as a domain of the human rights in all its scope, we should always seek the difficult, but feasible, balance between security and privacy. In 2007 Brazil was honoured to host in Rio, the second edition of the IGF. Since then we have seen in our society a steep increase in awareness and interest on issues related to management and use of the Internet. The Brazilian Government has taken seriously the task of providing quality access to the Internet and bridging the digital divide. We are actively promoting public policies related to Broadband deployment, e-Government, open standards, local content, e-education, and e-health, among other initiatives. Our aim is to take advantage of what Internet can offer to empower Brazilians to develop their skills in creativity to their full potential.

The widespread use of the Internet has also brought about challenges in terms of providing universal access, guaranteeing security, promoting diversity, avoiding malicious conducts, safe guarding vulnerable groups, and applying the law. The solution we have envisaged in Brazil is the establishment of a civil rights framework for the Internet, which will set the basic rights and principles for the use and management of our interconnected society. In this way we hope to set the stage for reaping the full benefits of the Internet in the context of our development policies. International collaboration and coordination on the use and management of the Internet is crucial if we want to succeed. That explains the strong presence of the Brazilian delegations in Vilnius. You will notice that we brought here a true multistakeholder delegation, reflecting the path we have chosen to manage the Internet in our own country. We are convinced that it is through dialogue and cooperation, in a spirit of openness and democracy, respect for diversity, freedom of expression, and participation that we will achieve our collective goals of making sure the Internet is a safe and reliable tool

for development. Five years after our first meeting in Athens it is time to appreciate the progress we made and the goals we achieved at the IGF. This is much needed discussion in light of the perspective of IGF's continuation and improvement. We must strengthen and institutionalize existing mechanisms of participation in the IGF such as the regional process, dynamic coalitions and best practices such as remote participation, while preserving the agility, independence and openness of such mechanisms. Moreover, it is time to discuss ways on how to move forward when we are able to achieve general consensus on important matters, as well as how to account for differences of opinion between us, something that should be viewed as a natural and enriching part of the Internet governance process.

Nathalie Kosciusko Morizet:

For five years the Forum has brought together the Internet community to discuss and gain understanding about the information society and how to draw benefits from it, and how to preserve it from political and economic slippages. That first phase is coming to a close and soon the U.N. General Assembly will pronounce on extending this experience and of course, with all Europeans, and those who have appreciated these meetings, France supports our renewal of the IGF's mandate, and calls for the next few months to be used to strengthen the capacities. The multistakeholder approach and the broad freedom in the selection of themes for the discussions are an example which I have tried to follow with my colleagues in the French Government, particularly since my last visits to you in Sharm el Sheikh.

We spoke of the right to the protection of privacy. I'm happy to announce the forthcoming signature in France on targeted publicity and another on control by Internet users. I hope this step which is only a beginning and that it will incite many of you to join the fight for our own personal data to remain personal. We've spoken of Internet neutrality. Several months of debate and consultations later after Sharm el Sheikh it is clear that we need to guarantee by law in the long term the openness and universality of the Internet and ensure that innovation can continue to prosper there.

What France seeks to do and what Europe will do will not be enough if we do not have international level reflection and discussion on Internet Governance including the subjects that come under ICANN. We need this to deal with this major challenge of respecting human rights, and particularly freedom of expression on the Internet. Our Minister for foreign affairs Bernard Kouchner is bringing together a pilot group of ministers on 15th October in Paris seeking to protect, promote and strengthen basic rights on the Internet. If we allow the Internet to be diverted from its purpose and become a tool for representation, censorship and hunting down opposition, we're signing the Internet's death warrant and abandoning our own ideals. All stakeholders present here, Governments, NGO's and the private sector are responsible for and able to build a sustainably free, open Internet, respectful of private life, privacy, property, the rights to freedom of association, expression and opinion. All of us are concerned by this and the Forum of Internet Governance has work ahead of us. I wish it and us every success.

Andrew Mclaughlin:

On behalf of President Obama I'd like to express thanks to the Government of Lithuania and its Government for sponsoring and hosting the IGF. I will say a few words about why we're here, why it matters, and what comes next. Fundamentally the reason that we're here is because the very architecture of the Internet itself embodies a mode of social organisation, a mode of technical organisation, which is decentralized, which is cooperative and which is layered. Each three of those characteristics are fundamental to the benefits the Internet has brought. It fuels the freedom of innovation that enables economic growth. It fuels the freedom of expression that enables social and political growth, and the functioning of Democratic societies worldwide. It is especially important for the developing world and I want to stress this today. The very open nature of the Internet which is to say, the Internet's ability to support innovation without permission, the ability of the paradigm attic two kids in a garage to create a new service, to create a new application, to create a new website and immediately reach every potential consumer in the world is one of the things that is going to fuel economic growth throughout the developing world and enable access to global markets in a way that has been much more difficult with physical goods and services in the past. So for the developing world, we're seeing this dramatically reduced cost of communication and information, bringing increasingly accelerating benefits. Local entrepreneurs in the developing world can innovate locally, and reach global markets, same thing for educational institutions and for Governments and movements in the non-profit world.

By way of historical example, I think it is important to note that when you compare the pace of innovation that we've seen on the Internet with the pace of innovation that we saw with the previous primary communications network, namely the telephone system, you get a sense of how dramatic the benefits of this architectural model can be. Over the course of decades, the telephone system innovated really a couple of features: Voice mail, call forwarding, caller I.D., and that was about it. The major Telecom companies even resisted fax machines, and the adding of data across the top, until they were essentially forced to accept it. In the Internet by contrast where no permission is needed to deploy new services, we've seen an unbelievable staggering explosion of new capabilities and tools at ever reduced prices. Today we have 5 billion mobile phone subscribers, a billion mobile data subscribers, more than 2 billion Internet users worldwide and those numbers are accelerating everywhere, especially in the developing world. So why does this matter? It matters because the architecture of the Internet needs to be actively maintained and supported. And as I said that architecture is decentralized, it is cooperative, it is layered and the governance institutions, governance processes, have to mirror and in many ways model that architecture in the way that they function. That's why the IGF is so important because it is a critical element of the multistakeholder process applied to the problems of Internet Governance. Even the term governance is a little bit strange and requires something of a new definition. It is in English anyway a singular term. What it really needs to be is a plural term, governances. We need mechanisms and institutions that respect each

other and cooperate with each other to strengthen their own core competencies and to enable others to pursue their distinct roles in that broader ecosystem.

One very encouraging step in this direction has been the proliferation of regional and national IGFs which enable us to take the multistakeholder model down to the national level and then raise issues up to the global Internet governance Forums like we are today. We have to acknowledge at the same time some of the anxieties that go along with this process. Governments want and they need and are entitled to the ability the pursue public policy objectives on the Internet as well. We also have to recognize we can't solve all of the problems of the Internet in one Forum, not one treaty organisation, not one multistakeholder Forum, we need multiple institutions. On the technical side the Internet Engineering Task Force, the World Wide Web Consortium, the IEEE, the ICANN, these are all organisations that play specialized roles that have to work in concert with one another. The critical point is to respect those different roles and to foster cooperation among them, and as I said that's what the IGF is here to do. So what next? Well, from the perspective of the U.S. Government and the Obama administration we're strongly committed to maintaining the IGF, to maintaining it in its current form as one key mechanism of Internet Governance and one that models, as I said, the Internet decentralized cooperative architecture. In closing, I want to say we greatly appreciate Kenya's offer to host the next IGF and we look forward to seeing everybody there.

Ravi Shanker:

The Internet has been a game changer. It is been a democratizing element and I think that is what inspires all of us to come to a common platform. The IGF is a Hub of activities. It is a Hub of activity in which each one has a different thought. There is a movement towards consensus and yet there's a lot of respect for diversity and differences. I think this is a democratizing platform which in itself is a harbinger of change. The Government of India fully recommends the continuance of the IGF. We recommend it because of its multistakeholder participating approach. We recommend it because it is in pursuance of the Millennium Development Goals. We recommend it because it is a transformer and a democratic element.

In India the hosting of the third IGF brought a lot of excitement. The Internet for all excited the people of India. At the third IGF, we felt that the inclusive growth can come about only through a multilingual platform, and multilingualism has been an important instrumentality of growth among the Internet and the IGF itself. The spirit of multilingualism has transmuted from the IGF to the ICANN and the onset of the ccTLDs itself is an indicator towards the convergence of the thought of multilingualism both in the IGF and the ICANN platform. I would think the Internet is like the renaissance of our times. It is unleashed the creative talent of people. It is brought out the creative forces which are embedded, and whether it is the Facebook, whether it is the twitter, or whether it is any new platform that is likely to emerge, I think it all is very well. I would like to think that the IGF itself as a model would be talked about in business schools of the future. It will be talked about as a management

model for multistakeholderism. We have had a century of the management thoughts of tailorism. I think now we would have the thoughts of the multistakeholder approach, which is bottom up approach.

Janis Karklins:

I'm pleased to address the fifth edition of Internet Governance Forum on behalf of the United Nations Educational, Scientific and Cultural Organisation. UNESCO has been an ardent supporter of and contributor to the IGF, which we have always seen as an essential platform for multistakeholder discussions. The Forum provides an important channel for exchanges of opinions, ideas, and concerns. It provides us all with inspiration and ideas for our work to improve Internet Governance. UNESCO's interest in the IGF stems from our conviction that the Internet has a key role to play in fostering pluralistic equitable knowledge societies. Let us look just five years back, the end of the World Summit on Information Society. ICANN was reporting to the United States Government under the terms of memorandum of understanding. During the IGF in Athens, the first one, the community began discussing the management of resources, critical resources, of the Internet. A year later a memorandum of understanding was replaced by the Joint Project Agreement, and three years later by the Affirmation of Commitments. I have no doubt that the heated debates in the IGF meetings contributed significantly to gradual evolution of the oversight mechanisms of the technical coordination of the Domain Name System which was one of the key issues during discussions of the second phase of the World Summit on Information Society.

During this preparatory process and the first IGF, calls for internationalization of domain names were very persistent. I remember Ms. Manal Ismail from Egypt informing us about the work of the Arab states on language tables for Arab script based languages. Today international domain names are a reality not only for the Arab states but for dozens of other countries as well. UNESCO has always advocated linguistic diversity on the Internet. It is not acceptable that as recently as 2008 only 12 languages accounted for 8% of all Web pages on the Internet, considering that people on our planet speak approximately 6,000 languages. English is clearly the dominant language on the Web and was two years ago only used by 72% of Web pages. However, speakers of other languages also need to be able to express themselves on the Internet. To help achieve this, UNESCO signed a cooperation agreement with ICANN late last year, providing for cooperation in promoting multilingualism on the Internet.

In recent months, UNESCO has grown increasingly concerned about growing efforts in some parts of the world to limit freedom of expression on the Internet. It is not acceptable for our organisation whose Constitutional goal is to promote the free flow of information by word and image. Freedom of expression is central to building strong democracies, contributing to good governance, promoting civic participation and the rule of law. It is also essential for human development and security. The principle of freedom of expression as stated in Article 19 of universal Declaration of human rights, must apply to the Internet just as it should to traditional media. Therefore,

during this edition of IGF, UNESCO will continue engaging with all stakeholders to address this issue, advocating for the free and unfettered flow of information. I would like to emphasize our great responsibility to respect the interests and fulfill the aspirations of the billions of people who have yet to connect to the Internet. Therefore, let me reiterate UNESCO's commitment to the IGF and its multistakeholder approach. Less than a year ago, UNESCO's 193 Member States adopted a decision during the general conference to strengthen UNESCO's involvement in the field of Internet Governance. UNESCO shares the enthusiasm of IGF participants to increase multistakeholder participation in, and understanding of, the Internet. Our ultimate goal is to create conditions in which the Internet will provide development opportunities for all.

Rod Beckstrom:

I begin my remarks with a simple reminder: The Internet works, every minute of every hour of every day. The Domain Name System processes hundreds of billions of transactions every day. More transactions than the world's financial markets, and more than the world telephone systems. The fact that the Internet works is a testament and a tribute to the multistakeholder governance model. Governments could not do it alone. The Internet has the power to transform the human experience. It enables communication on an unprecedented scale and is woven into billions of lives around the planet. Its openness, its inclusiveness, its relative lack of regulation make it a fertile field for innovation and competition, an engine for much needed economic growth. Why mention inclusiveness? Because everyone using the Internet should and must have a voice in its governance. If governance were to become the Province exclusively of nation states or captured by any other interests, we would lose the foundation of the Internet's long term potential and transformational value. Decisions on its future should reflect the widest possible range of views and the wisdom of the entire world community, not just Governmental organisations.

ICANN is a multinational institution working for the common good: A stable and unified global Internet. This is reflected in the increasingly global nature of its work and in ICANN's international staff, International Board of Directors, Supporting Organisations, and Advisory Committees. ICANN's role in Internet Governance represents a unique form of consensus based governance, global outlook, bottom up decision making, decentralized control, inclusiveness, transparent processes, and attention to community voices at all levels.

As coordinator of the domain name system and Internet addresses, ICANN is a vital steward of the Internet's future. The support of the global community and its multistakeholder, private sector led decision making model, are and will continue to be cornerstones of ICANN's success. Our international advisory and policy making groups represent a full range of shareholders. This includes a Government Advisory Committee representing the legitimate role of Governments in public policy and a Board of Directors from around the world. ICANN's achievements since the IGF meeting in Sharm el Sheikh last year speak forcefully of the benefits of the multistakeholder

model. With the 2009 Affirmation of Commitments the United States and ICANN formally recognized that no single party should hold undue influence over Internet Governance. The affirmation acknowledges the successes of the ICANN model. It commits ICANN to remaining a private, not for profit organisation, validates the role of the Governmental Advisory Committee, and declares ICANN as an independent and not controlled by any one entity. Another significant achievement is the historic deployment of the Domain Name System Security Extensions, or DNSSEC. At the very root of the Internet, it is the biggest structural improvement to the Internet in over 20 years. When it is fully deployed, the threat of certain types of cyberattacks will be greatly reduced. international domain names or IDNs allow the use of non-Latin scripts in Top Level Domains. The IGF prioritized it. ICANN and the community delivered it. Billions of users are now using and accessing the Internet entirely in their primary scripts. Since the 2009 launch of the IDN fast track process ICANN has received 33 requests for IDNs covering 22 different language scripts. 14 have been delegated and more will be soon. The 22 include Arabic, Chinese, and Cyrillic scripts together used by 1.5 billion people worldwide.

Some want to bring Internet Governance into the framework of intergovernmental organisations exclusively. What would that mean? Most Internet users, businesses, service providers, non-profits, consumers, would be shut out of the governance debate. Make no mistake, if we do not address this now effectively, together, the multistakeholder model that has enabled so many successes will slip from our grasp. We must work in partnership to continue the innovation and openness that are the hallmarks of this multistakeholder model. The IGF is an important public Forum where all interested parties can come together equally to address these issues for the common good. Its greatest values are its egalitarian philosophy and inclusiveness. Here the doors are open. The IGF derives its strength and legitimacy from its multistakeholder composition. Bringing it into a traditional intergovernmental framework would undermine what the U.N. itself has been pursuing in recent years which are private and public community partnerships. All stakeholders must make their views known to their respective Governments. It is Government alone that will decide the future of this body at the U.N. General Assembly this fall in New York. In conclusion each of us can call on the U.N. to retain this successful IGF format that is so valuable, but what matters most is that we further strengthen the multistakeholder model by continuing to welcome diverse and occasionally contradictory voices. Together we can ensure that the Internet's future rests in the hands of its most important constituency: The people. The Internet works. Let's keep it that way.

Subramanian Ramadorai:

On behalf of the businesses worldwide, BASIS brings business expertise to and encourages the business participation in the IGF. Like the IGF, business firmly believes in the vast potential of the Internet and other electronic communication tools to drive social and positive economic changes. There has been a huge democratization of the Internet. People all over the world are accessing the Internet through different devices, mobile and smart phones and personal digital assistants. And even certain domestic

appliances. In a country like India, mobile phones are available at $30 and online services reach the masses at a cost of a few pennies through Government kiosks. There is a long way to go though. global statistics on Internet users per 100 inhabitants reveal the disparity between developed and developing countries. 66 out of every 100 inhabitants in the developed world compared with every 18 in 100 inhabitants in the developing world have access to the Internet. In developing countries there are also glaring disparities. In India there are only 51 million active Internet users. There is a huge investment to provide access by 2012. This will bring millions into the Internet family. Internet access combined with mobile technologies will spawn a wave of local entrepreneurs and crate greater access to social services, transport, education, finance and healthcare. India businesses are partnering with Government to make this possible.

The world is in a collaborative mode because we are increasingly becoming interdependent. The recent economic crisis and challenges have demonstrated the solution to such problems lies in the joint effort involving all stakeholders. The Internet belongs to all, to the poorest, to the richest. Therefore the governance of the Internet concerns all and getting governance right is more crucial than ever. All stakeholders must keep working through issues together so we avoid conflicts and barriers that could impede growth and development of the Internet. The future development of the Internet must include the engagement of all relevant stakeholders. The IGF provides us all with a unique opportunity for the generation of new partnerships, ideas, discussion of real experiences and challenges, and the sharing of best practices, which are all necessary for the successful development of Internet-related policies.

Over the past five years, the IGF has made a lot of progress. Policy discussions of key governance issue, such as Critical Internet Resources, Access and Diversity, and security and privacy and openness have taken place and built on previous discussions. There has also been a greater focus on developmental issues. The range of stakeholders participating in the IGF has not only become larger but more diverse and looking ahead businesses recognize the need to continue working together, addressing new issues and expanding participation. In a global economy with global supply chains and markets, the Internet is critical for businesses around the world. Working with all stakeholders we can establish the right environments and new business models to help the Internet, and those using it reach full potential. Allow me to share an example from India. At Bagapali village in India, the turning point in their lives was the creation of a business process outsourcing centre in town. Such rural BPOs offer jobs to young people who would have otherwise migrated to bigger cities, by training them in communication skills and processes for six to eight weeks they are ready to take up assignments. More than 50 present of the employees at the rural centre are women. Working at the centre helps the employees to save money for their marriage, pay off debts, buy sewing machines and cows and buffalos for their families. This is social transformation in action. Today I have a platform to share the story with you because here at the IGF we can engage in candid and open exchanges on a range of existing and emerging issues.

Cloud Computing promises to empower developed and developing countries alike; however, like many issues we discuss here at the IGF, Cloud Computing raises an array of policy issues from access and security to applicable law and jurisdiction. Business is a leading partner in establishing the kind of programmes and initiative that are helping people in cities and rural areas extend the use of Internet for economic and social benefit. Businesses worldwide have come to trust IGF as a venue to gain insights and new perspectives and come away with ideas and best practices that have an impact on our respective communities. There is no other forum that includes all relevant stakeholders and allows the kind of exchange we have at IGF. We strongly support the continuation of the forum with its founding multistakeholder principles.

Sami Al-Basheer:

The ITU is a natural partner of the IGF. The ITU organised the World Summit on the Information Society, which created the IGF and which resulted to be the most comprehensive and inclusive debate ever held to discuss and design the principles of the information society. The WSIS process, since its inception in Geneva and Tunis, has been promoting dialogue and cooperation between all stakeholders: Governments, the civil society including the private sector, as well as international organizations. The whole nature of the ITU reflects the WSIS collaborative principles. The ITU is the sole international organisation within the UN system which is open to representatives of Governments, civil society, private sector, and other international and regional organizations. With the recent addition of Timor-Leste, the ITU now counts 192 member states as well as more than 700 sector members and associates, ranging from industry to academia, from regional organizations to civil society entities. We, at the ITU, firmly believe in this open and inclusive approach. This also explains why ITU is one of the most active international organizations in the promotion of the WSIS and its core values: Building together an inclusive information society.

With its mission in mind, and within our mandate, the ITU has been continuously encouraging an open and transparent dialogue among the relevant stakeholders and among the wider Internet community. All players in the ICT fields can join this global platform, and indeed a number of them have already done so. Several extremely active entities of the Internet community, such as the ISOC, and some of the regional Internet registries, are members of the ITU already. Let me seize this opportunity to invite the entities you represent and who haven't done so yet, to join the ITU and enrich the dialogue, design even more inclusive solutions and shape the future of the information society. In a few weeks in Guadalajara, Mexico, the ITU is holding its plenipotentiary conference where ITU membership will decide on the priorities of our work for the four years to come. Our members have already put on the agenda a number of issues of interest to the IGF community. These include Internet-related issues such as Internet public policies and the role of intergovernmental organizations in promoting and facilitating access to ICT infrastructure, services and applications, as well as IT literacy. We should also discuss issues such as cybersecurity, child online protection, migration to IPv6, as well as the role of ICTs in mitigating the effects of

climate change. Indeed, the opinion of the IGF community matters to me and to the ITU and its membership. Therefore our debates here at the IGF will help me in my future discussion with ITU members as setting our priorities for our future work. Ladies and gentlemen, ITU has been supporting the IGF process as well as the component of the WSIS, and I am convinced that this interaction must be pursued for the benefits of the world and particularly for the benefits of the developing countries, which need our full support in their efforts to bridge the digital divide. international cooperation is crucial in building of the information society. Let us work together to connect the world and to make it a better place for all.

Jean-Paul Philippot:

I would like to take this opportunity to speak about some public broadcast issues. Public radio and television specifically was created because of the content it produced, information, investigation, a concern for openness, and concerns such as democracy and by the means of communication used, universal coverage, access for all. Associations such as the world broadcasting union since the outset have sought along with national Governments and also with national institutions to defend and promote these values. It is for this reason that today we are particularly pleased to be associated with this work, the work of the IGF and we consider IGF to be an important partner bringing together all stakeholders in an Internet group which constitutes our common future.

Internet for public radio and television requires a complete overhaul. We need to change the way we do things and the way we view interactivity, but this is also based on the conviction that we need to modernize. We have several concerns which of course go along the same lines as those explained. I shall try to explain these very briefly. The first concern is to ensure freedom of access to the Internet. Convergence is a reality. The public no longer distinguishes between venue and on demand services. Soon the new hybrid services will enable consumers to have access on the same screen to contents distributed both through broadcasting technology and through Internet on demand. Public service media adapt to this convergence to ensure that the public can have access to all our programming of high quality and varied content. Some believe that there are market imperatives which oppose openness and are in favor of paying services. Today stakeholders which are traditional or new ones are seeking sometimes to limit free service to operate according to new business models. This is a concern for us that feel that this can limit access to Internet. We feel that there are other means such as cooperation.

The second concern is guaranteeing copyright today in the Internet age and to modernize it. Sometimes it is believed that there are threats to creating variety on the Internet. For this reason the EBU has just proposed updating the copyright system. This copyright system should make it possible for operators to develop their contents on all platforms and also to offer the public access to hundreds and thousands of audio visual works which today are difficult or impossible to access because of these rights. Finally, it will create a framework to use this content which is completely lawful and transparent. This brings me on to the third of my concerns, which is digital

piracy. We have to adapt behaviors. We must educate the public to make lawful use of Internet content, particularly younger audiences, but also we have to increase lawful use of easy access platforms with varied content in a lawful way. This should no longer be an exception. The next concern is the reliability of information sources. Clearly we should combat the confusion that exists concerning information. We shouldn't consider that an Internet user is the same thing as a journalist. Today the quality of information services can increase the credibility of Internet. Another concern is freedom of expression, we need to live the ideal of the Web and make sure it is not a dead letter.

Globalization has opened up new horizons and also has broken down a balance which sometimes has been fragile. There is clearly a risk if we were to limit pluralism and also we need to finance creation. The model of the media is based on the richness of content. And this means that there's a certain cost. We are always obliged to invest in new and varied content and the operators on the Web are not necessarily aware of the situation. In a world tomorrow where content is no longer paid for, the variety and diversity of the suppliers, and the richness will disappear and this will be bad for everyone. We need mutual enrichment through the Web instead of common impoverishment. For this reason we believe that we should work actively to promote IGF, not to defend special interests that you understood, but because of certain values of citizenship, creating value, democratization and emancipation.

Annemie Turtelbloom:

Internet has become an essential means of communication in our society and has created change already comparable to the telephone. It enables the world's citizens to communicate with each other wherever they are in the world. The Internet is not only a means of communication; it has also become an unavoidable medium for the "knowledge society." The profusion of contents uploaded to the Internet and the fantastic opportunities it creates in terms of education or health turned it into a primary necessity tool which should be accessible to all citizens of the world. It is important to explore the possibilities of ensuring that everybody has the opportunity to access to Internet. I firmly believe that measures regarding end users' access to or use of, services and applications through electronic communications networks should fully respect the fundamental rights and freedoms of natural persons. Nevertheless, in numerous parts of the world, the Internet remains an inaccessible luxury. That is why we must join forces in order to fight the world digital gap. We must propose and adopt measures aiming to reduce it. Nowadays there are nearly 2 billion Internet users, and an increasing proportion of them come from developing countries. The European member states support and will continue to support the developing countries in improving their telecommunication infrastructures.

The Internet is a fabulous knowledge and sharing medium, but it also presents risks, regarding, for instance, the protection of privacy and underage users and consumers. The authorities, without regulating all aspects of Internet, ought to take whatever measures are necessary to protect the Internet users in the best possible way. The authority also

must guarantee the security of communication networks in the same way they have to watch over the energy supply of their population, for instance. Governments are not the only actors; however, the private sector also has to continue to play a leading role in the development of the Internet to ensure it reaches its full potential. This brings me to the fundamental role of the IGF. The IGF is the only place in the world where all the Internet actors can gather, whether public or private. IGF is the place of exchange and experience sharing. For four whole days experts and stakeholders of the entire world will be able to share their experiences and exchange best practices. We are sure that one of the benefits of the IGF is bringing together stakeholders that might not have met otherwise and hold different views. That is why the European Union advocates a renewal of the IGF mandate in its current structure, in a situation where public and private sectors are partners. Like the overwhelming majority of speakers at the consultations in Sharm El Sheikh, the European Union is absolutely convinced that the Internet Governance Forum should be continued beyond its initial time frame of five years. In our view, the IGF has to remain a nonbinding, democratic, transparent and multilateral forum which brings together all the stakeholders of the Internet. Of course the European Union will support any efforts to further improve the IGF, as well as supporting wherever possible the participation of the developing countries. The European Union welcomes also the national and regional IGF activities. The Danish and British IGF meetings have recently taken place and we encourage all organisers of national and regional dialogues to provide their input into the global IGF. I am happy to confirm that the European Union has high expectations for the workshops and discussions during this IGF meeting. I have no doubt that these exchanges will be an inspiration again for all of us in our quest to assure access to the Internet and to the knowledge society for everyone.

Ginger Paque:

Some of us represent Government, others business or academia or Civil Society in different or overlapping areas of our lives or at different times of the day. In the end, we all take off our hats and we are members of society and individuals Internet users. We are parents, worried about our children's online safety. We are Internet users concerned about the security of our financial data. We are citizens seeking to protect our basic rights to access, freedom of expression, and information. Multistakeholderism, recognized in the Tunis agenda in 2005, was the biggest conceptual achievement in WSIS. It was accepted as a guiding principle for Internet Governance, and the IGF contrasts the intergovernmental stakeholder approach previously applied. This success demands that the IGF continue with its core structure basically unchanged, while emphasizing the further application of enhanced cooperation.

The Civil Society in each of us worries about our human rights, about child porn, and about being scammed. We worry about finding information in our native languages. We worry that the richness and diversity of our traditions will be replaced by a new SMS text language. The Civil Society Internet Governance caucus asks that we continue to work on these issues together by appropriately applying the principles of the basic human rights instruments, such as the universal Declaration of human rights, and

supporting the principle of indivisibility of rights highlighted in the WSIS Declaration of principles. This enhanced cooperation is not just a process that will address the issue of Critical Internet Resources. It also allows the IGF to set a precedent to address all global Internet governance issues. It includes the imperative of developing policies in addition to the IGF process, a process which is oriented towards taking wide inputs, deliberating on options, and feeding into the policy developing processes. These two actions are complementary though clearly distinct and both must be achieved. We also note happily that the once stalled process of enhanced cooperation is now being prioritized as was mandated by the WSIS, through planned open consultations later this year.

We acknowledge the achievements of the CSTD Working Group on the IGF reform, and express our desire and commitment to work closely with it, as well as the Association for Progressive Communications, and other Civil Society initiatives. We continue to support the regional IGF meetings, with closer focus that will address problems at every level, spreading the impact of the IGF around the world in physical meetings and including the themes discussed regionally. We support the unique model of dynamically engaged hubs and remote participation as innovative developments of the IGF. Local meetings and remote participation have increased inclusion to the point where this IGF has individual remote participants engaged online around the world, with an unprecedented 33 local hubs registered. We reiterate the importance of capacity development to improve inclusion, to allow us each to build the resources and knowledge necessary to reach our goals. Finally, we invite all of you to join Civil Society in addressing specific Internet Governance issues such as net neutrality vis a vis wireless Internet. We invite other players to make themselves clearly heard, working towards a user centric and people centric Internet. We must continue the IGF model of providing a new set of means and processes for openness and participation that will become the default global standard.

James Rege:

Kenya has been involved throughout the WSIS process and with the Internet Governance Forum since its inception. Kenya has pioneered and continues to convene the East African Internet Governance Forum using a bottom up and multistakeholder approach, of which we are very proud. The East African IGF continues to bring together the East Africa Internet community to discuss public policy issues affecting the Internet in the East African region, and is usually a culmination of national level Internet Governance discussions in the respective East Africa countries. Further, Kenya's new Constitution enacted in August this year has made Kenya a favorable destination for investment. The Constitution has recognized ICTs as an enabler for development by having provisions that promote intellectual property rights, privacy and confidentiality, freedom of expression, and information, that's FOI, the right of access to public information, press freedom and consumer rights, among others.

In the area of managing the Critical Internet Resources, the management of Kenya's ccTLD registry, that's the KENIC, is a model that has been emulated regionally and

internationally. The KENIC Board membership is multistakeholder with its members drawn from the private sector, Civil Society, academia, and the public sector. Further, Kenya formed a national Internet Protocol version 6, this IPv6 task force whose mandate is to develop strategies for the deployment of IPv6 in the country. The Task Force membership is based on a multistakeholder model. In addition, this year's Kenya national and East Africa regional IGF meetings focused on addressing and discussing the governance of Critical Internet Resources. The regional East African IGF proposed the development of a Working Group to strengthen East Africa's ccTLDs.

In the area of national cybersecurity management, the Kenya communications amendment act of 2009 recognizes the need to enhance and create public confidence in the use of electronic transactions through the establishment of a national cybersecurity management framework. Kenya also chairs the East Africa communications organisations cybersecurity Task Force whose mandate is to facilitate the establishment of national computer incident response teams. In this regard, Kenya is currently in the process of establishing a national computer incident response team, whose purpose is to manage cybersecurity issues in the country through a coordinated response to cybersecurity incidences, awareness creation, research and the provision of cybersecurity advisories, among others. In the area of access, already three undersea fibre optic cables, SEACOM, EASSY and TEAMS have landed in Kenya. Kenya is also in the process of putting in place an elaborate national network called "the national optic fibre backbone infrastructure," otherwise dubbed as NOFBI. Satellite links coverage is all in place to serve as backups. Kenya has over 100 licensed ISPs which are interconnected via peering arrangements at the Kenya Internet exchange point, KIXP. Further, Kenya has 4 mobile telephone operators. The number of mobile telephone subscribers has grown from a meager 20,000 in the year 2000 to about 2 million this year, that's over 1,000% growth. The number is still growing, as we stand here today. This translates to 86% of the population under mobile coverage.

The numbers of Internet subscriber's stands at about 3 million, out of these, 2.7 million subscribers are using mobile Internet access through GPRS/EDGE and 3G networks. Mobile money applications like M PESA and ZAP are used to transfer and receive money across the country and further, 3G and 3G plus technologies are widely entrenched in Kenya and some operators are currently testing 4G pending deployment. The use of mobile money transfer is also being used by people in the remote areas as banking facilities. As seen over the last five years, the value of the UN IGF process has been replicated in various ways in Kenya and in other parts of the world, and has led to a more inclusive process for dialogue on Internet policy issues. Kenya has already endorsed the continuation of the UN IGF mandate beyond this current five year tenure, and we would wish to ensure that its current multistakeholder model is retained. Further, we would wish to see a more concrete involvement of national and regional IGFs particularly in the development of issues and themes. Finally, Kenya has offered to host the 6th UN IGF meeting in 2011, and in this regard, we would therefore like to take this opportunity to seek your support towards Kenya's expression of interest.

Eligijus Masiulis:

You actually presented a lot of ideas for the meetings that are going to be held over the next 3 days. Excellency's, distinguished experts and delegates, remembering the theme of the IGF 2010, it is clear that the overall objective of our meeting is to develop the future together by joint efforts. We are not here to negotiate on some wordings or texts but to understand the conditions under which we live, to understand our opportunities, and to further understand and promote the development and the deployment of the Internet. Recalling the Geneva Declaration of principles, let us work together to create an Internet and information society that enables individuals, communities and peoples to achieve their full potential in promoting sustainable development and improving the quality of their life.

MANAGING CRITICAL INTERNET RESOURCES

15 September 2010

Chairman:

Mindaugas Glodas, Country Manager, Microsoft Lithuania, Vilnius

Co-Moderators:

- Chris Disspain, Chief Executive Officer, .AU Registry; Chair, Council of Country-Code Names Supporting Organization (ccNSO), Carlton (Melbourne)
- Jeanette Hofmann, Senior Researcher, London School of Economics; Political Science and the Social Science Research Centre Berlin, London/Berlin

Remote Moderation:

Cathy Handley, Director for Government Affairs/Public Policy, American Registry for Internet Numbers (ARIN), Chantilly, VA

Mindaugas Glodas:

It has probably already become banal to talk about how important and central to our existence the Internet has become, but I would still like to go through a couple of examples of uses ranging from our daily lives, when we do e-banking and shopping, when we're searching for the news and when we're socializing. People spend hours on Facebook and Twitter. Some people even make their living doing marketing activities using Internet tools such as Facebook. Even funding political election campaigns, if not winning those campaigns, is sometimes actually attributed to successful Internet communications. We've seen many breakthrough usages, for example, in health care, when health care is becoming available for elderly people, without them having to leave their homes. Interactive education is brought to numerous audiences in remote locations. There are critical applications such as coordination of disaster relief efforts in Haiti, and lately in Pakistan as well. I think our industry is now standing on the doorstep of what I would call a paradigm shift; we're standing in front of the real adoption of Cloud Computing.

Governments around the world, small enterprises, big enterprises, when they move to the cloud, will actually move their mission critical systems, their mission critical data to the Internet. Should something happen to the Internet, those corporations, those applications, will virtually cease to exist. Therefore, I think it is critically important that we make sure Internet develops well and we take care of the Critical Internet Resources. Internet started in the universities in a naturally very Democratic environment. I think it is our task to make sure that Internet as such is equally available on all continents of the globe, is equally available in all countries. Therefore, IGF is a unique meeting place for all these multistakeholders and plays a very important role in making sure any obstacles for Internet's future are removed. The United Nations Working Group on Internet Governance described Critical Internet Resources as including the administration of the main name systems, IP addresses, administration of the root services, technical standards and so on. We're building on these definitions now and we talk about IPv6 availability, its successful applications and examples of how that has been successfully implemented in different products. We're talking about internationalization of Critical Internet Resources and enhanced cooperation which has become more relevant when the United States Government provided for a new arrangement with ICANN involving the international community of stakeholders in this relationship. We have seen progress around domain names that use national scripts and developments around new Top Level Domains, and last but really not least, Internet, like I already mentioned, is critical in situations of disaster and crisis to provide coordination of relief efforts. Many challenges in these areas still remain, and this is the place to discuss them, to make your opinion known to the others.

Jeanette Hofmann:

Our first topic is the status of IPv6 availability around the world.

Ruth Puente

Thank you for giving the NRO the opportunity to discuss the pressing issue of IPv6 deployment. The NRO consists of five regional Internet Registries, or RIRs: AfriNIC, APNIC, ARIN, LACNIC and the RIPE NCC. All of these organizations are represented at the Internet Governance Forum this week. Together, the RIRs represent, and are supported by, over 15,000 organizations around the world, who coordinate the administration of part of the Internet's fundamental infrastructure. As we are all aware by now, we are approaching the depletion of the unallocated IPv4 address pool. Therefore, one of the most significant Internet issues right now is the global deployment of IPv6. With this in mind, the NRO organized a workshop, held yesterday, called "IPv6 around the World." In it, participants discussed real world examples of successful IPv6 deployments and initiatives, and identified best common practices in planning, capacity building and deployment of IPv6. Several important themes emerged from this session: One, IPv6 specific initiatives that bring together different stakeholder groups have a dramatic effect on IPv6 adoption. Examples such as go6 in Slovenia and NIC.BR in Brazil have resulted in significant uptake in those countries, and can offer models for other regions and economies to adopt. Two, the primary driver for IPv6 is business continuity as the IPv4 Internet reaches capacity, organizations must adopt IPv6. Without IPv6, networks will not be able to grow and organizations will not be able to provide all services to all users. Three, Governments have a clear role to play in this area and can be key pushers of technological innovation. Many Governments have already deployed IPv6 on their own networks, and many more have imminent plans to do so, this must be an example followed by all.

This year, for the first time, all five RIR communities took part in a coordinated global IPv6 deployment monitoring survey. Funded by the European Commission and conducted by GNKS Consult and TNO, more than 1,500 organizations from 140 economies responded to the survey. The results revealed that IPv6 awareness continues to grow, and a significant proportion of organizations are already taking steps toward IPv6 deployment. The survey also revealed some misconceptions about the cost of adopting IPv6. While those who have not started planning for IPv6 cited cost as a major concern, organizations that have deployed, or are deploying, IPv6 often find the expense less than anticipated. While it is true that deployment of IPv6 is an investment, organizations must understand that delaying IPv6 because of this may ultimately result in greater costs, with last minute deployment and planning likely to increase the investment required. Since the last IGF, the RIRs and their industry partners have been working closely with a wide range of stakeholder groups to educate, promote, and share information relating to IPv6. We have provided vital expertise to intergovernmental organizations including CITEL, the OECD, APEC, CANTO and the International Telecommunication Union. RIRs also host events like Government working groups to meet the specific needs of Governments in their region. These efforts truly enhance cooperation in a multistakeholder environment. The knowledge and the resources required for IPv6 deployment are accessible to all stakeholders. It is imperative at this stage, that your organization be actively pursuing IPv6 deployment.

Jeanette Hofmann:

I had a look at this survey that was commissioned by the European Commission, and what I noticed is that many ISPs mentioned vendor support as one of the major hurdles. So I was wondering, is this a misconception, as well? Or is vendor support still a major hurdle for ISPs in order to provide IPv6? Perhaps we could just collect a few contributions from various stakeholders who are vital for the provision of IPv6?

Patrik Faltstrom:

To a large degree I think people who say there are problems with hardware from vendors, software, and many other things are today misconceptions. The development and deployment of IPv6 is going very fast and is increasing a lot just like we saw in this investigation from the RIRs and the commission. From Cisco's side, we do have IPv6 support in most of our equipment, and we are adding new features and new IPv6 features every week, so basing statements on problems with IPv6 on even two-months old information is not correct today. Regarding what is also important for us of course just like everyone is the deployment and the working deployment and allocation of IPv6 addresses, and we're participating heavily in all the standard organisations and policy processes, specifically the RIR's process that strongly support being where allocation policies are handled.

Jeanette Hofmann:

Does that mean the communication problem between vendors and ISPs are misconceptions? Or is your perspective from Cisco not representative for all major vendors in this business?

Patrik Faltstrom:

There are very specific issues where there are problems, for example, specific things like DSL connections and DSL home connections. There are discussions even in the IGF on how to handle that and before the standards are settled it is hard for vendors like us to actually implement it, but we have Cisco and others deployments of IPv6 also in those difficult areas.

Chris Disspain:

If I'm buying equipment at this sort of level, am I expected to simply know to ask the right questions?

Patrik Faltstrom:

No, if you buy Cisco equipment today, they support both IPv6 and IPv4 and that implies also when you upgrade the software for your existing equipment, as long as the equipment can handle the amount of memory for the new version of the software, you will automatically get IPv6 support.

Chris Disspain:

You say there's some equipment I could go and buy if I don't go to Cisco for example. Equipment I can go out and buy which would not necessarily support IPv6. That's right isn't it?

Patrik Faltstrom:

Yes, there's some equipment and we have for example at Cisco, navigators that customers can use and verify what kind of features are in each version of the software for each platform.

I think a year from now, we will see more and more that everything that supports Internet, regardless of whether it is wireless access like in this room or gear, will be both IPv4 and IPv6, so the transition will be more transparent and invisible.

Jonne Soininen:

I'm from Nokia Siemens Networks, and I will talk about our products and our mother company's products, Nokia, as well. First, I would like to agree about the many misconceptions about the support of IPv6 or the inability of the equipment to support it, that it is old and it is constantly moving. This doesn't mean that everything will support IPv6 today but it is increasing. For instance in our gear we're basically adding IPv6 support all the time and we have added already in the equipment for our operators the features they need. Coming to the mobile phones issue, on Nokia's mobile phones all the Symbian devices support IPv6 today and have supported it for many years, so you might have something that supports IPv6 already in your pocket. This is not necessarily true to every vendor but at least we have tried to do our best to support IPv6 in the grade of products where we think that they would be first used and hopefully they will be now used as well. The interest in IPv6 has completely changed in the last year or two. Whereas before, we had to talk to our customers about IPv6 and tell them they should be ready, nowadays they actually ask us and want us to prove that we know about IPv6 and that we support it and understand the technology.

Constance Burger:

I am from the Ministry of Interior of Germany. Germany believes that the Internet is the main driver of business innovation and growth in our country. One task of a Federal Government is to continue developing and designing the Internet, and we see IPv6 as a chance to turn the Internet of communication to the Internet of things and services. The federal Government regards the adoption of IPv6 as an important part of introducing new Internet technologies and modern, secure communication infrastructures. We are a buyer and user of network infrastructure and applications. Public administration plays an important role in the Government in German markets and with the active introduction of IPv6 and the demand of V6 capable products, will

grow even more. With the political positioning, we will create greater transparency and planning certainty of participating interest groups. At the same time, the stimulus package will help motivate the IT sector and adapt IPv6. Germany is the largest Internet nation in Europe and in the top 5 worldwide. About 62 million people in Germany regularly use the Internet for a penetration rate of 75%. This also means that all Internet users want to retain full functionality and they will be able to do this only if they adopt IPv6. The German Government is going to deploy IPv6 in Germany and I think what we can do as Government is give the awareness and economics the transparency that's needed together with all these parts from the industry. We want to go forward with IPv6, and this is a signal I can give to you, and we need the help from the other Member States or the IGF members to share the experiences as well.

Jeanette Hofmann:

Are there any other experiences with procurement policies? I would like to know whether Governments have implemented such policies, but even more if they have any noticeable effect.

Constance Burger:

I think it is a longer process and in Germany, the Constitutional levels are so that we can just recommend some things to municipality states and the federation. So we had to adopt the action plan from the EU commission which gives much advice on how to procure new services and products, and I think it works but we need a longer time in Governments. That's a problem but these are small steps and I can see it in 10 years.

Maria Hall:

I'm working for the Minister of Enterprise of Communication in Sweden, the IT Department. I think this IPv6 deployment is one very good example of the dialogue between the business sector and the Governments or the public sector and municipalities, is very important. I've had good opportunities to have this kind of dialogue within this community. In Sweden right now we have the IPv6 deployment within the e-Government development process. One of the first steps that we took a couple of years ago was to have a procurement event, because procurement is one tool that's very strong for everybody. We need to have some kind of strategy for turning on the IPv6. It is very good that you're trying to have all these tools and software and things to prepare for IPv6 but the next very important thing is actually starting to use it because one day it is going to be citizens that are having IPv6. We want to make sure that person or that company is actually going to be able to use our public e-services.

Jeanette Hofmann:

What about deployment of IPv6 in other regions in the public sector?

Maria Hall:

Yes, I can say that in the few countries in our region that are active on IPv6, they are enforcing their procurement measures by adding IPv6 as a requirement. Recently we have heard from Egypt that the access to their IPv6 lab has to be in IPv6 and to do that, they have requested the provider to be IPv6 ready. I know that other countries like Uganda and Kenya are investigating the same thing, but if it is there it is a long time process and it has to be done in cooperation with the private sector.

Hasanul Haq Inu:

I'm from Bangladesh, a Member of Parliament and chair on communications. I need to emphasize in the transition from IPv4 to IPv6, we need to have Governmental interventions in a developing country like mine. If the Government doesn't initiate the process, then it will be very difficult. In my country the Government has issued an order for this and that helps. We have 59 million mobile users in my country at this moment and 5 million Internet users. It is growing fast and we must continue to build capacity and we need training in all these things. APNIC is giving us training in our country. As a developing country we think that within 2012 we can catch up, because we have IPv4 version. Some users though will go directly to IPv6, so the transition will not be that much.

Chris Disspain:

It sounds as if it may be that actually some of the first people who are going to be only IPv6 will actually be in the developing countries because of the unique issues there and that you have to mandate that the equipment is IPv6 moving forward. So we may end up actually having the first pure IPv6 access in developing countries.

Fouad Bajwa:

I'm going to share some comments from the Pakistan Telecommunication Authority IPv6 Monitoring Group. Their recommendations have been to increase IPv6 awareness and capacity building, and the strategy for this would be organising seminars and training programmes for university students and professionals. The second recommendation was to establish a national Internet Registry to overlook IP and DNS management issues in the country. The third one was to provide some profit incentives to Internet industry for encouraging them to adopt IPv6 based infrastructure. These incentives include a reduction in regulatory fees and tax rebates. The fourth recommendation is that Internet connectivity providers may be asked to enable IPv6 readiness in their networks. Five, necessary funding be provided through agencies like the Pakistan national ICT R&D Fund Co to establish IPv6 research labs for academic institutions. Number six, an exclusive national IPv6 road map may be devised catering future strategy for IPv6 transition. Since there's a lack of content providers in Pakistan the issue remains that IPv6 stands at a very, very minute level of implementation.

Nigel Adams:

We have been offering IPv6 services for some six years now, And to those ISPs who say there is no demand for IPv6, could I just say that we are now gaining contracts against those ISPs who don't offer IPv6, and that you should be educating your sales forces.

Chris Disspain:

If I'm a customer of yours, what do you say is the benefit for me? Do you differentiate in the service that you've provided, or am I paying a different price because it is IPv6?

Nigel Adams:

No, IPv6 is a standard service as far as we're concerned. Most of our customers are hosting providers, and a lot of hosting providers realise that they will need to offer IPv6 very shortly or they will start to lose customers. Awareness is out there.

Benson Ncube:

I am representing Cabling for Africa, an ICT provider in Botswana. In regard to moving forward to IPv6, there is a big challenge, especially for developing countries, where there is heavy investment on the equipment that is currently running IP version 4 services. For the corporate world it is difficult in developing countries to justify the purchase of the new equipment. I don't know whether the venders have some support to push up this process for developing countries.

Jonathan Zuck:

I am from ACT; I think IPv6 is one of those technologies that is going to come up in a number of different sections of the discussion. I think we do a disservice when we think about IPv6 as a replacement for a waning existing service instead of as a new service. We need to be more focused on why we're building demand for IPv6 in terms of increased security and greater numbers of addresses that allow the tracking of things-like drugs, during a crisis, children, etc. I think this will lead to real demand and real opportunities for Cloud Computing and small business growth. IPv6 has to be thought of as a critical resource on its own, a new resource and not overflow because we keep discussing it in the context of waning IPv4 addresses. I think that's why we do ourselves a disservice on the demand side when we use IPv4 as the Gateway to IPv6. We shouldn't do that. It is a critical resource that we have to get deployed right now.

Raul Echeberria:

I want to mention something regarding the kind of agreements that are available in ISPs in developing countries. It doesn't seem very logical, but the ISPs in developing countries have less legacy equipment. So it is a strange coincidence in this case, but due to the fact that the Internet has been deployed in developing countries in the last few years, most of the equipment that we see in ISPs in developing countries is

almost compatible with IPv6. In fact, when we offer training workshops in IPv6 in any country of Latin America, it is just to talk with the ISP a few weeks before the workshop and help them to configure IPv6. And without investments, they can offer us IPv6 services in any location of the city, given ISP. So I think that sometimes we could conclude wrongly that because we are speaking about developing countries, the kind of equipment that are located there are less modern or less powerful than equipment in other places of the world.

Patrik Faltstrom:

It is in fact much easier in many cases to deploy IPv6 in developing countries. In many cases they have more modern equipment. We have many projects at CISCO; for example, where we together with the Internet Society are building connect points in Africa with equipment that supports IPv6 from the beginning. It is also the case that I think that we will see the first IPv6 only end cost root servers in a developing country because it is easier to deploy there. So what we are doing from CISCO is we are working very hard to make sure that deployment of IPv6 is a software upgrade. There is an issue, though, that was mentioned from our friend from Bangladesh, about interoperability. We do not have as much experience with IPv6 as we have with IPv4. That is something people should know. CISCO and other venders try to help people in profitability and how to deploy IPv6 but most of that development is happening in the operation communities with the IRs and in the developing world. It is the developing countries, once again, where we of course could do more. A lot of things are happening.

Izumi Aizu:

I am from the Tama University and have been with the study group convened by the industry of communication. On behalf of the Ministry, we have disclosed guidelines for information disclosures on how to really public announcements of IPv6 adoption statuses, we sorted out what kind of information is essential for the end users for using the ISP services. The general agreement is that it is voluntary and that each ISP will decide what kind of information to disclose.

Jeanette Hofmann:

If you could change one thing to enhance the deployment of IPv6 in the coming year, what would it be?

Raul Echeberria:

My perception is that things are going well, so I don't see the need of changing such big things. I think we will see the deployment of IPv6 in the next few years. We need to work on capacity building around the world and the kind of discussion that is being held here today is a proof of that. The level of details and the discussions and concerns are very different than five years ago.

Chris Disspain:

We're going to move on now to the topic of internationalizing critical resource management and enhanced cooperation.

Peter Dengate Thrush:

I will finish off IPv6 and mention what ICANN is doing about that. There are a couple of references in our one page strategic plan and the first is internally taking care of business so we're IPv6 compliant internally. The other thing is a leadership role in relation to advocacy for IPv6 and explaining in the non-internet world exactly how the allocation works. There's some confusion in some places about the RIR process so we see our role as explaining that and encouraging uptake through that process. Without trivializing that, one of the things we focus on is the extraordinary number of addresses. So we use that as a way of reassuring those people who are sometimes told there's a shortage of IPv6 addresses. There's some confusion there between the two systems. So as part of that I've had to look at some of the incredible analogies that are available, grains of sand on the beaches of the earth aren't enough to equal that number, so we're getting this message up and working with everybody else in developing that. I want to finish on that and the point I make is that SMS technology was a feature that was exploited and turned into a service. Go and look we say to the entrepreneurs, look at what this new IPv6 will allow by way of new business opportunities.

Coming to enhanced cooperation, I think we start by looking at where this terminology comes in, and its clause 69 of the Tunis agenda. The first point to note is that really it is about enhanced cooperation to enable Governments to do what Governments do and that was on an equal footing to carry out their roles and responsibilities in international public policy issues pertaining to the Internet. ICANN is responsible for coordinating the day to day technical and operational matters in relation to aspects of the Internet, so I guess the starting point for us in relation to that is just a comment that we are a multistakeholder organisation, so it is in our very DNA to be cooperative. Otherwise we can't function, and remembering also that ICANN coordinates a dozen Governments. We actively coordinate with all of internal elements that make up ICANN starting, for example, with the ccTLD managers who were in place before ICANN was formed. We coordinate with the ccTLD associations in relation to, for example, disaster recovery and other exercises and we're pleased to see yesterday here at the IGF that the regional ccTLD associations have cooperated in developing a next step cooperation for contingency planning.

We coordinate obviously with the RIRs allocating perhaps most recently global policy in relation to equitable distribution of the remaining IPv4 address space. We actively work with the root server operators and cooperate with them. We have our own at large organisation building up individual memberships all over the world and more clearly and by way of contract we cooperate with the registries and registrars of the generic name space. Last in this list of internal cooperation, the Governmental Advisory Committee, it is hugely important to ICANN to have the support of Governments

by way of Governmental advice on those matters of public policy affecting what we do. In relation specifically to enhancing that cooperation, we've had a joint Board GAC Working Group, to increase the efficiency of the GAC and ICANN. Looking externally we participate, for example, in the Working Group on Internet Governance and we've become firm supporters of them from the very beginning of the IGF. At this IGF, the Chairman of the Board, the CEO and other Board members and staff are here in Lithuania to participate, cooperate, to exchange views, to share in all of the benefits that the IGF creates.

More formally than that there's a whole series of MOUs where we cooperate with external organizations. I mentioned a few of those with UNESCO as being helpful in relation to the IDN project. We have MOUs with Egyptian and Russian scientific and cultural and technical NGOs, with the Americans, the OAS intercommission telecommunications, with Pacific island, so we have a formal process of cooperation through MOUs and they're all visible on our website. We have formal liaisons with the IETF, people who develop the standards of the technical operation of the Internet, with the World Wide Web consortium, ITSE and the ITU who form a group, and with the security and stability Advisory Committee. We have a constant eye on enhanced cooperation because that's how we operate. IDNs have helped increase the exposure of the Internet and will bring forth, we think, a whole new generation of entrepreneurs and the developers in those countries whose scripts are now available. We focus a lot on translation and interpretation. We've got millions of words on our documents translated and interpreted. We've done reach out to other organisations such as the ITU. That's a list of the kind of enhanced cooperation.

Jeanette Hofmann:

Last year, the Affirmation of Commitments had just been released when we met, and we thought it would be good now to talk about what has been done and what has been implemented of the Affirmation of Commitments.

Bertrand De La Chapelle:

I am the Ambassador for Internet Governance issues in the French foreign affairs Ministry and I'd like to make two quick comments. The first one relates to enhanced cooperation. As some of you may know, there has been a very interesting discussion during the CSTD meeting in May in Geneva and this resulted in a Resolution that was sent to ECOSOC, and endorsed in ECOSOC in July, that asked the Secretary General of the U.N. to organise consultations on enhanced cooperation on a multistakeholder basis. I think this is a very important step forward, because until now, there has been a strong disagreement on what exactly enhanced cooperation meant, whether it was a process that was supposed to deal only with Governments and what they were supposed to do on their own, or whether it was something about the interaction of different Governments with the other stakeholders.

In previous IGFs, I had the opportunity to explain that in our view, the term "enhanced cooperation" in the various paragraphs, 61, 70, 71 of the Tunis agenda, actually refer to this very specific element and the definition of Internet Governance which is the words "in their respective roles." The reality and the substance of the enhanced cooperation discussion is to determine under which conditions the different stakeholders have a responsibility in the different stages of elaboration of a regime, in the different venues and structures where they participate, and depending on the different topics. So I am looking forward to the exchanges and consultations by the Secretary General of the U.N. The second point I want to make is on the topic of the Critical Internet Resources. We all know that there is an interesting double deadline, at the end of 2011 and at the end of 2012, regarding the INR contract and the cooperative agreement between the United States Government and VeriSign for 2012. These are two different contracts. What I want to share here to help move the discussion forward is we believe very strongly, as long as the discussion on the management of the root server system and the oversight is framed in the terms of the unilateral control of one Government over the critical Internet resource of the Internet, we will not be able to have a constructive discussion.

The way we see it is that the subject and the challenge we have is to find a common wording for the problem we want to address, and the way we understand it is that we all have a common challenge and a common objective, which is to ensure the integrity of the root zone file, and what we mean by the integrity of the root zone file is we all want to make sure that no one voluntarily or unvoluntarily can tamper with the root zone file. Once we agree this is a common interest for all Governments, for all stakeholders, then we can begin to discuss whether there is a possibility to go even further than the current arrangement. I want to say very publicly and very clearly that we do understand that no evolution towards a better internationalization of this mechanism can be achieved if on the side of the United States, which is fulfilling this function at the moment, there is not the guarantee that the evolution will ensure the same level of protection and security that the current system provides. In conclusion I wanted just to frame this debate because this is the very good benefit of the Internet Governance Forum, to attempt to find a common formulation for the problem, instead of pitting one group of actors versus another group of actors, or one specific one in this case.

Xiao Lin:

We've already stressed the management of Critical Internet Resources, and this shows I think very well how important this subject is, and that it is one of the main missions of our Forum. To perfect the management system and to be able to have an equitable sharing of the resources globally, allows the Internet to fully play its role. The Chinese Government always attaches importance to the subject and has so over the course of the last 10 years. We have made tremendous developments in this area and up until the first half of this year, we already had 420 million users of the Internet in China,

and we are increasing the rate of utilization as more than 15 million users of the Internet are added each year to the ones already using it. We have developed many activities in this area. At the same time, with this tremendous surge in the development of the Internet, we have problems of domain names and these areas are extremely important. We are using 1/5 of the Internet, but the domain names in China represent only 1/20 of all those used throughout the world, so the management of the Critical Internet Resources is critical for China especially, and if we talk about the actual management of the Critical Internet Resources, well, China's cooperating with many countries around the world. We have the same common position. We're prepared to communicate with other countries to resolve problems that arise in connection with the Internet all over the world.

Chris Disspain:

I think we're all aware and agree that the resources are critical. The questions and sometimes disagreements arise about how they should actually be managed, but we certainly all agree they're critical.

Milton Mueller:

The IANA contract is an important element of the Internet Governance regime and because it is coming up for renewal, it is something we should be discussing in this session. It would be nice to actually discuss a real Governance issue in this session. I would like to make a few comments about that starting with what I thought were some of the very helpful observations thus far. I agree that the issue is the integrity and functionality of the Internet's root, and that is the criteria against which any institutional changes should be held up against, so I agree that Governments, to complain about U.S. unilateral control, have a burden to explain how any alternative institutional arrangement would improve things with respect to the functioning of the Internet. I would remind everyone that it is not just the Domain Name root we're talking about, it is also the addressing hierarchy root and this is an increasingly important element of Internet Governance. Some people have talked about the separation of functions that are currently bundled in the IANA contract as an element of Governance that could be changed or reformed in the process of moving forward. For example, the IANA contract could be separated into a standards component going to the IETF, an addressing component going to somebody, and the Domain Name component. It doesn't necessarily have to be bundled in one organisation. And that brings me to my last point, which has to do with the role of the IANA contract as an accountability mechanism, that if you simply assume or give this contract to one organisation, ICANN, which has weak accountability mechanisms already, the IANA contract renewal could be a good way to ensure that it is more accountable by making it renewable and competitively bid over a period of, let's say, 5 to 10 years.

There are advantages and disadvantages that need to be discussed carefully about splitting the functions. The advantage is the decentralization of authority, and there

are very few technical interdependencies, there are some but very few technical interdependencies between the address and the domain name root administration so why do they have to be together? The advantage is the decentralization of power. The advantage is you might have to create another policy Forum and duplicate the costs of people running around talking about these things.

Chris Disspain:

I want to make it really clear to everybody in this room that there's no close down on this if you want to talk about the IANA contract, that's absolutely fine. As a moderator I'm sure it will be very interesting but I do need to say to be fair, as a lawyer I'm extremely well aware of the fact there are certain people in this room who will not talk about it and cannot talk about it because it is a legal contract, so while I'm very happy to discuss it for the next half an hour, I know that some people can't for legal reasons. Last year we were in Egypt celebrating and acknowledging at least the signing of the Affirmation of Commitments between ICANN and the U.S. Government and since then, stuff has been happening based on that Affirmation of Commitments.

Brian Cute:

The ITRT as we refer to it began its work in April as a group of 12. We have structured our work with a focus on paragraph 9.1 of the Affirmation of Commitments that among other things focuses on how ICANN manages its public input processes, its PDPs and decision making. We're the first of a series of review teams under the Affirmation of Commitments. We've structured our work into two work streams: The team itself has four Working Groups that has broken up the elements of paragraph 9.1 and is beginning to do a review of how ICANN is improving and working on those processes internally. We also engaged an independent expert at the Berkman Centre from Harvard University to do specific case studies for us. Where we are in our work is that come mid-October we will be issuing proposed draft recommendations for public comment. We do presently have a public comment period open. It doesn't have an end date. We are happy to take comments from the community. From a practical standpoint, if you had comments to factor them into our draft recommendations that go out by mid-October, I'd suggest you get them in by the end of this month for us to consider them, but there will be a follow on public comment period starting in mid-October and we're obligated to deliver a final report to the ICANN Board by the end of December this year.

Jeanette Hofmann:

I have a question of a more general nature. This is a new procedure, like a bit of an experimental procedure. What would you say have you learned so far? Do you think this is a method that could be used also for other organisations to enhance legitimacy and accountability and a sort of transnational sphere?

Brian Cute:

We've actually learned quite a bit so far. Part of our final report will be reporting to the Board our learnings in this process. It is an interesting and challenging process. The people who are in it are populated from the ICANN community. We are to a large extent insiders, if you will and we're very conscious of that. We have conflicts of interest, and we're very aware that our output needs to be embraced by the community, embraced by the Board. So we need to be autonomous. We need to be neutral and we need to be independent. We spend a great deal of time talking about that in the early phases. In terms of the work itself, we took a blank slate approach to our task as the Affirmation of Commitments is a new agreement between ICANN and the Department of Commerce. There have been prior efforts by ICANN to address accountability and transparency. We're looking back at those prior efforts, but in terms of how we structure our work and our outputs it is been a blank slate approach. We've developed our own principles along the way. We'll certainly share our thoughts with the community and the Board at the end of the process as to how this mechanism worked and yes, I do think it is a good potential mechanism for other organisations.

Chris Disspain:

I think it is pretty clear from the sessions so far that there are many understandings of what enhanced cooperation might mean, in very different contexts. One thing I think is really clear is that it means different things to different people. Heather Dryden, the interim chair of the Governmental Advisory Committee, will address the issue of enhanced cooperation specifically with respect to the GAC and ICANN.

Heather Dryden:

I'd like to talk a bit about the Governmental Advisory Committee at ICANN. The role of the Governmental Advisory Committee is to provide advice on public policy issues arising from the coordination of the DNS and in terms of enhancing cooperation, there are efforts external to the organisation. For example, there are about 100 members of the Committee, and that includes Governments and public authorities, as well as intergovernmental organisations that regularly attend GAC meetings, and in that sense, UNESCO and WIPO would be two good examples of that kind of interaction. There are numerous examples of the GAC working with other parts of the community to deliver positive outcomes regarding the Domain Name System that are of particular interest to Governments. I'm sure many of you are aware of the introduction of internationalized domain names, country codes, and of course, Governments are very keen to take up the opportunities there. I'm not sure of the exact number that we have now but many Governments have taken advantage of the fast track that was developed as part of a Working Group within the ICANN community, where Governments and others including the Country Code name Supporting Organisation really did collaborate effectively in order to quickly introduce internationalized domain names.

If we speak of more current efforts in terms of new generic top level domains, the GAC recently recognized the importance of maintaining this aim of universal resolvability for the Domain Name System so I think that's quite significant. Also, regarding the joint Working Group which is between the Government Committee and the Board of ICANN to review the role of the GAC, this includes really key questions in how those communications and that relationship continues to be cooperative, and an effective, for example, Government advice. So how that is received by the Board and the processes surrounding that, and whether improvements can be made to that. Also, in terms of liaisons from that Governmental Committee to other parts of ICANN, what is the role of those liaisons? Do we need to look at having other kinds of liaisons or other means of ensuring that GAC advice and advice from other parts of the community are looked at early enough in ICANN's bottom up policy development processes so that this process works as effectively as possible? We're really looking forward to coming out with concrete recommendations when that work concludes in December of this year.

Olivier Crepin Leblond:

I'm an ISOC ambassador, but I'll speak on my own behalf, also at the European At Large Organisation, I'm the Secretary of EURALO and ICANN. I just wanted to add to what was said earlier about public participation in ICANN. There is the 'at large' which effectively is users and Civil Society organisations, consumer groups and so on. I wanted to say you can get involved through 'at large' and ALAC asks us to bring your point forward in the ICANN processes.

Peter Van Roste:

I'm the General Manager for CENTR. When ccTLDs want to cooperate they roughly speaking have three different for a: the IGF, to discuss all things that are technical matters, on global ccTLD related policies, they can come to the ICANN meetings and discuss their ccTLD issues that are of interest of them, for all operational issues; however, they do have their regional organisations. Some regional organisations we have are AFTLD, LACTLD, Asia and central for Europe. Regional organisations group typically by all the ccTLDs from their region and allow them to exchange information. In the build-up for IGF 2010 we quickly came to the conclusion that especially with the lessons learned from the previous IGFs, we really wanted to have something tangible as an outcome from this workshop. So what we agreed to do is instead of informally exchanging information between those four regional organisations we're effectively going to build a knowledge platform that will group basically all ccTLDs across the world, and this again would focus on operational issues. So it is sharing information, it is broader than security but since in the context of our workshop this was the most relevant element, this was picked from that debate. APTLD has obviously more know how about IDNs than anyone else. The Centre is looking for instance in different aspects and LACTLD maybe has unfortunately the opportunity to share contributions from Chile and Haiti on how to deal with natural

disasters. The timing is that by Cartegena we have a detailed list and by Q1 next year we should be up and running with a knowledge database.

Fatima Seye Sylla:

Yesterday morning AFRALO held a workshop on new TLDs and IGNs for development. This workshop addressed with the very rich panellists the new ccTLD programme, history, opportunities and barriers in developing countries, the IDN ccTLD fast track implementation and the impact of new IDNs on the development for poor countries and communities. The debate demonstrated the existence of a big concern about the real impact on needy countries and communities, and the questions related to the possible number of applications for new TLDs from developing countries and the poor communities. The effective impact of the new TLDs and IDNs on development, mainly the barriers linked to the application costs, the application cost, the technical requirements such as IPv6 and DNS 6, the complexity of the application and the technical human resources we're lacking.

Another major issue linked to programme inclusiveness was debated. There were still worries, even though ICANN is doing a very good job in having Working Groups around these issues, about conducting studies prior to implementation, meaning here feasibility studies, during and after implementation, to see if we're going in the right way or not. For example, is it the best way to open single round of unlimited number of applications rather than successive rounds of limited number of applications so that we can correct what needs to be corrected after the experience of each round has been done?

Chris Disspain:

It seems to me that what you're saying has come out of this workshop is that development, new TLDs for development is a double edged sword. It could be good for development, but perhaps it could actually be difficult, or make development more difficult.

Zahid Jamil:

As far as the IDNs are concerned, I think it is a very important thing that ICANN is doing introducing IDNs, but I'll just focus a little more on what the new gTLDs, which are not just new IDN gTLDs but new gTLDs, will do in general for developing countries. This was discussed yesterday and the chair of the ICANN Board was kind enough to be in the workshop yesterday and confirmed there would be something around the region of 300 new TLDs per year that would probably be mandated by ICANN. The impact of this, specifically on developing countries, is something that was a topic of some discussion. What was also discussed was the issue of the economic analysis, which has come out, and the root scaling study that come out from ICANN which have been very good studies. The only problem with it is that we are now at a stage where the process or the draft applicant guidebook is going to

convert into a crystallized final guidebook, and this economic analysis has come out now saying we don't have enough statistics. We don't know what the economic and social impact necessarily will be. Did we do the cart before the horse? Should the studies have come first and the rules subsequent to that? Other than that, obviously the cost on developing country businesses having to acquire on the second level several domain names and basically then being stuck with the use of search engines to market themselves from the developing country businesses and the impact of this on the digital divide in developing countries. One area of concern was the impact this entire process, and the sensitivity that could necessarily be shown to developing countries, what impact that would have on the credibility of private sector led multistakeholder models of governance especially when this may become an example of challenges by other Governments and IGOs.

Jeanette Hofmann:

Do you think it is ICANN's job to do financial analysis? Or is it something the applicants need to do?

Zahid Jamil:

One of the requirements of the new gTLD process was that the economic study would be done by ICANN, so the current economic analysis on the website of the new gTLD website of ICANN shows it was done by ICANN. It was funded by ICANN and the economic analysis itself says there's so much more statistics, social costs and economic costs that need to be studied and probably if you read it, it seems maybe we went and made the rules before we did the feasibility and the feasibility obviously is sort of part of what ICANN must do before it starts. This is one of the business model issues.

Andrew Mack:

My name is Andrew Mack from Washington and I am here as part of this working group. The working group was established in April, following the passage of a board resolution 20 at the Nairobi meeting. We brought together a truly multistakeholder team that has people from NGOs, private sector, academia and others around the world representing pretty much every continent. We started off with a primary goal of focusing on looking at different kinds of support that might be offered to new TTLD applicants from needy and underserved groups and our primary criteria for eligibility was the issue of need. So we spent the last five months looking at this and have looked at a series of different kinds of support and among them was price support. Are there ways that the costs can be reduced to make it easier for needy applicants to move forward with their application? Are there ways the communities can help applicants complete their applications and fulfill their needs? There was also discussion of IDNs and ways to serve underscript securities. The group presented at Brussels, we are working on recommendations for board consideration, and the process is still in motion.

Leonid Todorov:

I represent the CCTL.ru and I'm happy to inform you that the new IDN TLD for Russia is up and running and we have already 16,000 plus domains registered in that zone and 3,000 plus actually delegated. They are operational and people can have their access to them. That was quite a challenging exercise. We were happy to be among those first four nations who pioneered this area. I believe that we've given a great deal of effort. We worked on protecting, first of all, the owners of legal rights for trademarks, as well as the Government needs. They are more or less dealer protected, but we are constantly working on modifying them to make sure that not only Cyrillic trademarks are duly protected but rated trademarks are protected as well in these new zones. I believe that we should thank, first of all, the ICANN for this unique opportunity and the civil community, our peers, with whom we consulted all the time and whose advice was really invaluable for the launch of this new IDN TLD for Russia.

Chris Disspain:

It is often said in respect to new details, when they're coming, that a lot of names will be registered in them purely as defensive registrations to protect the trademark and so on. The only current examples we have that we can look at and maybe see whether this is likely to happen are in some of the IDN-ccTLDs. Do you have any statistics as to how many of your current 16,000 names you would class as being protected registrations as opposed to people registering names?

Leonid Todorov:

We haven't done this analysis as yet because the time sequences are too short, and I believe the overall number is not that big to prove some of our empirical guess work. I would say though that certainly quite a fraction of those domains have been registered specifically for the sake of protecting certain trademarks. This area of law in Russia is still under construction so we do have certain ambiguities in our law. Some companies, some trademark owners, they clash over domain names.

Fouad Bajwa:

My first comment is with regards to IDNs and their adoption in developing countries. It is going to be a long process. For some of the countries where language has been already localized and is core to the ICT, or the Internet functions of that country, like within the Arabian world and the Chinese world and the Russian world, their adoption may be pretty quick and fast. However for countries, let's say in regards to my own country where the tradition of English language usage on the Internet has been great, and we're certain some other efforts have been there for including Urdu Language as part of online content, there still needs to be a lot of attention given towards creating awareness in those countries. Capacity building is a primary issue in order to counter problems in adopting IDNs.

Second thing, I think the global focus is still required. A global focus in terms of that the IDN implementation is starting from top to down but at the same time there's some bottom level support required. For example, ccTLDs have to be moderated in all developing countries where non Latin languages exist and whose applications have been accepted for IDNs to actually start the grassroots level awareness. That regional language and individual input is definitely needed. So primarily, capacity building still remains a huge issue.

Izumi Aizu:

About a year ago, we formed the Japan Internet Domain Name Council. This is a full time stakeholder organisation, participated in by the industry associations of CICERAL, University non-profits and observers. We have started the open selection process for the new registry operator of the IDNCCT, or dot Nihon, in Japanese or Chinese characters. We are a little bit slow, behind China, the Republic of Korea, or Hong Kong (SAR) because we decided to have an open bidding process. First of all, we have to discuss the selection criteria, and how to set up independent selection committee. The intent was to bring an open competitive environment in which the existing registry could also participate in the bidding. Now our focus of discussion is moving into the issue of governance for oversight of the new ccTLD-IN and also coordination between the new and existing ccTLD. It is a little bit complicated but we are getting lessons on the governance of ccTLD. Much more work is to be done, and there's talk about the ccTLD, like Tokyo, Osaka, and how do we coordinate or not. These are issues on the table and we'd like to share that.

Chris Disspain:

One of the points that was made really clearly yesterday in the workshop was that it is important to remember that the new TLD, being an IDN, ccTLD or a TLD generally, is not the end itself. It is merely an enabler and it is helping. It is pretty clear that from what we've heard this morning, there is both an upside and a downside to development, to the effect on development and developing nations. The final topic is on disaster and crisis.

Max Larson:

Regarding my experience in Haiti, I'm going to talk about how remembering best practices regarding DNS operation can help ccTLDs for service continuity during disasters. I will also talk about the value of collaboration between peoples in the Internet community. During the earthquake the data centre and servers in Haiti collapsed, we lost two servers there. During the earthquake though, some of the managers of the secondary servers noticed this, so they got together and contacted the master server in Australia and configured it and pulled data from this. This was very fortunate. What we learned from this event in Haiti is the necessity to adopt best common practices regarding DNS operation. It is also important to have a diverse geographic network on ccTLD infrastructure to avoid points of failure. Five years ago when we were to decide

where we were going to put our server, there were a lot of political talks as to where we should put them. At that time we decided to have servers outside of the country, mostly because of hurricanes, so we are happy that we did that. What we learn also is the value of people networking. There was a lot of talk in the Internet community, on mailing lists, to try to collect shelter for people in the Internet community in Haiti and on connectivity issues. It was extremely valuable having social networks and a broad Internet audience to discuss crucial issues and day-to-day operations. So in our case we think it is important to do capacity building and to have a pool of competent people that would be able to take care of business if other persons are not available for some reason.

Frank March:

Most of you will be aware that New Zealand had a 7.1 Richter scale earthquake on the 4th of September, about the same size and effect of the Haiti earthquake and we were very fortunate that the results for us were very different. Our hearts go out to the people of Haiti in the way that they have had had to recover from a massive disaster. In fact, the earthquake in Christchurch on the 4th of September is the largest earthquake ever to have taken place without the loss of a single human life. Part of that was fortunate; it was 4:35 in the morning when practically everybody was in bed and the structure of buildings in New Zealand generally and in Christchurch in particular is such that people in bed basically weren't affected. The major damage would have been to cars and people in the streets, had the earthquake taken place four or five hours earlier or four or five hours later.

The reason I'm drawing your attention to the limit of destruction in the city is that about 60 percent of houses have some form of damage. Some of them are uninhabitable. Particularly services such as water, sewage, and power went out and some of them are still out and still being recovered ten days later. The telephone services remained up but became overcrowded, overloaded very quickly, as you might expect. Initially the newspapers and television stations were asking people to send in videos from their mobiles and that sort of thing to see on the news. You'll see on YouTube a number of the videos that were submitted as a result of that, showing footage actually taken during the course of the earthquake. The mobile services very quickly were overloaded and people were asked to stay off them so they could be used for emergency services only. What I want to report to you is that the Internet remained operational in Christ Church and throughout New Zealand and did not' miss a beat the whole time. The services remained up and we were able to maintain links between isolated groups who began exchanging information from about 2 minutes after the earthquake ceased.

Sami Al-Basheer:

These unfortunate incidents happened in Haiti, Chile, and now lately in New Zealand, and I just want to seize the opportunity to inform you of the efforts the ITU is doing in these occasions. We were one of the first organisations to be in Haiti to restore communication by providing satellite terminals. We also started a fund to rehabilitate

the infrastructure in Haiti, with many of our members and other stakeholders, in addition to some resources from the ITU itself. Recently with the unfortunate flood disaster in Pakistan, the ITU also took the initiative to restore some satellite communication there, to help in the recovery efforts and to help organizations and other humanitarian efforts. In Pakistan we also started a fund and started it by donating 1 million US dollars to the fund. Now we are asking the help of the international community to help the Pakistani administration to restore their communication infrastructure, which was badly hit by this unfortunate flood. This is just information I would like to provide of the efforts the ITU has taken in these locations.

Fouad Bajwa:

As a citizen of Pakistan I'm very grateful for how the whole technical community has responded to the crisis in Pakistan. I'm thankful to my friends from across the world, even the people who have extended their will to support the crisis in Pakistan. I would like to thank in particular all the stakeholders participating in the IGF process. For example, Google created immediately a response centre online and as part of this they made available satellite imagery of all the disaster hit area. Secondly they created a resource locator and the representative in Pakistan also extended the news that they had contributed 200,000 US dollars to the relief efforts. I would also like to mention that many of the organizations, including the United Nations and so forth, have set up very important technical tools online in response to this. For example, communities have gotten together to create local.com.pk, a website that provides up-to-date satellite imagery. The Sahana disaster information management system team is already in Pakistan. There's Pakistan flood incident reporting by Ushahidi, and a crowd mapping tool. Interestingly this project is from Africa. Also SRSO relief activities, again being managed by Ushahidi. They're also providing maps. The Relief Web, which comes under the U.N. Emergency Response, is in formation for the humanitarian relief community. The UNOSAT provided Pakistan map products again, human-produced maps of the situation. The comments community has also stepped in by introducing the crisis comments wiki, for the Pakistan funds. ICT4Peace has added an inventory wiki. And once again, I would just like to thank everyone who's extending their support and say that we still need your support.

Steve Del Bianco:

I represent NetChoice and I heard talk about network diversification. To have a resilient network in the case of disasters we also need geographic diversification of data storage. Mindaugas, in his opening with respect to Cloud Computing, talked about medical records as critical network resources. Medical professionals on the ground in a disaster need on the ground access to the medical records for people they're treating for sickness or injuries. If the data itself is stored only in the country affected, you can imagine that even if the networks were up, database servers may not be accessible at all and the medical records will be lost at the time they're needed most. The answer to this should be easy. Industry should just be doing backups or moving data to other places

that won't be affected by the same disaster. In other words, diversification of where we do the backups. I think you all need to know there are significant barriers to moving data across national boundaries, even if only for backups. That's because nations, frankly, have different laws with respect to privacy of data, particularly medical data, and data protection mandates. So it is a simple task, and I ask of the Government representatives and regulators that participate at IGF to work together and harmonize your data protection laws, to make it possible for us to move and back up data across national boundaries for the purpose of data diversification that will help us in a disaster recovery effort.

Bill Graham:

I wanted to report briefly on a workshop held yesterday morning called priorities for the long term stability of the Internet, put together by the European commission, the Internet society of Netherlands, the communications regulatory of Lithuania and Tama University. We reviewed threats and things that need to be done to improve the way we work to improve long term security. First off, there was a series of technical threats which included malicious acts, implementation issues because the Internet is growing and changing so quickly that there can be problems if these changes are not implemented correctly. So interdependence was one interesting point that was raised. By way of example if you want your neighborhood to be nice, you can clean up your yard. But if your neighbors don't clean up their yards you're not going to get very far. Another view was that the main threats are not technical but really they're on the policy front. So we then turn to some threats to long-term stability from policy. One of those was the possibility of fragmentation of the network if net neutrality is not maintained and the need to maintain free end to end flow of information. There was a lot of discussion about overregulation or poorly informed regulation because there's a lack of people who are really comfortable with technical things. So the lack of cross-talk between the technical and the policy side bring their own threats. Also, multistakeholderism is difficult for some policy agencies to handle so we're still developing a level of comfort and an ability to do things in a multistakeholder way.

We had a case study from Lithuania about some national efforts to monitor the stability and security of their networks and they identified a need to have reliable indicators so that they could do that work. We then turned to another discussion of solutions, and someone said that the issues that are threats to stability have been well known to the technical community for years; however, when they become a problem or threaten to be a crisis, then the policy Committee wakes up to them, and deal with it. So there's a need to close the gap among researchers, operational people and policy people. There's also a need to train people to operate at the intersection of policy and technology. Then we very briefly looked at a map that Izumi had prepared showing some areas between policy and technology, and he identified two gaps. One, there is a gap where there is no functioning mechanism right now for regular global policy coordination or for a second one, for global operational cooperation. We did not think there was a need for new organisations, but rather a need to look carefully at how those issues can be dealt with through some mechanism. Regional and cross national

although the national level coordination is also important, there isn't a need for a new organisation. There are lots of organisations effective in the field. It is just flagging these particular concerns. It is about the existing ones coming together and dealing with the specific issues.

Chris Disspain:

Increasingly I know for many ccTLD managers, as the Internet becomes acknowledged as more as and more of a critical Internet resource, Governments become more and more interested in making sure that they're all covered in a crisis so that no one can ever say to them, well, why did not t you do this? Thomas de Haan has a few things to say about that particular issue.

Thomas De Haan:

The thing which I think is important for Governments to realise in this contingency planning is the fact that we depend very highly on ICT, especially in the Netherlands. We're still top 3 Broadband users and we have a highly globalized economy. And then on the second point we have also a very strong ccTLD. SIDN is still the fourth largest Critical Internet ccTLD in the world and in the Netherlands approximately 70% of all websites, whether Government, private or social, they're all dot NL for 70%. So this triggered for us a kind of thinking about the responsibility as a Government. SIDN is a private Corporation, it is a not for profit Corporation, comparable to dot DE and dot UK, so there is no formal tie between Government and our ccTLD registry. We really don't want to have a formal tie in the sense of regulation, Domain Name regulation, because we think self-regulation is still the best way in this context, in ICT, to rely on self-regulation and self-organisation. So we started a dialogue and we came to an MOU which we focused really on certain things which can really go wrong, we're talking about a disaster in the sense of an organisational disaster, a major technical disaster, and things like going bankrupt. We came up with two things which are in this setting relevant; that we have an emergency assistance agreement in case there's really a big disaster, on the side of the registry, that we as a Government will assist.

The second part is a road map which we made up together with the ccTLD, a road map to come to a new registry, to nominate together in a consultation process with the local community which we're a part of a new nomination for a new registry. And of course, this needs cooperation with ICANN and IANA which we're still working with it.

Emily Taylor:

I must say the discussions have been immensely wide ranging both in topic and in the diversity of speakers who have taken the floor today. First of all, we looked at the status of IPv6 availability around the world. This was a lively discussion, informed by the feeder workshop on IPv6. Overall, we saw this as an example of the Internet in transition, a bit like the migration from leaded to unleaded petrol, that for a time, it

is very rare, then you have coexistence and then gradually you move across to the new system. Hearing real world examples from Governments, vendors and Internet service providers, they talked about their successes, and also the obstacles in their path.

One interesting highlight was that people were starting to say that the demand is now coming from the end user, from the customer, rather than just simply a push of information from the number resource allocators. The landscape is changing quickly and we're told to be aware of outdated information particularly on equipment and capacity. One speaker encouraged us to articulate the benefits rather than just the depletion of a waning resource and what IPv6 could open up. Lastly, the situation of developing countries was highlighted, and one speaker said they may be in a position of advantage comparatively because of the lack of legacy equipment but, of course, that equipment still costs.

Secondly, we moved on to the internationalization of Critical Internet Resources, both the management and enhanced cooperation, and for me, this took us across the following two items, as well. Last year at this discussion, we talked about the Affirmation of Commitments, which had just been released, and the first applications for non-Latin script Top Level Domains. So many speakers discussed and emphasized the importance of this topic to them, and within the IGF. We heard about the steps taken by ICANN since the Affirmation of Commitments. We heard from the Chair of the Committee looking at accountability and transparency within ICANN. The relationship was mentioned between the number of users and the number of registered domain names in a territory, and it will be interesting to see the impact of deployment of non-Latin character domains in the root on this. We also heard about cooperation between the GAC, the Governmental Advisory Committee, and the ICANN Board, with other stakeholders, as well, and the tangible result of a creation of a knowledge database between Country Code Top Level Domain managers. Moving on, we looked at a sharper focus, at new Top Level Domain names, and the introduction of non-Latin scripts in the domain root. We heard reports from the feeder workshops, which looked at the opportunities created by internationalized domain names, and also some concerns about whether this would actually close or increase the digital the divide. Speakers talked about the great benefits that can be brought to national businesses, e-Government, enabling local language content, and we also heard about the Working Group set up by ICANN specifically to look at what can be done to assist needy applicants.

Our last look was at disaster recovery and crisis and we heard of the remarkable achievement of the Haitian registry in ensuring continuity of service despite the destruction of the local infrastructure. This also emphasized the importance of hearing multiple viewpoints. We talked about the political pressure to have the infrastructure provided locally versus the influence of industry best practice and cooperation which tended towards geographical diversity. A healthy reminder, a timely reminder, that when we talk about management of critical infrastructure in many countries, we are sometimes talking about one or two people. A point was made that Haiti has implemented IPv6. It is not just a question of money, but shows the benefits of

cooperation. We also heard about the responses of natural disasters in New Zealand, the ITU's role in restoring satellite services, and what is being done on the ground. One speaker also mentioned the importance of geographical diversity in protecting data and backups, and the interesting conflict between national laws on data protection, which may inhibit this, and this is perhaps a topic that demands further thought. Next and lastly we looked at other threats, not natural disasters but sort of operational, technical and policy threats and the need for people to operate at the interfaces between these areas to enhance understanding, although no new organisations were called for. In contingency planning we had the example of the Netherlands, where there was cooperation between the Government and its local Country Code registry, which fulfilled the Government's obligation to plan for disaster without undermining the self-regulation of the registry.

So what have we learned over the last 5 years? And how has the discussion moved on? Personally, I really see a difference in the nature of the dialogue and how it is being conducted. This set topic was felt to be a bit too even to qualify for a main session in Athens 5 years ago, and we took our first tentative steps in Rio. By Hyderabad we had the confidence to start this format of open discussion, and through the next 2 years, I would say that the level of outright disagreement, the acrimony has reduced, and the level of information exchange, real world examples, has increased. A great deal of the heat has gone out, the dialogue is more wide ranging. It is not as fast progress as any of us would like, as all of us would like, but I guess that is the corollary of corroboration between stakeholders and consultation: It takes time; but here we have been talking about the experiences of the Russian registry in implementing domain names, and both naming and numbering the essential blocks are there but they're not there as an end in themselves. They are there as an enabler to extend the reach of the Internet to all people, all languages and local content.

At a higher level, I think we see the impact of the IGF in two respects: We are encouraging stakeholders to climb out of their silos, where we were stuck 5 years ago, and I think this is a tribute to the non-threatening environment here. Secondly there is the importance of people sharing their experiences. This is all new stuff we're discussing today, IPv6 and new internationalized domain names. People here are working on things that have not been done before, and on which many millions of people depend. Things don't always go right, but overall, what I take away from this session is the willingness to cooperate. It helps to share both the problem and the solution, to be honest about things that did not go right but overall, to celebrate our successes.

Mindaugas Glodas:

Internet only exists because there are those who consume products of the Internet. These are businesses, and these are individual consumers. Whatever we do, we should keep in mind what is in their most and best interests, and that all they care about probably is connectivity, the availability to connect and the security of that connectivity. It is the devices to be able to access whatever is on the Internet, and that

whatever is on the Internet is actually the content. So being on the private side of the stakeholders and representing a private company, I think we, jointly with our partners and also competitors are doing a great job in bringing those technologies forward, but we can only do that successfully if we have a proper level of partnership with the Governments and the NGOs. We often talk about public private partnerships and to me the Internet is the best example of the biggest system in the world that is governed as a public private partnership, and that public private partnership actually spans multiple Governments and multiple commercial entities. I think we should actually keep up this good job, and take it with the responsibility to secure those needed critical resources so that the Internet has a good future, and develops further both from the technological perspective, but also very importantly from an accessibility, availability and safety perspective.

MANAGING CRITICAL INTERNET RESOURCES

Reports of the Workshops and Other Events

WS 28. Priorities for the Long Term Stability of the Internet

Report by: ISOC with contributions by other organisers

List of panellists and or participants:

Session 1: Hillar Aarelaid (Chief Security Officer, Estonia CERT); Danny McPherson (Vice President, Network Security Research, at VeriSign Labs.); Alain Aina (Special Projects Manager, AFRInic Network Engineer,); Ram Mohan (Executive Vice President, & Chief Technology Officer of Afilias Limited); Raul Echeberria (Executive Director LACNIC); Theresa Swinehart (Executive Director, global Internet Policy, Verizon); Max Senges (Policy Team, Google Germany); Paul Vixie (President of Internet Systems Consortium and ARIN Board Chairman) Session 2: Rytis Rainys (Head of Network and Information Security Division, RRT, Lithuania); Natalija Gelvanovska (Head of Network and Access Division, RRT, Lithuania) Session 3: Avri Doria (Professor at Luleå University of Technology); Izumi Aizu (Professor and Senior Research Fellow at the Institute for InfoSocinomics, Tama University); Andrzej Bartosiewicz (CEO of YonConsulting.com,)

The workshop was opened by Ms. Neelie Kroes, who stressed how the stability of the Internet is a multi-faceted topic that concerns users all over the world. Although the Internet has proven to be fairly robust and resilient so far, this does not mean that there is no necessity to continue addressing threats. Therefore, it is important to know who does what and where more work would be needed. Last, not least, Ms. Kroes "reassured" the audience that in the view of the Commission the private sector, not public authorities, should continue to play the leading role in day-to-day

operations of the Internet, in full respect of the multistakeholder approach. However, given the importance of the Internet for societies at large, public authorities have an interest – and a responsibility – to understand what is done and what could be done to ensure the stability and resilience of the Internet. This is the spirit of the discussion on principles for Internet resilience and stability which Member States of the European Union are already conducting, with the Commission providing a facilitating role. The workshop revealed three areas where attention is needed to improve global confidence in the ongoing stability of the Internet.

There are a range of technical threats. Speakers identified the following:

1. Malicious acts – bad people doing bad things; e.g., malware, botnets, DDOS attacks, route hijacks, middle box cache poisoning, etc.
2. Implementation issues - new protocols and new services are being created and introduced almost daily that need to be integrated into the Internet in a consistent way in order for them to work well together and across the networks that make up the Internet. If that is not achieved because of lack of expertise, or because some networks don't keep up, problems can develop. In that way, protocols and services intended to be improvements or to deal with threats can themselves become threats to stability.
3. Issues of interdependence – the international nature of the Internet means that no country can assure the stability of the Internet without the agreement and cooperation [or collaboration] of its neighbors, or at least all the stakeholders for which relative dependencies or fate is shared.
4. Issues of growth – the continuing explosion of Internet demand challenges service providers of all types, and also highlights the need to improve some characteristics of the Internet protocol itself (e.g., inability to verify authenticity of IP source addresses; routing insecurities, etc.)

One speaker said that the main challenges for Internet stability will not come from the technical area, but from the political and policy arenas. He said one cannot speak about stability without speaking about integrity of the network. That integrity is facing challenges such as possible fragmentation due to the loss of the neutrality of the network, threats to the free end-to-end flow of information; from over-regulation due to otherwise well-meaning efforts to solve problems like cybercrime, infrastructure security vulnerabilities, etc.

Turning to threats in the realm of policy. Speakers identified the following:

1. The fact that Internet policy needs to be developed with knowledge of how the technology works, and taking into account the needs of users.
2. There must be a multi-stakeholder approach to policy development concerning the Internet, because of the Internets globally distributed nature, and as a consequence of the end-to-end model. Working in a multistakeholder

environment is unfamiliar to some accustomed to working in more traditional environments, and needs to be learned.

3. There is no agreement yet on principles underlying Internet policy, and until those can be developed, the resulting misunderstandings and conflict are themselves a threat to stability.

Third, threats arise from the need to build skills:

1. In both developed and developing countries there is a need for education and capacity building so that there are people who can deal comprehensively with the new global policy environment, and the opportunities and challenges it presents. Some organizations are already doing that, but considerably more is necessary.

2. Similarly on the technical side, trained, experienced and capable people are needed to address each type of threat identified above.

3. Finally, because of the nature of the Internet, there is a need for skills development at the intersection between the technical and policy worlds. Technical people need to think about possible social/policy implications of their work; while policy people need to be able to understand the technical constraints on their desired policy development. This is a relatively novel requirement, and there are few institutions trying to address it so far.

In the second session, the Communications Regulatory Authority of the Republic of Lithuania (RRT) presented their national experience with efforts to address the need for Internet infrastructure resilience assessments in order to identify and then monitor security and stability of national networks. Lithuania has five years of experience preparing to have a knowledgeable national response to threats to Internet stability. They spoke about the challenges for a small country to build knowledge at a national and local level. Specifically, they described efforts to identify common indicators to assess Internet resilience and to develop mechanisms to collect the relative information. It is a priority for Lithuania to understand the state of their infrastructure, which led them to undertake a mapping exercise that showed a surprisingly large and interconnected web of actors, which has proven to be useful. The work identified a lack of academic capacity for researchers & studies and international co-operation between state institutions performing similar assessments. This was emphasized as an area needing further development. The workshops final session began a conversation about gaps that need to be addressed, who is active in the field, and what else needs to be done. One speaker noted that the technical community knew about many or all of the vulnerabilities identified long before they were known to the policy people. And even then, the policy side of the house only became aware when the nature of the threat became critical. People from the policy and technical worlds need a way to get together earlier, and in an environment where they can communicate early and often. The Internet Governance Forum is a good start, but more is needed.

Second, many of the solutions and general facts of life in the network are determined by business imperatives and the profit motive. For a public good like the Internet,

profit is not always the best motivator of the sorts of behavior needed for stewardship. Some things, like the adoption of IPv6 and some steps to increase security, don't have an obvious or immediate economic benefit; yet they need to be implemented for the ongoing health of the Internet. Changes at the infrastructure level, particularly at the IP Network layer, tend to be complex and expensive and lack obvious direct incentive. A way must be found to get beyond the current situation where, if there is no profit advantage – i.e. no killer app or financial incentive – the necessary steps won't be taken. And third, in terms of finding a way to evolve the network (i.e., to go from a wooden wheel, to iron rimmed wheel, to a rubber-tired wheel) there must be a way to bridge the gap between the researchers, operational people and policy people. That means we have to find a way to evolve both our understanding and our systems in a multi-stakeholder way. The continuation of threats to the long term stability of the Internet also shows there are not sufficient monitoring and analytical tools to deal with the challenges posed by the rapidly expanding Internet, both from security and performance points of view. Finally the results of an analysis of organizations involved in local, regional and global technical and policy issues were presented. There was discussion about where gaps exist and how they might be addressed. Specifically, the gaps that need to be filled to deal with threats against stability are creating a mechanism for global policy coordination on regular basis, as well as a mechanism for global operation coordination. Both require a good degree of cooperation and coordination among the various actors concerned. The word "global" is used here to recognize that most actors in developing countries do not participate in the existing mechanisms sufficiently, yet threats are generated and spread globally, or are inherently systemic. While there was no appetite for creating new organizations to fill these gaps, the problems were recognized. People attending the workshop felt it would be useful to continue work with such an analysis. There was also a call made for participants to elaborate some principles that would be instrumental in ensuring vibrant (and stable) evolution of the Internet, possibly in cooperation with the Dynamic Coalition on the Internet Rights and Principles.

WS 50. City-TLD Governance and Best Practices

Report by: Thomas Lowenhaupt

List of panellists and/or participants:

The following participated in the workshop: - Mr. Izumi Aizu, Senior Research Fellow, Institute for InfoSocionomics, Tama University, Tokyo, Japan - Mr. Sébastien Bachollet, ICANN ALAC vice Chair, Président d'honneur d'ISOC France - Mr. Bertrand de La Chapelle, Délégué Spécial pour la Société de l'Information / Special Envoy for the Information Society Ministère des Affaires Etrangères et Européennes/ French Ministry of Foreign and European Affairs - Mr. Wolfgang Kleinwächter, University of Aarhus, Board Member of Medienstadt Leipzig e.V. - Mr. Dirk Krischenowski, .Berlin TLD - Mr. Thomas Lowenhaupt, Connecting.nyc Inc. USA, Chair/Moderator - Ms. Ana Cristina Amoroso das Neves, Knowledge Society Agency (UMIC) Ministry

of Science, Technology and Higher Education, Portugal - Mr. Thomas Schneider, Coordinator International Information Society International Affairs, Federal Department of the Environment, Transport, Energy and Communication DETEC, Federal Office of Communications OFCOM, Switzerland - Mr. Jonathan Shea, Chief Executive Officer, HKIRC, Hong Kong (SAR) - Remote Participant - Mr. Werner Staub, Secretary, CORE Registry - Ms. Hong Xue, Dr. Hong Xue is Professor of Law, Director of Institute for the Internet Policy & Law (IIPL), Beijing Normal University - Mr. Olivier MJ Crepin-Leblond - Will serve as remote moderator

Workshop panelists affirmed the desirability and utility of public interest city-TLDs to urban areas in both the developed and developing world and presented TLD features, applications, and activities that would enable cities to better coordinate the acquisition and development of their TLDs. Workshop participants proffered the following suggestions:

- City-TLD proponents should define the role and responsibilities of public interest TLDs, using resources such as the Paris Understanding.
- An organization of proponents of public interest city-TLDs be formed.
- Literature should be prepared to inform mayors of the world of the utility of city-TLDs and distributed through their best practices organizations.
- Via petition and other mechanisms, the case for the thoughtful and rapid approval of city-TLDs should be presented to the ICANN.
- Such petition to the ICANN should note that the operation of city Government, the quality of city life, and the sustainability of cities will be improved by the thoughtful issuance and development of city-TLDs.
- Such petition should also note the unsuitability of the proposed filing fees, technology requirements, and registry/registrar separation for city-TLDs proposed in the Draft Application Guidebook, especially for less developed areas.
- The petition should note that the acceptance of city-TLDs as a distinct category of TLDs, governed under the existing laws of nation-states; unencumbered by traditional concerns about trademark stress; and governed by responsible entities will free the ICANN to focus on more problematic TLD categories.
- That nation-states be contacted through the members of the ICANN's Government Advisory Committee (GAC) and other channels and requested to assemble a list of cities with an existing interest in TLDs.
- That a list of cities proposing public interest TLDs be submitted to ICANN.
- That a dedicated unit within ICANN be created to process public interest city-TLD applications.
- That cities on such a list be processed and approved in an expedited manner.
- That trademark issues be closely considered.
- That the city-TLD advocacy organization creates city-to-city processes and communication channels to share best practices.

WS 55. Successes and failures of Internet governance, 1995 - 2010, and looking forward to WSIS 2015

Report by: Jeremy Malcolm and Janna Anderson

List of panellists and/or participants:

Wolfgang Kleinwächter - Academic and consultant, Tracy F. Hackshaw - National ICT Company Ltd, Trinidad and Tobago, Catherine Trautmann - European Parliament, Carlos Afonso – RITS, David Souter - ICT Development Associates Ltd, Moderator: Jeremy Malcolm - Internet Governance Caucus

The workshop looked at progress made since the initial 2003-2005 WSIS meetings and forward to a possible future meeting of WSIS in 2015.

A brief substantive summary and the main events that were raised:

Wolfgang Kleinwachter, a professor of Internet policy and regulation at the University of Aarhus in Denmark a co-founder of the Internet Governance Caucus and longtime Internet governance scholar and civil society leader, said the dialogue among various stakeholders is key, and it took a long time to gain the right for members of civil society to participate in a full role in multistakeholder Internet governance.

Tracy Hackshaw, chief solution architect in the Government of Trinidad & Tobago's ICT Company, discussed concerns of developing nations. He shared specific details about the successes and failures in his part of the world, using his country as a primary example. He said access issues have not been solved in remote locations such as the islands around Trinidad & Tobago, but the WSIS process and other global governance efforts are raising the need for connectivity.

Carlos Afonso, a member of the Brazilian Internet Steering Committee and longtime leader in IGF and ICANN, said the multistakeholder process "is a very important success even with all its imperfections." But he noted that some countries that were active at the start of the WSIS process have not been present in the IGF in recent years, listing Bolivia and "several other countries." He said people should question why this is happening.

David Souter, managing director at ICT Development Associates, said that as the Internet has become central to society, economics, politics and culture the Internet community and mainstream Governments have struggled to find a relationship.

"The Internet is in a continual state of flux and its development is unpredictable, so its governance arrangements need to be responsive to the changes that are taking place within the Internet and its development and its impact," he said. "We need a more thoughtful approach for accommodation between the Internet world and Government. The interface between the two seems to be more crucial than the identity of either."

Catherine Trautman, a member of the European Parliament representing European Socialists, said the work toward multistakeholder governance is a positive step of WSIS and the IGF process. She expressed concerns over the question of enhanced cooperation, noting that civil society is perhaps not getting its due recognition.

"Civilian society could show the contribution they make," she said. "This is essential in this evolution and the decision on continuation of IGF." She said the process is in a state of flux as the United Nations General Assembly is expected to take a vote soon about the possible extension of IGF that could be a positive or a negative influence on the processes set in motion through WSIS and IGF.

Conclusions and further comments:

When the discussion turned to the possibility of a WSIS meeting in 2015, Kleinwachter said civil society organizations must begin to get more organized to participate effectively.

"What I see as the risks is that it would be a repetition of what was decided in Tunis and Geneva, and now in 2015 that means a bureaucratic summary and not a new conception of thinking for the next 10 years," he said. "It would probably be a backward-looking summit, which would be a waste of resources and energy. It is better to strengthen the IGF, to have another big world summit, to have a ministerial meeting, multistakeholder in 2015."

Afonso spoke about the impact of constantly emerging innovations such as Facebook and Cloud Computing. He said that in light of considering 2015 people involved in IGF should be investing more effort into anticipating the governance agenda for the next five or 10 years, asking, "What are the new challenges?"

"We have to explore this territory, to come with innovative solutions," he said." This would be my challenge for the next five years of the IGF, to make the IGF a place where such new ideas are discussed."

Souter agreed that any third WSIS meeting should be more than a look back. "What social networking existed in 2005?" he asked. "Where was the mobile Broadband in 2005?"

WS 61. New gTLD and IDNs for Development: Importance and Obstacles

Report by: Tijani Ben Jemma

List of panellists and/or participants:

Fatimata SEYE SYLLA, Chair of ICANN AFRALO (Moderator) Olivier MJ Crepin-Leblond (Remote Moderator) Mohamed EL BASHIR, ISOC Sudan Khadija GHARIANI,

secretary General of Arab ICT Organization Bertrand DE LA CHAPELLE, French Government Representative Elaine Pruis, VP Client Services (Remote participation) Zahid Jamil, Pakistan Aziz HILALI, ISOC Morocco

The delegation of new generic Top Level Domains (gTLD) will have an economic effect that can impact the development of the developping countries. Also, the Internationalized Domain Names (IDN) that will allow a naming system in other languages than the conventional ASCII will permit an easier access of the local community and the grass-root population to an Internet in the local language. The development will be really affected. The speakers will demonstrate how important are those 2 components for the development and what are the obstacles that might prevent the developing countries from the benefits of this new opportunity.

The panelists addressed the following items: The new gTLDs program, history, opportunities and barriers in developing countries; The IDNs ccTLD fast track implementation, the impact of new gTLDs and IDNs on the development of poor countries and communities. The debate demonstrated the existence of a big concern about the real impact on needy countries and communities. Questions were raised related to: the possible number of applications for new gTLD from the developing countries and the poor communities, the effective impact of the new gTLDs and IDNs on the development, the barriers linked to: application cost, technical infrastructure requirements such as IPV 6 and DNSSEC, process complexity of the application, technical human resources.

Conclusions and further comments:

There were still Worries about conducting studies prior to implementation (feasibility), during and after implementation to see if we are going in the right way or not. For example is it the best choice to open single round for an unlimited number of applications rather than successive rounds for a limited number of applications so that we can correct what needs to be corrected after the experience of each round?

WS 87. IPv6 around the World: Surveying the Current and Future Deployment of IPv6

Report by: Chris Buckridge

List of panellists and/or participants:

Patrik Fältström (Cisco, Swedish Government Advisor), Moderator Paul Rendek (Representing the Middle East Network Operators Group) Antonio M. Moreiras (Brazilian Network Information Center) Adiel A. Akplogan (AfriNIC) Jan Zorz (Go6) Constanze Bürger (Department of Federal IT Infrastructure and IT Security Management, Ministry of the Interior, German Government) Samantha Dickinson (APNIC) The panellists represented the following regions: Africa, Asia, Europe, the Middle East, South America Chris Buckridge (RIPE NCC) served as Remote Moderator for the session.

IPv6 adoption is an issue of central importance in Internet governance discussions, and recent years have brought us to a point where major networks in both the developed and developing world have deployed or are planning to soon deploy IPv6. The momentum towards a v6-enabled Internet is now irresistible. There remain concerns, however, about lack of access to information and education about IPv6, and the potential for this to disadvantage stakeholders in developing regions. The aim of this workshop was to showcase some of the ways in which IPv6 is being successfully employed in a variety of networks throughout the world today, as well as discussing ways in which all stakeholders can ensure that they have the information and access that they need to be part of the IPv6 Internet.

A brief substantive summary and the main events that were raised:

The workshop commenced with brief presentations from the six panelists, each of whom discussed the situation in their region, country or organization. Samantha Dickinson of APNIC, the Regional Internet Registry (RIR) for the Asia Pacific region, explained how the "kickstart" policy developed by the APNIC community allows any organization with IPv4 address space to automatically qualify for IPv6 address space. The policy has doubled the number of organizations with IPv6 address space in the region. Jan Zorz outlined Slovenia's "Go6" initiative, which is a collaborative effort of industry, Government and the Slovenian IPv6 working group. Go6 has organized IPv6 summits, offers consulting and training services, and is working with mobile carriers to encourage deployment. They have also been speaking about their work and experiences at events around the world. Antonio Moreiras described the role of Brazil's NIC.BR, a multistakeholder organization, in facilitating IPv6 allocations within the country and working to raise awareness through speaking engagements at conferences and events, online information, training events and a complete e-learning package. A website, IPv6.br, was launched in 2008, targeting all stakeholders, from technical engineers to businesses. NIC.BR also provides free IPv6 transit for members of the Internet exchange point.

Constanze Bürger discussed the German Government's plan to deploy IPv6 on its infrastructure and federal Government network. Working together with the RIPE NCC, their Regional Internet Registry, the Department of Federal IT Infrastructures and IT Security Management has obtained the IPv6 address space required to connect Germany's various municipal Governments, and is now finalizing its planning and organization. Paul Rendek spoke on behalf of Osama Al-Dosary, Chair of the Middle East Network Operators Group (MENOG). He noted that about 20% of Local Internet Registries (LIRs) in the Middle East have obtained IPv6 address allocations from the RIPE NCC, similar to the overall percentage for the entire RIPE NCC service region. As well as bringing together network operators, MENOG has also created an IPv6 Roadshow to educate Governments and industry stakeholders in the region. Adiel Akplogan, CEO of AfriNIC, noted that the African RIR has allocated more IPv6 this year than ever before; with 107 out of 750 AfriNIC members now having received IPv6 address space. He also explained how AfriNIC continues to work

with African Governments and local operators. Following these six presentations, the floor was opened to general discussion. Representatives from organizations including Nokia, Cisco, and Netnod/Autonomica noted that they have already made significant progress toward adopting IPv6.

Conclusions and further comments:

The business case for IPv6 is continuity of the business in a contemporary Internet environment. "Top-level" IPv6 deployment by IXPs, Governments etc. can have a significant positive effect on downstream adoption. The lack of IPv6 content should not deter people from adopting – content will appear naturally as the IPv6 infrastructure evolves. Government can play an important role as a key pusher of technological innovation in their own networks.

WS 113. Resilience and contingency planning in DNS

Report by: Giovanni Seppia

List of panellists and/or participants:

Speakers - Max Larson Henry, Haiti, .HT - Margarita Valdez, Chile, Nic Chile - Michele Neylon, Ireland, Blacknight Solutions - Kurt Erik Lindqvist, Sweden, Netnod - Thomas de Haan, Ministry of Economic Affairs, The Netherlands - John Crain, ICANN - Khoudia GUEYE EP SY, University of Dakar, Senegal - Lim Choon Sai, Singapore Network and Information Center Remote Participation Moderator: Peter Van Roste

The organizers of this workshop believe that the current DNS infrastructure is a sound and stable environment where all stakeholders cooperate tirelessly and valiantly to ensure its correct functioning. Overview: What has been and is done at registry level with a focus on two concrete cases of contingencies faced by registry operators, at Government level with two crisis scenario, at the root server operators' level and at the ICANN level.

The workshop addressed how DNS security is dealt with at various levels to guarantee continuity of the services and features our life has become deeply linked to and relying on. We heard of the remarkable achievement of the Haitian registry in ensuring continuity of service despite the destruction of the local infrastructure, and this also emphasized the importance of hearing multiple viewpoints and scalable network infrastructure. We also heard how the Chilean registry coped with the 8.8 Richter scale earthquake which severely impacted the country, how their efforts to measure the damages on the non-DNS and the DNS infrastructure were developed, how the importance of having any guaranteed continuity as international nodes were not affected by the disaster, how the local mirror of F-ROOT allowed national Internet to operate even with all international links down, and last but not least how the sites responded as expected. From a registrar and root server operator perspective, two interesting presentations given by Blacknight Solution Ltd, an Irish registrar, and Netnod showed that the

private sector is fully aware of the various contingency aspects and therefore, careful plans are in place to ensure continuity and services to the end users even in case of major calamities. Then, John Crain by ICANN talked about their training activities towards the ccTLD community to ensure best practice exchange and the development of capacities at local level. The last segment of the workshop focused on the existing cooperation between Governments and local registries. The .no case is one of the most significant. Thomas De Haan of the Ministry of Economic Affairs of The Netherlands spoke about the ..no registry, SIDN, private, not for profit Corporation, comparable to .de and .uk. There are no formal ties between the Government and the ccTLD registry. They believe that self-regulation is still the best way in this context. Therefore, they worked out a MOU in which they established procedures for certain elements which can really go wrong and which imply the Government assistance.

Conclusions and further comments:

To respond to the workshop's initial questions if registry managers, Governments, the private sector and other DNS operators are ready to cope with contingencies, if recent scenarios have shown that the necessary back-ups are in place, if business continuity is foreseen in the Internet world or is the DNS an endangered ecosystem where the failure of one node can lead to major disasters, the answers are all positive in the sense that concrete and tested procedures are in place at various levels. And this is also thanks to the great dialogue that is constantly and tirelessly continued in the Internet community, a dialogue that has become more wide ranging, a dialogue that involves all stakeholders, a dialogue that is at the basis of best practice exchange, like the work done at the CCTLD regional organization level, a dialogue that has greatly benefited from the IGF process. The Workshop concluded with the signing of a letter of intent by the 4 regional organizations. This agreement is not restricted to security issues, but has a broad scope and will allow ccTLDs across the globe to benefit from the experience from their counterparts in other countries. This tangible outcome of the workshop ensures that the exchange of best practices amongst ccTLDs will continue in the years to come across the regional borders.

WS 141. Deploying DNSSEC in a Territory

Report by: James Galvin

List of panellists and/or participants:

Chair and Moderator: James Galvin, Afilias Limited - representing ICANN's Security and Stability Advisory Committee Dmitry Burkov, a Trusted Community Representative for the root signing process Nurani Nimpuno, netnod Peter Janssen, .EU Alexa Raad, Public Interest Registry Ondrej Filip, CZ NIC Sebastien Bellagamba, Internet Society

More than a dozen countries have now deployed DNSSEC in their TLD. With the root now signed and our collective experience at an all-time high, this is an opportunity to bring together the experiences of those who have deployed DNSSEC

to share their lessons learned and to discuss what was necessary to successfully deploy DNSSEC. We had representatives from the complete chain of players involved in DNSSEC deployment, from the registrant who must elect to sign their own domain, through the registry, and the DNS operator who must support the deployment, to the Governments who must commit to the deployment of DNSSEC by setting the policy. The root zone has been signed and deployed since July 2010. We reviewed that success and the interactions between the root zone and countries, thus establishing the foundation we will have for a more secure Internet experience within a country and throughout the world. This workshop began with very short position statements from the panellists. The principal objective of this session was an interactive engagement with the attendees to discuss what is necessary in order to successfully deploy DNSSEC in their country.

The Workshop began with a moderately detailed review of the history of DNSSEC, from its beginnings in 1993 through the evolution of the DNS during which it became a critical infrastructure protocol. Everything that we do on the Internet depends on the DNS. It is the foundation upon which all applications and services are built. Without the DNS virtually nothing would work. DNSSEC is an opportunity for the next evolutionary step in the Internet. It is an opportunity to provide the foundation for a new secure, a new safe Internet for everyone. With DNSSEC you get certain guarantees about the site that you're going to and the service that you're trying to communicate with. We need DNSSEC for the future. We need it for the next step of what the Internet will become moving forward. Like any new technology, DNSSEC requires preparation. While its deployment is relatively new we do have a lot of experience. The early adopters have a lot to offer from their experiences. There is a fair amount of free software out there, for those who want to engage in the deployment of DNSSEC on their own. There are a number of service providers who have services to offer to facilitate your deployment of DNSSEC. Beginning with the root, each panellist presented some moderately detailed summaries about their deployment experience. ICANN, along with their partners VeriSign and NTIA, are the keepers of the top of the chain of trust, probably the single most important point in the DNS hierarchy. They chose very high-end processes and procedures to manage the signing of the root, and they did so in a very open and transparent way including the entire Internet community in the process.

Some very detailed statistics were presented clearly showing that with planning and careful execution the transition of the root zone, perhaps the most important zone in the DNS, from unsigned to signed could be executed without incident. Three top-level domain registries and one registry service provider provided a review of their experiences. Each included their specific recommendation for what worked for them. Finally, from a user perspective, the Internet Society described their experience being the first domain name to sign their zone when the .ORG TLD went live with signed delegations. Two essential points were made during the discussion between the panellists and the workshop participants. First, planning is essential. In order to ensure a seamless transition that moves a TLD from unsigned to signed with no loss

of service, registries must develop a plan and execute according to that plan. There are now a lot of resources with various suggestions about how to deploy DNSSEC.

ICANN OPEN FORUM REPORT

Panelists:

Rod Beckstrom – ICANN President and CEO
Peter Dengate Thrush – Chairman of ICANN Board
Chuck Gomes, Chairman of GNSO
Jayantha Fernando – Sri Lanka's GAC Representative
Ram Mohan – SSAC Liaison to ICANN Board

The purpose of this session was to report on ICANN's work and achievements. In particular the panellists discussed the Affirmation of Commitments (AOC), new gTLDs, IDN ccTLD Fast Track and DNSSEC. Rod Beckstrom was chairing the panel. He started off with an overview of the 4 topics mentioned above, then he asked panellists to speak to the details of the topics. He said that the AOC recognized the success of the ICANN model and declared its independence. On new gTLDs, Rod said it was an example of the multistakeholder model, and pointed out to the complexity of the process that involved a wide range of stakeholders, who had been deliberating to get the work done. On IDN Fast Track he highlighted the fact that millions of Internet users got their IDN ccTLDs live in the root using their native scripts. IDN ccTLDs in Russian, Arabic, Chinese, Sinhalese, Tamil, and Thai had recently entered the root. Rod described DNSSEC as a significant upgrade in Internet security, and added that its deployment had come as a result of the cooperative work by IETF and the Internet community.

Peter Dengate Thrush spoke in detail to the AOC. He began with a historical snapshot on the formation of ICANN and the MOU (shopping list) with USG, which had changed in 2006 to what was called the JPA (more goals oriented). In 2009, the JPA was concluded, and a new arrangement (AOC) was put in place, which shifted ICANN to a different kind of oversight (it used to be done by USG, but with the AOC it's done by the whole community). Peter then talked about the Accountability and Transparency Review Team (ATRT), its composition and its work. He said the group had been working on 4 areas: 1) reviewing accountability and transparency of the ICANN Board; 2) the role of the GAC; 3) review ICANN's public participation; 4) Board decisions and if/how they could be challenged. He talked briefly about the way the team had been working and its interactions with staff and Board, and the work underway leading to the final report the team should produce by 31 December 2010. Peter concluded with headlines about the 3 other review teams on who is, security, and consumer protection.

Chuck Gomes gave a brief introduction on new gTLDs since the beginning of its policy development process in 2005, through the Board's approving of the policy

and directing staff to work on implementation, all the way to the different draft implementation guidebook issued over the past 2 years. Chuck highlighted some of the work being done such as the vertical integration issue of whether registries and registrars should remain separate in terms of ownership; concerns raised by the GAC regarding morality and public order; support needed for new gTLD applicants from developing countries; issues remained to be solved with regard to IDN gTLDs. In all these efforts, Chuck made the point that all these were example of cross community work and deliberation.

Jayantha Fernando talked about IDNs and the Fast Track Process. He pointed out to the multistakeholder effort that led to the launching of the process in November 2009. He listed that countries that got their strings live in the root as well as those who passed string evaluation. Jayantha spoke to the 3 stages of the IDN FT application (preparation, string evaluation and delegation) and reflected on the local experience of Sri Lanka in each of the 3 steps.

On DNSSEC, Ram Mohan said it was considered the biggest structural improvement in the Internet in the past 20 years. He described in simple terms what DNSSEC was and what security problems it meant to mitigate. He alluded to the Kempinsky flaw and emphasized the community collaboration to fix this flaw, and the continued effort that eventually led to the root signing. He added that 20 TLDs had deployed DNSSEC so far, and 14 more were on the way.

As a comment, Rod showed the audience where in ICANN's Strategic Plan (one page summary sheet was distributed) did each of the topics discussed by the panelist lie. Rod also spoke briefly to the Strategic Plan and its main components: DNS stability and security; consumer choice and competition; IANA and core operations; healthy Internet ecosystem.

There was a question by Sabina (.de) on the Strategic Plan noting that under DNS security and stability there was an objective on "more secure TLD operations" and the question was whether ICANN had expanded its mandate to include TLD operations. The answer was that ICANN had not expanded its mandate; ICANN would not get into the TLD operation business; ICANN's role had always been to coordinate efforts and ensure the stability and security of DNS, and that was what ICANN had done in DNSSEC. A following question by the same attendant on whether ICANN had a coordinating or a regulating role. The answer was it had a coordinating role. Another question by a gentleman from Bangladesh on IDN ccTLDs, which his country had already applied to get its IDN string, yet it was not mentioned by the panelist when he listed the countries that applied in the FT process. The answer was that applications through the FT process would not be made public until they pass the string evaluation phase, or unless the applicants chose to make them public.

ACCESS AND DIVERSITY

15 September 2010

Chairman:

Antanas Zabulis

Co-Moderators:

- Nii Quaynor, Chairman and Chief Executive Officer, Network Computer Systems, Accra
- Olga Cavalli, Professor, Universidad de Buenos Aires; Director, South School on Internet Governance; Advisor, Ministry of Foreign Affairs of Argentina, Buenos Aires

Panellists:

- Mike Silber, Board of Directors of the .za Domain Name Authority, Johannesberg
- Manal Ismail, Director of International Technical Coordination Department, National Telecommunications Regulatory Authority of Egypt; Vice-Chair, Government Advisory Committee, ICANN, Cairo
- Yamil Salinas Martínez, Communications and Public Affairs, Telefonica, Buenos Aires
- Philipp Grabensee, Chairman of the Board, Afilias, Dusseldorf
- Mahesh Kulkarni, Department of Information Technology, Government of India. Pune, Maharashtra
- Virat Bhatia, President – External Affairs, South Asia for AT&T, Delhi

Remote Moderation:

- Raquel Gatto, Assistant Professor, Pontificia Universidade Catolica de Sao Paulo; Associate, DiploFoundaion; Sao Paulo

Antanas Zabulis:

I hold the position of the Social Adviser to the Prime Minister of the Republic of Lithuania on the subject of Information Society. It is a great honour for me to start the session of discussions on the subject of Access and Diversity. Last year in in Egypt there were two sessions, one on Access and another on Diversity. This year we have these topics consolidated and I think that is very right because it is even difficult to imagine how we can separate these two issues going together. Our session today will focus on access to infrastructure and access to content, topics related to regulatory issues and investment will be addressed tomorrow. This afternoon, we look forward to a range of issues from your home locations, the global reach of social networks and the linkages between access to knowledge and security solutions both in terms of hardware and software. An issue of interest over the past years has been the use of filters to block illegal or harmful content. In what conditions do you believe filtering should be considered? We'll also discuss network neutrality, another issue that has come to the fore over the past year. What do we mean by network neutrality? Should any principal also be applied equally to fixed and mobile networks? This is a question that may be particularly important in the developing world where noble networks will be the main means of access. As was noted during the critical Internet resource section, we're beginning to see the introduction of internationalized domain names but as we think about diversity, the issues of local language, the ability to access and create content in all languages is essential for furthering the richness and value of the Internet for all.

Multilingualism can help towards making the Internet more relevant and useful to people around the world. When talking about Internet Access and Diversity we should distinguish a few key levels: Infrastructure levels and the content levels supplementing it, as well as the knowledge and skill levels which to my understanding are some of the most important. For most of us it is difficult to conceive the world's technological age. Some people wake up at 3:00 in the morning, go to bathroom and afterwards check their email on the way back to bed. Well, the reality is changing. An issue about the access to a network is still relevant even in well developed countries where surprisingly a large part of the society still lives digitally detached. For example, even 30% of the population of the European Union has never used the Internet, and many of them have not done this just because we don't have an access to any network. I think the discussion of the global access to Internet should start with an establishment of the right to the Internet at the global level as one of the basic human rights. It is not on the top here but it is a necessity which is implemented practically by the most advanced countries. By bringing the right to the Internet forth to the level of basic human rights, there will be a global obligation and general incentive for Government, international organisations and businesses structures to achieve this goal. The public private partnership, so called PPP, can be the most effective way to expand the infrastructure of the Internet. This method has justified and has been proved by many times by a number of successful examples across the world. We here in Lithuania have

inspiring stories about the establishment of public Internet access points, as we have around 1,000 across the country.

There are factors which completely change the indicators of the Internet and e-services by the population. One of the fastest ways of ensuring global Internet access would be mobile Broadband, Internet networks and mobile devices. The reasons are obvious. According to our mother company report published a few years ago, twice as many Lithuanians feel naked without a mobile phone than they do without their underwear. The future Internet access is an access to the pocket or a palm, accessible anywhere at any time. Encouraging indicators of this trend are the mobile strategies selected by Google, a boom of mobile applications market and new mobile technologies providing the possibilities of mobile Internet which have been only imagined until now. Allowing speeds of up to 100 megabits per second is a reality today, and probably some of you have already experienced this, just right now, by trying the telephone you can do it yourself here at the IGF conference, and we're proud to present to you such an option.

Olga Cavalli:

I'd like to stress the fact that we have transcription not only for the main sessions, but also for the workshops, which is a major achievement and allows many people to follow all the work we do here in Lithuania, not only here but also remotely, because there are people from all over the world following us through the remote project. We have many others all over the world following us so it is not only a meeting for people that were so lucky to be here with us today, but also for everyone who is interested in the future and the present situation of the Internet.

Mike Silber:

I'm speaking in my capacity as Director of the Domain Name Authority, and these views are specifically as discussed within that organisation. A lot of discussion takes place around the so called digital divide, and a very interesting comment was made by a colleague in turn quoting another colleague, so possibly this is starting to pick up some momentum, which was that there's no longer any purpose about talking of bridging the digital divide because there is always going to exist some form of access curve, those who have access and those who have either limited or no access. There are children gaining access to linked networks at an increasingly young age, but there is a certain age at which our children, our youngest children, don't have access, certainly not unsupervised, immediate access, to this network of networks, and that's entirely appropriate. Similarly, there's a generation of older people who don't have access because they lack many of the skills, and the intent or the desire to learn those new skills in order to obtain access. That being said from a purely age based perspective, there will be people that will be outside of the connectivity curve. Of course, one of the biggest drivers of that connectivity curve is poverty, education, and geographic location, meaning that people in developing countries are far more likely to not have access than those people in more developed countries. That has a significant impact

on issues of access to knowledge, access to information and access to the resources that can actually help those people improve their lives.

So when we talk about a digital divide, and when we're talking about diversity and access, we need to also look at the broader Millennium Development Goals, and recognize that we're always going to have a divide. What we can hopefully do is move the access curve along. Hopefully we can decrease the extreme points of that curve so that a greater number of people have a more equal access, but we're never going to remove it completely.

Increasing the relevance of this Internet network to local people is an absolutely critical step. Yes, for many people, the ability to engage with a global community is a driving factor, but in a rural village, as a subsistence farmer, the ability to connect with people in another Continent speaking a different language may not actually be that appealing. It is the ability to access relevant, local content, key information that affects the lives of those people that is a major driver. It certainly has been a major driver for the uptake of mobile services, and particularly mobile data services, which given the world garden nature of many mobile technologies has allowed them to very specifically target and focus on rather small and very specific audiences. If we're going to take the success of the mobile technologies in developing economies, one thing that needs to be developed is the mechanisms for local content creation, and there have been a number of steps. The first being internationalized domain names, and certainly we haven't seen statistics coming out of that as they're still too new, but that hopefully will be a mechanism through which local relevant content can be increased. There are other mechanisms though that are required to actually increase the amount of relevant local content, so that the Internet becomes more relevant to more people.

Manal Ismail:

I will share with you from a developing country perspective how we see IDNs and the multilingual Internet. Over the past years, the Internet has proven to be an indispensable tool and has grown in a way that affected all facets of our lives. It is now used as a permanent source of information, an everyday tool for communication and social interactions, and a mechanism to conduct online services. The Internet has also proven to be an effective tool used in preserving national identities and protecting cultures and cultural heritage, so it comes as no surprise the need for a multilingual Internet where users can easily use the Internet in their day to day activities, and in their native languages, especially as Internet access has started to be listed as one of the basic services in some developed countries. A multilingual Internet should be viewed as a citizen right, and a Government obligation. Governments should not differentiate among citizens in availing all basic services, and Internet is now one. It is high time to have a multilingual Internet in order to avoid ending up with a digital divide, even at the national levels. So as we try to reach a multilingual Internet we need equally to consider three aspects upon which a multilingual Internet is based, those are the availability of local content, localization of applications and tools, and internationalization of domain names.

With regards to the local content, it is extremely important to enrich the Web with local content in native languages, and as users are not any more at the receiving end, they should be able to create and receive information in their native languages. In addition to the user generated content, we should also work on triggering local content markets, and come up with initiatives and business models that would help intensify native content on the Web. We also immediately need to make sure that we build on the positive experiences that end users might currently have. For example, it is important to make sure all needed tools and applications, like search engines, browsers, and others, are available and localized to meet the needs of those local communities. Last but not least is the internationalization of domain names, which is yet another important component of a multilingual Internet. It may sound trivial, yet it is a key aspect to enjoy seamless access to local content as they allow users trying to access local content to also type the URL in their native languages. One may not be able to easily access the content he or she wants if they are unable to understand, guess, or recall its address. It also doesn't make sense to have Governments promote e-Government services using a foreign language, or to have businesses advertise their online services to local markets in a language that is understood only by a minority of its population. It also is a challenge to call for trademark protection, and then be obliged to protect its translated or transliterated form. All those issues and much more indicate the importance of IDNs, and it is worth noting here that IDNs is one aspect that really needs to be coordinated at the international level. With the IDN gTLDs now being a reality, I really expect this to pave the way for the introduction of IDN gTLDs, where there will definitely be some learned lessons from the language communities, it is also expected to open new market opportunities in terms of having registries and registrars in those emerging markets, as well as triggering the local content and application development markets. So this is definitely a right step toward a multilingual Internet that would ultimately bring more users online, help them interact and communicate in their native languages and help them protect their culture, heritage and preserve their national identities.

Yamil Salinas Martinez:

Argentina, like many other countries in Latin America, has experienced in the last two years big changes in how the Internet is being used. More than 60% of Internet users have one or more profiles on social networks. Just like in other parts of the world, we use them to contact old friends, school mates, find jobs, collaborate on projects, and get in touch with migrants' families or just to play Farmville. In this short talk I want to focus on three ideas about this global stage of social networks. To begin with the first one that shows us the power they have and what they can do let me start by telling you a short story. This is a story of Ellie, a very active American woman in an online community with hundreds of contacts and friends. One day, Ellie, in her 20s and eager to see the world out of her window, decides to leave the comfort of her home, job and belongings and take a long trip around the world. All her contacts and friends gave her a very warm farewell and wished her the best for her trip. Once on the road in the middle of the Himalayas she received a call, a very personal call about culture that

moved her to become a nun and change her life. She contracted a serious illness and in the blink of an eye she was in a New Delhi hospital in a coma. On the other side of the world in a matter of hours her friends in the virtual space made contact with New Delhi doctors and investigated medical emergency flights and even organised a fundraising campaign to get her back home. Fortunately after a few weeks Ellie could recover in the United States and finally got back to India again. This short story demonstrates the enormous power that online social networks have which is the power of the connection of people. We can say that almost saved a life but what I like most about this story is it happened almost 20 years ago before Facebook, before Twitter, before Google and even before the IGF. In 1991 Ellie was an active member of one of the first virtual communities dedicated to connect people and this story is told by a well-known research and pioneer in cyberspace in one of his books.

So what can we draw from this story? The first point is that social networks are not new in the Internet ecosystem. The difference today is the huge number of people participating in these platforms and the pace of change. At this moment, hundreds of millions all over the world are logging in into their profiles and even from this hall. In the past, access to these tools was only for a few people who could afford them in most developed countries. The use of these services challenges us with very important issues and actually are redefining topics like privacy management, security of personal data, identity theft and the right to delete permanently our accounts that need to be addressed in a multistakeholder environment, especially in developing countries where legal frame works and representatives are not yet fully adapted to this new reality. I believe that with great power comes great responsibility. Not only from users, but also from companies for the personal data they keep and want to monetize and Governments for citizen states that can find and easily monitor and track today.

The second idea I want to share refers to the geographic extension of social networks. As I mentioned earlier the topic of this is the global reach of social networks and today we can say that social networks have become global. We have a long way ahead but from almost every country people are joining these services and platforms. I think the point is they're not yet globalized. We haven't engaged with global people yet. On average, we're still getting in touch with people with the same point of view, interests and location, or even more, with people we already know. That's human nature. We still tend to socialize with groups of people who share our common views and interests. I think this is one of the most important challenges to face and it is not related to technology. Building new roads and bridges between people no matter where they are to take action to present and future global problems. This meeting and all of you who are here tweeting, blogging and in remote participation are a great example. In this sense I want to highlight the thoughts of people who are translating in their local languages all the proceedings of this Forum.

Despite being not yet globalized, social networks have made a powerful impact on the local scene to connect people, promote freedom of speech and help those in need. A few months ago our neighbor country Chile suffered one of the most serious earthquakes in its history. The earthquake, which occurred by night, cost millions in

material losses and sadly took the lives of many people. Immediately after, people began to communicate from the mobile phones through social networks, mostly to Facebook and Twitter. In real time we knew what was happening there and soon Twitter was one of the platforms to finally look for families, friends and loved ones. Not long ago the same situation was speared after an earthquake in China and the same applies to political activism as seen in Kenya or the Middle East. This is really powerful. We have a platform that can help people spread their voice in minutes. In short, although not yet globalized and diversified in contacts and conversational flows where language is still a high barrier to overcome, social networks every day strengthen the global presence and have proved to be an unseen channel for expression and communication.

The last point I want to refer to today is a historical path of the social elements of the Web. In this sense, I think that massive social networks that we can see today are the peak of the social layer of the Web which began years ago with the first and for today primitive social obligations like BBR services, IRC chat rooms, wikis and blogs. Today platforms like Facebook, Twitter and Foursquare are the tipping point at the social Web stage. Today it is impossible to think of a Web service or even a single page that cannot be shared or linked to our network so this doesn't mean we have finished. All of us here and those committed to the future of the Web know that there is always room for more innovation and better ideas. My opinion is that the next challenges are to continue in the balanced adoption to these technologies, taking them to government agencies, cities and organisations to generate a more significant impact on those people who are still behind. In my professional career I have seen the positive impact social networks can bring to small organisations, to global companies linking professionals and colleges, fostering innovation and new services. Finally to sum up this brief talk, the three points I wanted to share with you today have been exposed. The first one, social networks are not new in the Internet system. Just remember Ellie's story. Today they're radically changing our perception and use of it. The novelty lies in the enormous number of people who use them and how they're pushing debates and hot issues at high levels like identity, privacy, property and security. The second is that social networks are now a global phenomenon and not anymore an emerging issue. Despite not being globalized, they have proven to be an unseen channel for participation, mobilization, and communication at local levels or in a human crisis. The last one, these services are the paramount of the social layer of the world. What comes next? We don't know. Nevertheless, I'm sure that once again, the Internet experience for all of us will never be the same.

Philipp Grabensee:

Geolocation is generally defined as the identification of the real work graphic location of an object, in our case it is mobile device or an Internet computer terminal. Of course, the technical aspects of geolocation, and I think if you look at the technical aspects of geolocations, you have to differentiate, if you talk about the wire to device, or if you talk about a mobile device. Generally wired-to device is located or the geolocation can be performed by associating this device with the Internet protocol IP address. Of course we know that this technique or this mechanism of identification

and location has its limits. Limits are based on the preciseness of the database, which of course has several limitations; and also of course there are ways to get around those identification procedures such as people using proxy services or entering the Internet through VPN from a total different part of the world. With the identification or the technical aspect of geolocations for mobile devices they differ a little bit here, the IP addresses are not used for the location of the device but rather the information given by the Internet or by the cell phone carrier, or by the device itself. For example, in inbuilt GPS system, also identification or location is possible through third parties. This is just a brief summary about the technical aspects of it, but I think more important for our discussion and further discussions are the different applications of geolocations you can look at.

There are probably different ways of differentiating them and mapping them; but I differentiated them by two aspects. One, the applications which come more from a regulatory side, and the other which are more market-driven, and so come more from the economic than the rather regulatory side. Of course there's an interaction between those sides. Looking at the applications coming from a regulatory side, first we look at the aspect or the implication of criminal investigations. I think especially in the U.S. but more and more countries, laws impose the necessity on bank software companies and other venders to know their customers and to identify their customers, to prevent certain things from happening. So in that sense geolocation is used in the content of criminal investigation. Then of course geolocation can be used in the context of censorship. An example being that for companies distributing pornographic content, geolocation can be used to prevent that content from being delivered in certain jurisdictions where that content is considered to be unlawful. Geolocation is also used to enforce international trade agreements. Finally, from a regulatory point of view, geolocation can be used for spam-fighting.

In the regulatory framework, taxation is an interesting aspect of geolocation because in several taxation treaties, the place where the server is located is also considered for taxation purposes. So that's another important aspect. If you look at the more market-driven or non-regulatory aspects of geolocation, I think the main aspect is geomarketing, you can deliver a certain specific content to people in certain regions. I think that becomes more and more important especially with people using mobile devices. There's a subject of that target content that should be mentioned, the aspect is sometimes called geotargeting, when websites show different Web content based on users' geolocation or different information. Also the aspect of regional licensing is important, to say that if broadcasting companies or companies who give access to movies have license agreements for certain regions, geolocation can permit that this content is delivered in regions where those licenses are not valid.

To finalize my thoughts, I think we see two interesting development. On the one hand when we see more hosting done in the clouds, it seems to become less important or elusive to say where certain content is hosted. Of course when you choose certain cloud providers, you can choose or decide if your cloud is in Europe or in the national country. I think that will have an impact on issues such as taxation. It becomes less

important, I think, in the world of wired devices and Web servers. However, if you look at mobile devices, I think geolocation, from a consumer side, becomes more important. The consumer is seeking for specifically geographic linked information using his mobile devices wherever he might be in time. So I think we see here two different developments which go in a different direction that I'm looking very much forward to discussing those aspects with you in the further session.

Mahesh Kulkarni:

I represent the Centre for Development of Advanced Computing, a scientific society under the Department of IT in the Government of India. Today the challenge is to build an ecosystem for seamless access to the vast pool of information, uninterrupted anytime, anywhere, and with various access devices and methods. In a country like India, with its rich cultural and linguistic diversity, this becomes more crucial and poses high-end research challenges. Diversity comes first, since in each country there's a societal, linguistic and cultural diversity. The need for access as a democratic process automatically should follow. The citizens of each country need to have access to information as their birth-right and in their own mother tongues and native languages. Information poverty is as big a problem as economic poverty. The growth of access in the world is a welcome pointer toward the alleviation of information poverty. IDNs in one's own mother tongues are the major step in resolving this informatic-societal problem. Coming to the multilingual diversity in India, we have totally listed 452 languages, of which 438 are living languages; however, constitutionally 22 Indian languages are there which make use of multiple scripts. There's a challenge of one language and multiple scripts, and one script and many languages. Over 95 percent of the Indian population works only in their mother tongues and do not use English at all.

As far as challenges in the IDNs are concerned, the Indian languages are highly complex in syllabic structure and have a three/four tier font design. Browsers are not fully supporting all of the Indian languages. The Government of India has developed a policy for IDN. The policy was frozen through the democratic process such as workshops, on-line awareness, consultations of academia, and cultural bodies. For ease of implementation of the policies, application programming interfaces are being developed. Currently 7 languages are put on fast track. We expect others to be submitted to ICANN shortly. The major issues in the ideals are localization of ccTLDs, language tags, and consultations with countries sharing the languages, encouragement of Indian language on the Web for ease of access. Two Indian languages, Hindi and Bengali, are among the top ten languages spoken across the world; however, no Indian language is among the top ten languages in the Internet. English is the most favored language of reading for only 28 percent of the Internet users. The growth of the rural Internet user has grown by 12 percent in the past year. We see a rise in wikis, blogs and social networking sites and the availability of online newspaper in all languages. The Broadband connections and connectivity is still a challenge. India is working very hard in this regard.

Virat Bhatia:

The South Asian region represents approximately a fourth of the world's population. It covers from Afghanistan, Pakistan on the west to India in the middle and Nepal, Bangladesh, Myanmar towards the south. It represents all the cultural and economic complexities that a region can have. It represents strong national character on one hand, and in the case of India, 22 official languages, 450 different languages and sometimes a dialect every 10 kilometers as you travel through the country. Food habits range from non-vegetarian to vegetarian to vegans for six generations. Actually, no two items, events or movements look the same. At the outset let me say that the region has done exceedingly well where mobile telephony is concerned. A lot of speakers have spoken about Broadband and wireless being the next hope of delivering Internet, so let me talk about some practical sides of that because this is a region that's done exceedingly well when it comes to mobile penetration. The penetration rate is about 60 percent across the region. There are about 750 million current users in these countries and this number could grow to 900 million perhaps by the end of this year. So by the middle of next year you could have 1 billion subscribers using mobile telephony in south Asia amongst these seven or eight countries.

On the other hand, Broadband access and Internet penetration has been a major source of challenge. India, for example, that has 650 million mobile subscribers and counting at 20 million new additional subscribers every month, only has about 70 million Internet users. That's the challenge that we have. With the exception of a few open cities and perhaps one or two countries which are smaller, this challenge is quite wide spread. We believe the Governments have a leading role in ensuring Broadband and Internet penetration through regulations and policies that will help get this to the next stage. We believe for the most part they need to put out an environment that favors very large scale domestic and foreign private investment because the resources that these countries have are competing between basic education, primary health, rural development and poverty eradication. Private investment has done well in terms of innovation and services where mobile telephones are concerned. It is a great sort of lead-in to allowing future policies to help bring in the private sector.

There's also a need for fibre. The approximate investment required in the region is about 7 to 8 billion dollars for the last mile of the Broadband which is fairly well developed by now. Let me briefly distribute challenges why Broadband has done poorly as compared to mobile telephony. For consumers the challenge has simply been the availability of service coupled with high costs, plus there are very serious language issues. You can imagine almost all relevant content is in English, and only 5 percent of the nation or about 8 percent of the region can read, write and speak in English. Unlike other regions where there are two or three dominant languages which can help for translation, in this region there are 30 or 40 languages. Finding ways to get people mainstreamed into certain languages is a real challenge on which the Governments are working very hard. One of the challenges that we have with regards to Government using Internet at a large scale is a low PC base within the Government.

Governments still do a lot of work on legacy paper systems. The majority of the Government employees are not savvy in using the PCs. There is a usage issue and a confidence issue. There are also confidentiality issues.

It is not that promising. Some serious interventions are required to make it work. It is not the same as mobile telephony and the successes should not be taken for granted. There is sufficient need for us to focus on Broadband, use wireless as a band wagon to foster this, but a lot of effort is required. I think the region as a whole struggling with some basic, fundamental issues which are not the same as some of the advanced issues that have been discussed.

Katherine Trautmann:

The key issues from our panel, in which people from ICANN, from African countries, from Egypt and from Europe were discussing, were in three words: stability, security, and process of legitimization about the ccTLD and IDN.

Andrea Saks:

Many of the panellists have very accurately described some of the people who are excluded but there wasn't enough on persons with disabilities, so I can do a little focusing there. Youth and children are some of those people, they want privacy, they want safety, and they want access. They want libraries. They want libraries to have technology so they can do their homework. Libraries are being closed; books are being thrown in the bin. Why do Governments want to close them and throw them away when we could actually reinvent those to become technology centres for not only the young, but the older people, too? There are indigenous people and we've heard about all the different languages. The problem also is that a lot of indigenous people do not have written languages, and there was a thought that came up through this that we should allow indigenous people to create their own content, and use tools to allow the Internet to speak to them.

Older persons are not exposed but they don't see the relevance. 'Why do I need the Internet in my life'? I don't need it. Well, without human intervention to help people understand why, in fact, they might need it, and that it might be useful for them to actually learn something about it, we're not going to get anywhere. We need to introduce and explain how services work on the Internet and that's something that needs human intervention, a lot of people want to cut costs and get rid of people, thinking that technology's going to do it all. Women are at the bottom, because of gender roles, domestic activities and a lack of relevance and a lack of training, and they often don't speak English and are seen as not being worthy. This is a very big problem in the developing world, but it is also a cultural problem in developed cities. They are marginalized in many cases by poverty, disability, income and age.

Education, it is so vital that not only in our schools, but in our other centres like in the library and other places, that people are given exposure to technology. Can apps

become a golden age? Yes, it has already begun. The touch screens are now available in a way that the blind can use them, and using standards that will enable us to have an interoperable environment is also something that needs to be done. We need to have things like total conversation.

We need human beings. It can't be just technology. We've got to have human beings to be the interface for the deaf community, for the voiceless community and for the deaf blind community. Broadcasting also has been taking this on very seriously. The BBC has been doing wonderful things in making their Internet accessible on television, accessible to persons with disabilities and everyone else, but it has to be unilateral. We have to have a library for our software engineers and hardware engineers to be able to access and chart these things so they can make a unilateral application that works over many different things.

We live in a global village and we want everything to be interactive. We don't want the situation where mobile phones are restricted too. We have deaf people who are isolated because their neighbor uses a different subscribing system and we've got emergency services that these people depend upon. So we cannot have proprietary standards that cause exclusion. We know the providers need to make money and we know they need it for research and development, but there has to be a plan to evolve, to be able to be interconnected, to be able to not restrict access for all these people.

We need to work together. We definitely need to work together as this is a global village.

Yuliya Morenets:

I am with a not for profit organisation based in Strasburg and I'd like to present the results of our workshop "Use of ICT by people with migrant background". We had very successful discussions and we had very interesting panellists with different propositions, with different perspectives, and we realised that we really need to continue the discussions concerning this question of Use of ICT by people with migrant backgrounds and of course propose concrete actions. For example, the promotion of a culture of cybersecurity with a specific focus on the young people with migrant backgrounds. We would like also to underline that we really need to integrate the people with migrant backgrounds into the process of Building the Information society, and we would like also to call on the Council of Europe as a Human Rights organisation to help us to develop guidelines concerning this issue.

Reinhard Schaler:

I am the developer of the Localization Research Centre and the CEO of the Rosetta Foundation. When you talk about access to digital content and knowledge in different languages, I think one point that still remains to be made is that right to access to digital knowledge and information in your language is not something that should be left to market forces, or to policymakers. It is actually something that is a human

right. Access to information knowledge is as important to people as access to clean water, food, and justice. Many, many thousands of people die every day because they don't have that access to knowledge that they require like access to knowledge on health information, AIDS prevention, HIV, and similar issues. I'd like to see that issue raised much more prominently in the Internet Governance Forum and I'm very happy that over the last 2 or 3 days that has already started to happen, much more prominently than it happened in Sharm el Sheikh. So hopefully, at the next IGF, the issue of access to content and to knowledge in your language will become one of the central issues of the IGF.

Jerry Ellis:

I'm a software engineer in Dublin. I've been a software engineer for 30 years and a consultant in usability and accessibility, and for those who can't see me I'm blind as well, so I have the experience with disability. I just wanted to pick up briefly on two things. One is that we talk about rights and absolute access to information, and access for people is absolutely a right we must have, but we also have to debunk this myth that accessibility costs. It is cheaper to include than exclude. I wanted to pick up briefly on something Andrea Saks said which is about universal design. Universal design is an approach to design which tries to include the needs of as many people as possible without need for adaptation. One of the problems we find is that if you go to Governments or policymakers, even to private businesses, and you convince them that it is a good idea, they say well, our designers don't know how to do it. So a group of us in Europe got together under the auspices of CEN, which is one of the European standards bodies, and we have over the last year and a half worked out a curriculum what's called a workshop agreement which is one step away from being an official standard.

Virat Bhatia:

To the point just made about the fact that access has a cost, I think at some level there's a cost associated but I think the cost battle is being won by technology and competition. For example, I will tell you that some of you might not believe that you can in India for one Euro buy four hours of talk time on a mobile phone. Now, clearly this is not a number that coincides with any other country, but you could pick up between 3.5 to 4 hours of talk time for one Euro. So these are the world's lowest rates. The mobile companies are using on an average, 6 megahertz of spectrum to serve 650 million subscribers. In the West the average allocation of spectrum is about 20 megahertz, so I think technology and competition will help innovate and drive those prices down, if the numbers are large. So in a way the point the gentleman is making is quite relevant but it still requires policies to foster large scale private investment at least in the developing world, the Government doesn't have the money that's needed to build this infrastructure on their own so to the extent they can be out of the way and assist in bringing in the investments, I think that will help drive down the cost and get the access going.

Raquel Gatto:

We have two questions from the Washington DC hub. First question: If older people don't want to use the Internet, why are we pressing them to do so? How does this relate to community hot spots? And the second one: Do you have examples of how Native Americans are using the Internet?

Andrea Saks:

In our workshop someone presented a survey which basically said that 95% of the people had access in the cities to Broadband, but really only it was about 80% that actually accessed it, but you go into the rural areas and that goes down. It also had a racial divide because there was an economic determiner. It was actually specified as the Asian, the White races, the urban, the people employed were the ones using the Internet and Broadband. For people who do not have jobs, that included the Hispanics and Blacks, the percentage was much lower. Rural areas for instance do not have good Broadband. A lot of the people I mentioned earlier, who are persons with disabilities, older people and indigenous people do not have access for many reasons. So it is misleading to think that the United States really is online all the time.

Alejandro Pisanty:

I'd like to ask the panellists what they think in rather sharp terms are the obligations of Government involvement in providing access to the Internet, maybe also differentiating between Telecom's policy and the Internet itself, what are the limits that Governments in their view should respect and enforce for the private sector to be engaged?

Antanas Zabulis:

I think one of the best examples would be the example of the Republic of Korea, because they've launched a nationwide project for both the availability of the mobile network and also supporting developing different applications. I think another example would be the example of Sweden, where we have companies which actually rolled out the nationwide fibre optics and it sold out to private companies on a cost basis. Exactly the same is planned in Lithuania because we have very wide fibre optics and it is also exactly the same pricing, its cost based. There's a lot of interest from different private companies to supply the last mile to different regions, and if there is a possibility of making a contract for supplying a network, there are a lot of private businesses who would get into the business and play well.

Ricardo Pedraza:

I am from VeriSign, and I would like to ask about some of the diversity and access challenges in India. We hear from you that the developments of inexpensive mobile phones seem to have created an Internet enabled environment. At $20 a mobile phone this is real impressive as a price, but what is the next challenge you're facing to bring Internet to the 700 million Indian people?

Virat Bhatia:

Actually at many levels but not only for India, but Southeast Asia, Pakistan, and some of the other countries, the challenge remains to a very large extent that society has built itself on local contact which work really well with mobile conversations. So the language and the dialects don't come in the way of mobile penetration. Literacy is a very big issue. In these countries, which represent about 1/4 of the world's population, nearly 35% are illiterate. We now have for the first time in the last 5 or 7 years a third category of literacy. There's the literate, there is the illiterate and there is the key pad literate, which basically knows the red and green button on every phone and they know how to dial a number and even send an SMS, but otherwise they can't sort of write but they can send an SMS, so there is this bridge being built right now between those who can't read or write at all and those who just started doing the SMSs. SMSs have now gone to about 7% of the total revenue stream, which is an indication of the fact that data traffic is growing, because the chances that an SMS user will adapt Broadband or Internet services is fairly high compared to somebody who only uses voice. The challenge still remains the device cost, unless we can deliver Broadband in a sensible, readable, usable format on inexpensive small screen phones, and unless we can do it at a price point of 4 hours of talk time for 1 Euro. We need to beat the price point, get the device right and start moving content on to local languages, or have a way that the search can be done in a regional language and the answers can be translated. One of those technology breakthroughs has to be brought. So there is a demand side challenge but that's being sorted out, on the supply side I think there are sort of other new issues cropping up but the network is there. The investments are there. It is just now stuck at this 80, 100 million subscriber base using Internet in this region and it is not going up as fast as it is going up in the rest of the world and that's the real challenge.

Mahesh Kulkarni:

When we talk about 670 million mobile phone users, the great challenge lies in terms of all these 670 million mobile users who are not doing text SMS. They're using it for voice communication so that's a major thing, and what we are trying to look at, is that these mobile phones should be language enabled but while doing so, all 22 Indian languages creates a complexity in terms of technology, to go into the hand set, as well as when we say to 95% of the Indian population to not speak English, the fact remains that 36.5% of the population cannot read, and cannot write their own languages, they can only speak. For such people, we require certain technologies, so some of the technologies which have been coined are the speak technologies, but then again there's a grand challenge in developing the speech technologies because every 10 kilometers the dialect changes and there are issues related with that. Secondly, Indian languages are very complex in terms of inputting in the sense if you take a keyboard, it is difficult to input, so there is a possibility of development of something like hand character recognition and these are technological breakthroughs which are required. Third component which has been touched upon are the search engines, definitely a search engine through the mobile is very, very crucial, because if you today try to do a

search on a mobile, possibly you'll get a huge links, which are not required. You require a much more focused search, and you require a lot of natural language processing tools and technologies to augment the mobile, so these are some of the challenges.

Virat Bhatia:

The region as a whole is the second highest user of voice software so people talk all the time and the information that they can't get from the net, they get from each other by calling sometimes multiple times and having long conversations, so people are finding their way around this in capability but actually that's the reason why voice minutes are really moving up, the costs are moving down. So the trends are quite clear that the lack of information on the net is being made up for by word of mouth and talking and asking questions. Also, many of the very effective directory services are sort of still operator based. You can call in, give them your information and they'll give it to you on the phone and SMS it to you rather than find it on the net. So there's a lot of that because that labour is cheap, so I think in the meantime, the access sort of is being made up through voice in the best way it can. It can't duplicate everything that's on the net.

Philipp Grabensee:

So how important do you think it is that more mobile friendly websites are available to give people who access websites for the first time through mobile devices a more pleasant experience? You think that plays a role, as well?

Virat Bhatia:

I think both factors are very important, mobile websites and phones. I guess as the market for Broadband increases, those friendly websites will come in, and then I think larger screen phones will come along. As I said, I don't think we'll have to fight the technology battle. I don't think we'll have to fight the cost battle. I think the challenges lie elsewhere, which is in terms of the very large scale investment that is required. And Governments play a role in this. We spoke about how Twitter helped in the two earthquakes, but 18 million people in Pakistan live on land below sea and don't even know what Twitter or Facebook is. So you know, the reality of that region is very, very different.

Katharine Sarikakis:

You are discussing actually the great majorities of this world. When we talk about accessibility, when we talk about diversity, we're talking about the majority of the world. I just wanted to be a little bit provocative to grab your attention. The workshop I was asked to contribute to is called women's rights on the Internet, let me just make a very brief list of the issues that we will be discussing, and they all have to do with the issues that have been raised, but they shed light on the very gender-specific experience of the Internet. Issues such as Geolocation, surveillance and cloud computing,

linguistic inaccessibility of the Internet; all these areas create zones of danger for many women and not only women in the so-called developing world, but our post industrial worlds too. What do I mean by that? Women can be tracked down, especially in the context of domestic violence. They can be tracked down and they can experience violence. There is no place for them to hide. There is very little anonymity. This is just one very important aspect. Another aspect is, for example, when you were discussing mobile friendly websites, this is not just a matter of personal pleasure. It does include it of course as well but it is also matter of safety. It is a matter of health. It is a matter of accessing authorities, of accessing health services or accessing others who can support you. There is another issue here which is the issue of misrepresentation and discrimination in terms of content. Again, this is a very gender-specific aspect. It does bear with it other intersections of race and age or disability and so on, but the gender dimension cuts across all these sections. So when we talk about diversity and access, we also need to pay a little bit more attention to what actually the great majorities of the world experience. I am not stating here that the Internet is a dangerous place and that we should regulate it heavily so that we are safe. I'm saying rather that we need to take women seriously; we need to include them in the policy process meaningfully. We need them as educationalists; we need them as innovators, and creators and not only as victims, which they can be at certain points, like most people. We need them more centrally involved in these processes.

Frank-Charles Osafo:

This idea of language is a basic concern to all and the question that I have is that it seems to me that are we using the Internet as the panacea to solve all ills and to solve all our language issues? This is a software issue and an education issue. People in the Universities should be encouraged with grants or teacher research, and should start writing these language applications so that when it comes time for it to be delivered through the Internet, through mobile, it is almost a trivial matter. 30 years ago as a student in Dartmouth, Dr. Nii Quaynor wrote a programme that in Ghana we call "OWARE". He wrote it in basic, simple language. He has brought this language to every generation, to every environment. And low and behold, about two months ago, he brought that language into the iPhone, to iTunes. Now, why is this relevant? It is relevant because the application that he wrote in translating a very complicated game as a student, that game can now be brought on to the Internet and everywhere. The idea is to develop the software; the environment will take care of itself. So using the Internet as a forum is great, but I don't think the issue of language development for any country has to do with having Internet Broadband accessibility or not.

Carla Wetherell:

I'm 16, and I'm from the U.K. I'm a member of the youth project involved in Childnet. We have produced a statement of belief for our involvement here and access is a theme that has been at the heart of our discussions. We want access for all. We believe the Internet is a utility and should be available to everyone, whether rich or poor, and regardless of their location, disability, background, or culture. We believe

that all users are equal and should have an accessible wealth of information online. We believe that addressing fair access for all must be a foundational priority for the IGF.

Nii Quaynor:

Do some content management policies interfere with the Internet's open infrastructure? Are we changing something by the way we try to manage our local policies on content?

Olga Cavalli:

I think that the big problem is that for some countries, some contents are fine and for some others are not, which is okay, because cultures are different. We have different beliefs. We are different in the way we behave. So we experienced some events during 2010 in relation to social networking or some contents that were taken by some countries. Do you think that's really a major problem?

Manal Ismail:

I think it is not white and black as it seems. I mean, the solutions should be there and it should be the users' choice. For example we have in Egypt some ISPs that have some filters for the children but again, it is the parents' choice whether to subscribe to the service or not and whether to have this applied to the whole subscription of the family or just for special account for the kids. The solutions should be there to help the people who would like to have it.

Virat Bhatia:

These issues are intensely locally sensitive. You can't go past shops in New York City or London without seeing underwear made out of the national flag. In India or Pakistan, you have to take the national flag down before sunset and it can never touch the floor while you're wrapping it. It can never be used for anything else except nation building in a certain way. Similarly the tolerance that people have for nudity is very different in Tehran than what it would be in Los Angeles. I think to the extent that the Government doesn't retain extensive discretionary powers to define this last minute, I think we're okay. So long as they say upfront what they're looking for and it is enshrined in law, it is negotiated, and it is discussed. I think that law then has its foundings in the constitutional realities. You may like it or not, but that's the law. If it is left to the discretion of the Government to interpret it, they will take it down if it is not in the public's interest. Now, public interest can be interpreted in many different ways by people in discretionary power. To answer your question, I think we should leave discretionary power out of this for Government. In that sense at least everybody will know what is wrong and right and how much to push. That's one way to create a kind of a filter against discretionary power.

Maria Delores Puy:

What are your opinions about the tools and methods used and recommended in order to block content? I ask this because earlier during the workshop of protecting consumers a lot was said about Internet users' behavior and how they can protect themselves. I'm coming from the legal environment and am interested in the technical effects also of blocking content.

Virat Bhatia:

It is the job of somebody who is in authority or has the authority to block content to do the cost benefit analysis of what this would mean. Now, do I want to see riots on TV because that is something that is news to me? Yes. But can it cause more riots or civil unrest in a different part of the country? Yes. So the Governments or authorities will make that call. They can never really get it quite right and it is not an easy task to do. There is no clean answer to this which can apply across the world, across sensitivities and across religions; this has to be a local decision.

Philipp Grabensee:

Blocking any kind of content affects openness. This is obvious. If you look at consumer protection from a more philosophical point of view, all kinds of consumer protection decrease freedom of choice and decrease openness. Autonomy is taken away from the individual for the better good. So that's a very general question, which is not Internet specific. It depends very much on your perspective of individual choice on one side, and autonomy on the other. On personal responsibility or how much a Government or another agency should protect a consumer and interfere with your freedom of choice, I think that's a question which is answered differently in different societies and different jurisdictions.

Virat Bhatia:

The issue of leaving out a certain segment of people from watching certain content has been there forever. User generated content is so difficult to censor, after it is put on the net and the content is already out there, and then you remove it, it seems a lot more hostile.

Nii Quaynor:

Are we managing content policy in a way that may be destructive? Are we making sure we don't do it in a destructive way? If you make everything go through a proxy, you've created a single point of failure for a network design not to be like that.

Siranush Vardanyan:

I am from Armenia and am an ISOC ambassador. It seems that access to the Internet is a challenge in every corner of the world. Is there differential access due to the absence of network neutrality?

Olga Cavalli:

This is quite a controversial issue. It is a difficult balance to find when you speak of the cost of international access, the right or not to download some kind of content, and the right of the users to know which kind of services they are receiving.

Yamil Salinas Martinez

There is some confusion between the fact that the net is so well known and flat tariffs. You need to know what is involved in downloading and volume. You have to respect the fact that the rates may differ from here to there.

Virat Bhatia:

I can tell you with some confidence that the network neutrality debate hasn't even surfaced in South Asia and I suppose it is probably true for most of Africa. I don't think it is a big discussion right now, at least in these countries. They have not even started writing the first documents on it. The focus is completely to get the infrastructure out there and to get the right policies in place.

Frank-Charles Osafo:

The idea of content monitoring in my mind depends on the stage of ingress or ingestion of the data, or where the filtering has been done, right? If the filtering has been done before actually gets to the destination point, well, I can see that hampering the openness of the Internet. In that case basically all data has been blocked and that means in my mind it depends on what phase or what are the stages that you have blocked? Are you blocking at the network level, I.D. transport level, or are you blocking at the application level? In case of e-mail, which is an application, corporations in America are filtering all the time because of regulatory requirements. That doesn't change; the content comes in, and is still stored at the viewer level. At the viewer level the content is filtered. So in that case really the data actually did move. Now, we use to have laws and all kind of firewalls and appliances to block spam and all those kinds of things. Those things are blocking data every day through networks. I don't think that is affecting the openness of the network because those are options by end users who are on their own deciding we don't want this. So I really think that when we are addressing filtering of the Internet, we have to be specific about what is it we are talking about. If we're filtering nudity and language, those things are so trivial; I don't think they're affecting the Internet itself.

Alvaro Galvani:

Most of you spoke about the solution of mobile phones, for example, and the debate was very much focused on the question of mobile phones and the question of the last mile. There is as likely problem relating to Internet traffic internationally, the question of the submarine cables and the big backbones. I heard a lot of economic explanations about the access to Internet. I'd like to ask you to do an analysis economically about the lack of competition of providers of infrastructure in international scenery. These in our point of view result in a very complicated situation and put developing countries in a bad situation. I believe this is not a noted debate and this is my question.

The IGF, thankfully, gathers many people, different people, and we have improved the diversity. To some extent we have to debate generic ideas that could fit all these diverse views together. In that sense, Brazil has presented a contribution in this IGF, which are the principles for the governance and use of Internet. In Brazil it was developed last year after a long time of discussions. They are very generic and we believe that they are a contribution that can establish in the world principles that serve as balanced guidelines. Related to the question of access, I would like to mention three of them. The first being the ideas of universality of access, many countries already have addressed these principles in their constitutions, the question of diversity, and the question of network neutrality. I would like to read one: 'filtering your traffic privilege must meet ethical and technical criteria, only excluding any political, commercial, religious and cultural factors, or any other form of discrimination or preferential treatment'. My second comment is related to national experience. We would like to share with you three points. In Brazil we have just launched last May our national Broadband plan. Our idea is to extend the access to Internet in our country, especially to the poor and most remote areas. This is something that if we had left it to the market only, would have taken too much time to occur. So the Government has been playing a very important role in that, mixing both public policy actions and incentives for the market in a very intelligent way. The second point I want to share is the Brazil experience in Internet exchange points. These have contributed a lot to decreasing the costs of Internet in Brazil. We believe that could be a very strong point for a very strong object for corporations, especially south-south cooperation. Third, on accessibility, our steering committee for Internet in Brazil has developed some research on the governmental websites, regarding trying to verify how many of them are following the national standards regarding accessibility. The numbers are not good yet, we have a lot to improve. These kinds of indicators are very useful to promote an environment that can contribute to an overall movement towards greater accessibility in the Internet.

Antanas Zabulis:

I would say we should probably talk about the infrastructure providers and the back bone providers. If we talk about the infrastructure, I would say that we'll see the consolidation in the market over the last five years because it was a heavy take off of 3G and maybe 4G. If I look at the companies remaining still in the market and

selling the infrastructure, I think 40 to 50 percent of their stock is in research and development. It is hard to believe that there is a new company that would be able to compete.

Manal Ismail:

Thank you for raising this important issue. It is been there for quite some time, and a famous example is that when we make a phone call to some country, we usually split the cost of it, but when someone sends us an email, we're paying for the whole thing, because we're connecting to the backbone over there. I think it is a point that should be considered on one side, and worked on nationally and regionally on the other side.

We have to work on the Internet exchange points, nationally and regionally. We have to work on the content.

Roy Balleste:

I want to come back for a moment to the issue of access, and how that connects to openness. I think as has been mentioned before, the end user is the key. Local standards have been mentioned and cost cutting agents have been mentioned but the underlying standard across the world we should consider is the universal Declaration of human rights, and in particular, the international covenant on civil and political rights, a treaty that most nations of the world have signed and agreed to abide by. If we look at access from that perspective, and through the eye of the rights enshrined in the treaty, then local standards and cost considerations become easier to handle. Access without openness really loses its purpose and so looking at these rights is very relevant. My question would be that if this is something that you're looking at as you deliver it back in your projects and your nations, what are your plans for the future to incorporate human rights?

Rebecca Cawthorne:

I'm 15 and am from England, and there's a problem we all found in our group that in schools, blocking the Internet has become overly strict. Most websites that you need to do homework or that you need to do your school work are blocked, and this is making doing homework and school work impossible. What I was wondering is if you have this problem in your schools, or if you know any ways our Government could help improve the blocking in schools.

Philipp Grabensee:

When we talked about blocking, this relates to the issue you mentioned, arbitrary blocking or proper due process. I think there's a certain agreement that under certain circumstances, certain content may be blocked, but it should not be an arbitrary decision by authorities they take without any base. There should be consensus or there should be some policy in a proper manner developed if there's a necessity to block

certain things for people of certain ages, but it should not be up to every individual school to arbitrarily do such things.

Mahesh Kulkarni:

As far as the language content is concerned, we feel that the role of government should be to act like a facilitator and an enabler and it should also manage certain standards in content creation. Encouraging individuals to put up websites in their native languages will also increase the content at the present time. Opening up the ISP market and assuring penetration in the rural areas by providing incentives. This is one of the important things, in order to help the content; the industry also has to play a very vital role. Localizing their website tools and technologies is also important. Academia can play a role by encouraging students to create multilingual websites and finally the consumer, that is the end user, is encouraged to use the free tools and technologies which have been provided. Children should be motivated to learn and type in their native languages. This will create a generation of users who will create useful content.

Manal Ismail:

As far as the IDNs are concerned, I really believe that we should consider that some of those IDNs are being deployed in emerging markets, and developing countries, and we should consider that the financial aspect should not impede the deployment of IDNs in those countries. We should bear in mind that there should be some knowledge transfer and we should lend a hand to those emerging markets. On the other hand, the language communities themselves, they have a responsibility to bring to the international community their issues and concerns, the technical solutions and issues with scripts, and if we really want to make sure we're considering languages, we need really proactive input from language communities. More generally, I really believe that we should know the requests and needs of people who are not online yet, and try to develop our future agendas.

Yamil Salinas Martinez:

Social networks are radically changing our use of the net and promoting interesting debates on identity, privacy and security. I think there's a lot to do to spread access to these platforms, but they are an excellent way and excellent chance for mobilization and participation. I believe that the big challenge is to continue to promote user skills and participate in a safe environment. Clear rules for software and other companies about how they handle the user's data and with whom they share it and also from Government and legal authorities to adapt legal frame works to new realities.

Virat Bhatia:

I wanted to focus on the fact that there's a paradigm difference between the manner in which access issues are being debated in the developed world and in the developing world, especially South Asia. I think we should be mindful of the fact that about

1/4 of the population is struggling to get this. I know we're talking about human rights, and sort of rights to information being a basic human right. I totally agree with that in principle but I think that our issues that are sort of preceding that in terms of importance, the local Governments are extremely caught up with interesting challenges but I think the debate today has helped at least understand the gap, the vast space that exists between the haves and the have nots, the digital divide not just within a country but between countries. I want to say about fibre investments, it has to be a combination of fibre, public finance and priority investment in the last mile wireless Broadband. That's the hope forward. As far as prices are concerned I think regulators have to come in wherever there is lack of competition and prices are higher to bring them closer to cost, or as close to cost as possible, but given the fact that large scale investments are required in cables, undersea cables, local infrastructure, then I think the flip side of the debate of technology neutrality, you can't have it both ways. You have to get this investment going, hopefully have sufficient infrastructure there and sufficient competition that the prices are so low that you don't have to depend upon other modes to bring down easier cheap access.

Philipp Grabensee:

We cannot forget that basic access is still an issue. We should always be aware that basic infrastructure and basic access has to be set up before we really get deep into these other issues.

Antanas Zabulis:

It is been a rather open discussion; we have been talking about the ability to engage with the global community and the ability to access the local content, getting more Internet to more people and multilingual content. We were talking about digital divide on national levels and I think this is an issue which I would like to stress a lot, because the speed is accelerating and the mobility is accelerating. Access without openness loses its purpose. On the content, I think we're facing certain challenges. One of them is the content accessibility and its openness and also on the other side, mobile applications and the access to the network for the disabled. Another aspect is the issue of privacy and security on the Internet. I do believe that knowledge, the education and self-regulation is probably a bit more effective rather than trying to tackle these issues only with technological measures like blocking re-routing content.

Concluding, I think again I would like to stress that I do believe and think that the Internet should become one of the basic human rights. I think that a year from now when the new IGF will take place in Kenya that the world will be a little different. The questions, some of them will remain the same and some of them will be completely different, and I would wish that the new IGF session would be something similar to what we had today: Open and not avoiding difficult questions but trying to solve difficult questions.

ACCESS AND DIVERSITY

Reports of the Workshops and Other Events

WS 27. Use of Latin and Native American Languages on the Internet

Report by: Olga Cavalli

List of panellists and/or participants:

Raúl Echeberría, Executive Director, LACNIC Vanessa Fusco Nogueira Simoes, Ministerio de Justicia de Minas Gerais, Brazil. Guenther Cyranek - UNESCO Regional MERCOSUR and Chile Office Adivisor Nacho Amadoz, Policy and Regulations Manager, Fundacio .cat. Jorge Vega Iracelay, Microsoft LCA and Citizenship Lead for South Cone, Latin America. Alberto Perez, Deputy Director for International Relations and for RedIRIS. Jesús Jiménez Segura - Instituto Cervantes Jorge Pérez Martínez - Foro de la Gobernanza de Internet en España Adrián Carballo, South SSIG Institutional Relations Director. Pedro Less Andrade, Google. Sebastián Muriel Herrero. Olga Cavalli, Regional Director, South School on Internet Governance - Panel moderator

The workshop reviewed, through the presentations of the different panelists, several initiatives that exist towards the usage of Latin and Native American languages in the Internet. The experience of .cat was explained by Nacho Amadoz as a new gTLD that is related with the creation of relevant content in Catalan for the Catalan community. Microsoft explained trough remote participation and through a video how the Indian communities of the Patagonia can use their native languages as they are incorporated into newer versions of Windows. LACNIC the Latin American regional RIR explained the relevance that for the organization have the different languages that are relevant to the continent which are Spanish and Portuguese and they also translate all the content in English because of its relevance to the technical community. Alberto Perez

de explained the activities necessary to create relevant Spanish content on the Internet.

In conclusion, the content in Spanish and other languages is growing in the Internet but there is an important effort to be done in order to increase it strongly.

WS 96. Protecting women's rights: Internet content from a gender perspective

Report by: Jan Malinowski/Johanna Nelles

List of panellists and/or participants:

Ms. Maya Indira Ganeshi, India, lead researcher, Exploratory Research on Sexuality and the Internet Dr Katharine Sarikakis, Institute of Communications Studies, University of Leeds, United Kingdom Moderator: Mr Jan Malinowski, Council of Europe Remote moderator: Jac sm Kee, APC Women's Networking Support Programme

The debate around Internet content and regulation is based on concerns for freedom of expression, data protection or the protection of children from illegal or harmful content. The fact that much Internet content and many Internet business models perpetuate gender inequality (gender stereotyping, pornography, games linking sex and violence etc.), and are used to subject women to violence and abuse (cyber stalking, sexual harassment, GPS tracking, trafficking in women) is largely overlooked. This workshop explored the importance of applying a gender perspective to Internet content, discussions around harmful content and content regulation. Its aim was to demonstrate how a change in perspective can change the perception of what needs to be regulated. This would allow future policies on content regulation to reflect the realities and concerns of both, women and men. This workshop also discussed ways in which conflicting rights and interests can be reconciled: freedom of expression and business interests on the one hand and safety concerns and human rights on the other hand.

Participants heard about the EroTICs (Exploratory Research on Sexuality and ICTs) research conducted by the Association for Progressive Communication (APC) on Indian women's Internet experience, especially in respect of personal contacts and relations, including the risks associated thereto. They heard of interference or risk of interference with women's rights (freedom of expression or association, but also political or cultural rights). Women suffer surveillance, harassment, stalking, fear, identity theft and manipulation) and related offline consequences (persecution in private and professional environments, defamation, assault or bodily harm). A range of issues require attention in a gender sensitive manner, in particular freedom of expression (censorship and undesirable self-censorship) and privacy, as well as risk of harm and its perception (the right not to be afraid). However, women's online or related offline risk of harm has to be properly understood against the fact that those who experience harm online also display strategies to resist, block and negotiate it. The research showed that women users realize that there are dangers online that they

need to protect themselves from. They block, resist and ignore offenders and are aware that personal information and details should not be divulged to strangers. Therefore, women users also show a self-evolved, self-generated response to the harms they face online. This has to be recognized in policy formulations.

The policy response should not involve limiting freedom of expression, a measure that may be detrimental of women's own rights (i.e. as regards content produced by women), but empowering including through further media and Internet literacy, Technology and, in particular, privacy settings do not provide a satisfactory response to risk of harm or fear, and do not offer women adequate self-protection tools. There is a need to strengthen the effectiveness of the right to privacy or enhance the possibilities to manage one's own image or identity online. Interference with content related to women's political, including feminist; activities may undermine possibilities for self-protection. Content facilitating self-protection (e.g. tools for assessing whether women are in a violent relation or at risk of violence) should be promoted. Participants noted that the Council of Europe is working on a draft convention on preventing and combating violence against women and domestic violence. The protection offered should extend to the online environments and women should have a right not to be afraid.

Proposals for further action: There needs to be a broad range of responses to address the issues of women's right to safety, expression, information, mobility, association and participation in public life on the internet. This includes not just regulatory or legislative, but also capacity building and participation in decision-making processes in public and private organizations and entities. Policy responses should be backed by further empirical research that reflects the realities of women. Women need to be closely associated with the design of technology, as well as the online tools and applications used by them and the means of protection available to them. As a distinct stakeholder group, women must be more closely associated to Internet governance and related discussions. Women have a right to be "Free from Fear" on the Internet. The following "F-words" emerged clearly in this respect: The Internet has to be Free Fun safe Feminine women-Friendly, and to this end, Internet governance (cf. the WGIG definition: the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programs that shape the evolution and use of the Internet) has to involve more Females and has to be more Forward-looking.

WS 109. USE OF ICT BY PEOPLE WITH MIGRANT BACKGROUND

Report by: Yuliya Morenets

List of panellists and/or participants:

→ *Mr Ilias Chantzos- Director EMEA & Asia Pacific Japan, Government Relations, Symantec Corporation Co-moderator* → *Ms. Luisa Maia Gonçalves- Director of the Department for Criminal Investigation, Surveillance and Intelligence Immigration and*

Borders Service/Minister of Interior of Portugal/European Committee on Migration/Council of Europe expert Co-moderator → Ms. Kim Sanchez- Group Manager in the Trustworthy Computing group at Microsoft Corporation → Mr Gbenga Sesan- Executive Director of Paradigm Initiative Nigeria (PIN)/ Microsoft Nigeria → Mr Malte Spitz- Member of the National Executive Board of the German Greens/former Secretary General of the German Young Greens, Mitglied des Bundesvorstandes BÜNDNIS 90/ DIE GRÜNEN → Ms. Yuliya Morenets- Rapporteur/TaC-Together against Cybercrime Representative → Ms Elvana Thaçi- Remote moderator/Council of Europe Administrator, Media and Information Society Division

We had a successful discussion with the audience and a number of experts on the question of the "Use of ICT by the people with migrant background". The legal bases are the Geneva Declaration of Principles and the Tunis Agenda for the Information Society. The main points of the discussion were:

1. ICT can assist and help people with migrant background during the integration process into the new society (using ICT they could accede information more easily and faster) and facilitate social cohesion, as well as give vulnerable people the possibility of accession to the citizenship of residence and positively take advantage of it. At the same time we have to pay attention to the privacy questions and the protection of personal data. The positive aspect is that ICTs could contribute to stop different types of exploitation of people with migrant background.
2. Very often people with migrant background can be involuntary involved into criminal schemes via Internet, they can also be recruited and trafficked (a number of examples were quoted), sexually exploited; a question of labor exploitation was raised too. Here the Internet is the tool which makes the recruitment and involuntary involvement easier and faster. These cases are difficult to investigate by the law enforcement agencies.
3. There is a need to continue educating young people as to cyber dangers and the use of ICTs. For the moment there is a lack of information too. The importance of the educational process was underlined, with specific attention paid to young people with migrant background.
4. We have to focus on literacy problems for people of all ages and develop a special approach for those with a migrant background. There is a lack of information and especially cybersecurity information. The digital divide still exists so we have to continue working in this area. We have also to work on the tools that can show to the vulnerable people and convince them that the use of ICTs can bring them more opportunities and the possibility to become more media literate. The fact of being media literate can assist them and facilitate the procedure of integration as well as better contact to the administrative bodies of their host country.
5. We have to spread the information on how not to fall victim of potential ICT risks and in this regard further development of cybersecurity culture is essential with a special focus being proposed to people with migrant background.

6. A number of skills of people with migrant background can be used differently and in a positive way in order to transform the digital divide into digital opportunity for them.
7. People with migrant background have to be more integrated into the Building process of the Information Society.

Conclusions:

1. We need to continue discussions concerning the "Use of ICT by people with migrant background" and propose concrete actions in cooperation with different actors (private sector, international organizations, civil society and the public sector).
2. The voice of the people with migrant background has to be heard and integrated into the Building process of Information Society.
3. There must be a proposal for a specific approach of promotion of cybersecurity culture taking into consideration the fragility of vulnerable populations and people with migrant background.
4. We call on the Council of Europe as a Human Rights organization, to support the development of tools and of the guidelines of best practices on the Use of ICT by people with migrant background for a better social cohesion and the increase of chances of success of the people with migrant background in their host countries.

WS 114. DIGITAL INCLUSION: REACHING THE MOST SOCIALLY EXCLUDED PEOPLE IN SOCIETY

Report by: Martin Boyle

Panellists and/or participants:

Lambert Van Nistelrooij, Dutch Member of the European Parliament, James Rege, Member of Parliament, Kenya (Chair of the Parliamentary Committee on Energy and Communications), Axel Leblois, G3ICT - global Initiative for Inclusive ICTs, Marc Berejka, National Telecommunications and Information Agency, USA, Osama Manzar, Digital Empowerment Foundation, India, Andrew Miller, Member of Parliament, UK, Moderator: Andrea J Saks, Accessibility Expert, Remote moderator:

Kieren McCarthy

The Internet is a powerful channel for user-generated content. Recent developments in digital technologies have created extraordinary social and cultural change. Almost every aspect of modern life has been transformed by technology, creating huge social benefits which are often taken for granted. In developed countries, many of the people who have never been online are the people who are also among the countries' most socially excluded. Often the people who have the most to gain from the Internet, whether to overcome isolation or to save money, have no access to it for a number

of reasons. The panellists approached exclusion from different angles. They had the role of stimulating discussion from the workshop participants with a high number of interventions from the floor, including from Government and regulators, young people, representatives from civil society and industry

A brief substantive summary and the main events that were raised:

The panel looked at various issues associated with exclusion in different countries:

- European work on the use of communications networks to improve the quality of life of older people.
- Kenyan work on technology as a learning tool, improving the skills and education of young people in villages (in conjunction with CISCO and Microsoft to develop Community Knowledge Centres to train for qualifications). Mobile phones provide an important link, in particular in money transfer.
- The US survey of consumers and the disparity in take-up rates for Broadband (85% for the high income brackets but reducing to 15% for some parts of the population. The main barrier to adoption was that it was not seen as relevant to the elderly and poorer citizens, rather than privacy and security concerns.
- A second survey looked at the proportion of people around the world who lived with some kind of disability and this increased as people got older. Technology can help people – examples of digital books and text to speech conversion, captioning.
- In India over 70% of those in remote areas were not well connected and again mobile was the main communications access. 3G was important. India also had 20 languages and only 5% of the population speak English. India had passed a right to information act, but (in contrast) no Member of Parliament or Chief Minister of a State had an official parliamentary website.
- In the UK there were problems of exclusion because of age or lack of skills. A schools competition focussed on disadvantaged areas and encouraged the children to add value and show leadership. We should avoid treating barriers to connection as different issues, but try to look at common approaches to helping people benefit from the technology.

In the discussion, we heard from delegates from South Africa, Sweden, Costa Rica, Mexico, Brazil, Indonesia the UK, Ireland, and Lithuania, as well as from a delegate from UNESCO, representatives from civil society and from young people

In conclusion the speakers highlighted:

- We need to see a paradigm shift in increasing quality of life and independence: it should not be a question of cost of the technology, but to re-evaluate what was saved by intervention.

- The importance of education. Old computer equipment could be recycled. In Kenya there was a significant focus on women and youth.
- Accessibility of the information infrastructure should be addressed by telecom regulators – a Toolkit for Policy Makers. national education systems and ministries of work and health could be channels to getting uptake of assistive technologies.
- It was important to understand how different segments of the population respond – different solutions to target different groups.
- Addressing exclusion needs to come from bottom-up and top-down initiatives. Policy makers need to be connected. Initiatives should not be to go and teach, but to go and learn, especially in the most deprived communities. Mobile was important at policy, content creation and service provision levels. Literacy is a problem, but different media can be used to by-pass this.

Exclusion does not just refer to one group: there are many different groups that find themselves excluded. But there are many common threads that can be drawn on. Youth and children are not always "digital natives" and can find themselves excluded: yet – as we saw in Kenya – ICTs can also be used to bring skills and education and help young people gain qualifications. Youngsters in the discussion said that they wanted privacy, safety, and access. They identified the importance of libraries for access to technology – is there an opportunity to reinvent those as technology centres not only for the young, but for older people, too? Indigenous people can be particularly isolated and a lot of languages in a country can be a barrier to communications, as can illiteracy. We need to consider alternative ways of generating content and different media for its communication.

Older persons often do not see the relevance of technology to them and we heard about how the poorest people often think the same: why do I need the Internet in my life? We need to find ways to explain how services work on the Internet to help people use the opportunities effectively and safely: this needs human intervention – the technology is not going to do it all. Women are in most societies treated as if they were at the bottom. Gender roles, domestic activities and a lack of training and education they are often marginalised. This is a very big problem in the developing world, but it is also a problem in a cultural environment in developed cities. In addition there is a need to persuade people in power of the importance of communicating. The need to help parliamentarians communicate with their constituents, or of administrations with those they administer. People are marginalized by poverty, disability, income, education and age. One of the panellists identified the importance of education. It is vital not only in our schools, but in other centres, too, that people are exposed to the technology: many of the people marginalised by society do not have access. Problems on uptake of Broadband were mentioned over and over again, not just for rural areas and developing countries, but also in the Western world. Mobiles are also vital in many countries. But in the effort to get people on line, we must not forget that we need to consider people's needs and ensure that we understand the barriers people confront.

Report by: Marília Maciel

List of panellists and/or participants:

Moderator: Virginia Paque - DiploFoundation and Remote Participation Working Group) 1) The use of online tools in international politics as a way to increase information and participation Lee Hibbard – CoE/EuroDig Nermine El Saadany - Ministry of Communications and Information Technology (MCIT - Egypt) Jovan Kurbalija - DiploFoundation 2) Increasing inclusiveness on remote participation Bernard Sadaka - Computer and Communication Engineer. DiploFoundation Associate Rafik Dammak - Research Student at the Interdisciplinary Information Studies, University of Tokyo Bani Lara - ISOC PH and coordinator of the Philippine remote hub 3) The interplay with related processes Anriette Esterhuysen – APC Edmon Chung - vice-chair of the ISOC Chapter in Hong Kong (SAR) Remote Moderator: Raquel Gatto (Remote Participation Working Group)

In the beginning of the session, the moderator, Ginger Paque, made some initial remarks. She mentioned that remote participation is more than discussing about tools and platforms. It is an issue related to development, capacity building and access. It was also noticed that we are moving from remote observation to remote participation in the IGF and that we are starting to explore and integrate several forms of remote participation, such as social reporting and continued online discussions. After these remarks, the floor was opened for the speakers and other attendants.

General comments:

- Remote participation can have a lasting transformative effect on global governance. It allows us to enhance diversity and inclusion. But for that potential to be fully fulfilled, capacity building and a change in attitude from the global governance institutions themselves are necessary (Anriette Esterhuysen)
- Remote participation should be encouraged for very practical reasons: a) it opens the policy process to more people and therefore the IGF benefits from expertise that would otherwise be disconnected from the policy process; b) it increases legitimacy of global policy-making and a sense of "ownership" of the process (Jovan Kurbalija)
- The use of the expression "remote participation" was criticized, as "remote" implies "distance" and "less importance". The expression "enhanced participation" could be used instead (Anriette Esterhuysen)

Evaluation of remote participation:

- Remote participation was a very successful experience in EuroDig and this was due to preparation. Intensive preparation before the meeting is the key (Lee Hibbard)
- Remote participants should have more impact on agenda-setting and policy-shaping. They don't often feel that they are actually shaping the topics for discussion. (Anriette Esterhuysen and Lee Hibbard)

Integration of channels and "networked participation":

- The platform for remote participation can be used to keep people who are present in the IGF connected to all sessions at the same time and aware of what is taking place in all of them. It is not only useful to remote participants (Bernard Sadaka).
- This year there was strong combination of formal and informal remote participation. In WebEx there was the more formal type and the informal one was on social media. There is challenge to make people aware of both (Tim Davies)
- What we call "remote participation" really is "networked participation", as those present in the meeting are engaged of formal and informal remote participation and take advantage of both. This backchannel conversation affects what is being said in the meeting (Edmund Chung)

Suggestions for improvement of remote participation:

- Some of the IGF proceedings should take place mainly online, such as preparatory meetings (open consultations, MAG meetings) (Anriette Esterhuysen)
- Some sessions during the IGF should take place totally remotely. Remote participation allows topics to be discussed from active participants from all over the world. The session would report back its discussions to the main session. (Nermine El Sadany)
- To address the problem of lack of influence of remote participants on discussion-shaping, there should be remote preparatory meetings. Organizers would collect and harvest the ideas and discussions from remote hubs and make sure that they are driven into the preparation of the physical meeting (Lee Hibbard)
- Also to address the same problem (lack of influence), there should be channels for remote participation available throughout the year, platforms through which one can send contributions (Chuck Gomez)
- To deal with future difficulties and limitations of remote participation (ex: impossibility to provide meaningful remote participation if there are too many people connected to one particular session) it could be useful to identify which

sessions are strategic; ex: in which sessions development issues are being discussed. Efforts should be concentrated on maximising participation in those sessions. (Anriette Esterhuysen)

- To build a lasting relationship of mutual assistance and exchange of experiences between ICANN and IGF (Katim Touray)
- Developing a network of remote participation facilitators. Map the human resources available in several countries, with contacts available (Katim Touray)
- Use multilingual web feeds. Webstream not only the original audio of the sessions, but the translations into the six UN languages (Katim Touray)
- The experience in the IGF could be a guide to enhancing participation. Include information about remote participation into the capacity-building processes. (Anriette Esterhuysen) Develop a toolkit? A collection of best practices to put remote participation in place, based on the experience of the IGF?
- It is important to "institutionalize" remote participation, to recognize it as a best practice and to have the formal commitment that remote participation should be provided in every IGF, open consultation and IGF regional meetings. The model of remote participation in Internet governance meetings should include local hubs, remote moderators and an interactive platform. This should be an integral part of IGF main sessions, panel and workshop design and agenda (RPWG).
- In order to raise interest among remote participants there should always be clear description of the workshop sessions. If organizers do not provide a good description and the names of speakers remote participants won't be encouraged to join (Marilia Maciel)

WS 182. "Can mobile 'Apps' create a new golden age of Accessibility?"

Report by: David Wood

List of panellists and/or participants:

Moderator: Jonathan Charles BBC, Gareth Ford Williams, BBC, Dr. Katoh, NHK, Emily Taylor, Oxil, The BBC Accessibility Toolkit, Patrik Falstroem, Cisco, Greg Fields (RIM) Remote Participant, Shadi Abou-Zahra W3C, Arnoud van Wijk R3TF, Arun Mehta

The Workshop examined the ways in which Internet delivered 'applications', which are the new currency 'smart' phones, ids, etc. can be used to help persons with disabilities.

A number of delegates stressed that using Internet and Mobiles are now a necessary part of living, both for those with and without disabilities. Not using them exacerbates social exclusion. Equally, both are, in themselves, of tremendous value helping to liberate those with disabilities. The Applications used for smart mobile phones and other similar devices are of considerable benefit today, and this may be only the beginning of a new age of affordable help for those with disabilities. Many

organizations are actively examining ways to create more and better applications, either by creating them, or by proposing rules or guidelines for their production. The BBC has developed services and objectives for those with disabilities, and suggests we should identify an 'accessibility framework' which may be used for policy. The NHK have developed many access tools including multiple-version subtitles, and text to signing avatar conversion. Cisco have developed systems such as WebEx as accessible, and suggested that, as a matter of policy, applications should be arranged to have the same look and feel as the application interfaces they are used with. The W3C has prepared a set of accessibility guidelines which are available for delivery forms that include 'mobiles'. The R3TF (Real Time Text Task Force) has developed new tools which will be valuable for text communication, and which will be valuable for those with and without disabilities. Arun Mehta has examined particularly the needs of those with mental challenges.

Conclusions:

What can be done?

- Wider Communication and use of the guidelines developed by bodies such as the w3C and the R3TF.
- Greater commitment to open and standardized systems that can be used by all and across all platforms.
- Provide tools to make writing applications easy and simple for all
- Recognition that one of the best ways of arriving at good applications for people with disabilities is to ask web developers with disabilities to develop them – let he/she who will have to use them design them if possible.
- Applications do need to be tailored to help specific disability groups, as a kind of 'group personalization'.
- New attention needs to be paid to those who have combined disabilities (e.g. sight+hearing) using tools such as haptic (touch) methods.
- Examine whether Apps can be useful to non-disabled users also, maximizing the use of them.
- Recognition that 'prioritization' of disability group – which to help - is difficult and sensitive. Circumstances need to be examined case by case, based on content and content.
- Establish a Common document set about these issues, and continue the dialogue.

Report of the Dynamic Coalition on Freedom of Expression

The meeting was well attended by broad range of stakeholders representing both long term members of the coalition, together with many new faces. The meeting provided a valuable space for people with similar interests to gather, network and get up-to-date information about the most pressing issues relating to freedom of expression and freedom of the media on the internet. We designed the workshop as a fairly informal

and flexible space where everyone was encouraged to shape the discussion to meet current concerns.

A number of important substantive issues were discussed during the meeting:

New Top Level Domains: Alexander Schubert presented his initiative at ICANN to introduce a new Top Level Domain name: .gay. The group discussed the merits and demerits of a new TLD (bringing up considerations about resources, strategy, and terminology). This case study led in to a discussion about the process involved in setting up a new TLD, and to what extent considerations of "morality" and "public order" constitute an illegitimate restriction on freedom of expression.

Intermediary Liability: Karman Turk from the University of Tartu presented her research looking at intermediary liability in Estonia and the implications for freedom of expression. Her work is based on a recent Supreme Court ruling concerning user comments on a media outlet website which found that where an intermediary has any direct or indirect economic interest, or any kind of control over, user content that intermediary will be held strictly liable for that content. The discussion centered around whether this ruling is compatible with EU law, analysis of the notice and takedown system, and in particular the limits of when an economic interest should result in liability for user content. Some consensus seemed to be emerging that there is a need for graduated liability depending on the relationship between the intermediary and the content.

Youth Empowerment: Gry Hasselbalch presented a recent study she had carried out which surveyed 4000 youths for their opinions on internet governance issues. The findings indicated that privacy was their top priority and that when they talked about privacy they were by-and-large objecting to parents and teachers monitoring their internet usage rather than about commercial collection of data. She argued that child protection was only one aspect of guaranteeing children's rights on the internet, and more effort was needed to empower young people through human rights,

Online Activism: Brett Solomon of Access Now spoke about his work with human rights organizations from around the world. He argued that denial of service attacks are an increasingly serious threat to online freedom of expression. He explained that many of the organizations that work with AccessNow are increasingly under technical attack, and by taking a site down the attackers are engaging in social engineering as the communities associated with that site are then lost. A discussion ensued about the type of assistance which such organizations need ranging from technical training, to access to more secure online services and proxies etc.

Library filtering programs: Many members were concerned about library filtering systems and wanted to know more about what systems and safeguards which are in place. Tapani Tarvainen from EFF Finland presented a study that they conducted in cooperation with the Finnish Library Association. The results found that there were no

consistent processes followed for identifying content for filtering, and that there was a serious lack of understanding amongst librarians about what is and is not legitimate expression, and that most librarians were not comfortable with the responsibility of blocking content.

Deep Packet Inspection (DPI): Ben Wagner presented the newest trends in DPI and the implications for freedom of expression and the internet architecture more broadly. He explained possible uses of new capabilities both those which are positive (to combat viruses) and those which are negative (behavioral advertising, and surveillance). He presented promotion and development of encryption technologies as a key tool for protecting freedoms.

Filtering: Yaman Akdeniz, founder of cyberrights.org, informed the Coalition about the extensive filtering and blocking regime in Turkey. She stated that a key argument used by the Turkish authorities to justify their blocking regimes is the fact that Australia, Germany, the UK and other countries block content too. Many participants noted that this was the case in their countries also. The Coalition agreed that it is vital that freedoms of expression issues are advocated in both local and international contexts.

Franco-Dutch initiative: Bertrand De La Chapelle, the French Special Envoy to the Information Society, presented the Franco-Dutch Initiative. The Initiative is an attempt to look at how these countries can protect online freedom of expression, especially through foreign policy and trade. This provoked a very lively debate over inconsistencies among French ministries in terms of freedom of expression, the challenges of regulating trade (particularly when dealing with dual use technologies), and the implications of distributing encryption technologies to human rights defenders.

International waterways: Bertrand also presented an ongoing initiative to explore analogies between the internet and the international regime of canals, waterways and international straits, particularly in terms of harm-free passage, and relationships of upstream actors towards downstream actors regarding information flows.

Report of the Dynamic Coalition on Accessibility and Disability Activities

Report by: DCAD Secretariat

1. The Dynamic Coalition on Accessibility and Disability contributed to the 5th session of IGF in different ways. Three events took place during the IGF this year involving the activities of the Dynamic Coalition on Accessibility and Disability (DCAD). ITU-T TSB support the DCAD in terms of secretariat with an accessibility coordinator as staff, a DCAD web, under the umbrella of the accessibility mandate, in the WTSA Division.

2. The DCAD was engaged in three events in different ways and modalities: the events are as follow:

   1. The third face-to-face meeting of the DCAD, held on the 16 September 2010
   2. Workshop no. 180
   3. Workshop no. 182 organized in collaboration with EBU
   4. Participation to the Workshop 114, organized by NOMINET

The report of each activity is reproduced in detail as follow.

1. DCAD Activity no. 1:
   3rd face-to-face meeting of DCAD: 16 September 2010

The third meeting of the DCAD was held on 16 September, with the participation of some 30 delegates from IGF, including Africa, northern Africa (Tunisia), Latin America and North America. Two Tunisian participants expressed their willingness to contribute to the work of DCAD in the future. The meeting was chaired by Andrea Saks, DCAD coordinator.

Remote participation was also possible through webex and captioning. The remote participation was ensured and coordinated by the DCAD secretariat. The documents are available on the DCAD website and on the IGF website.

The conclusions of the meeting were as follows:

a) Feedback from the IGF Participants on accessibility measures taken at this IGF meeting and that it was noted that everyone was temporarily disabled due the fact the meeting rooms had no ceilings and there was constant ambient noise. This fact really hit home in the fact that everyone needed captioning. IGF had every main session and every workshop captioned and it was possible for everyone to function whereas without it would have made it impossible

b) Remote Participation: Comments and experiences were expressed and brief report given by Virgina Paque from the DiploFoundation online IG capacity Building programme coordinator that there were 600+ Remote participants / 32+ hubs / 35+ remote panelists Paque stated that it wasn't perfect but that it worked and worked very well for such a large attempt and that the captioning was an important partner for remote participation

c) Feedback on the two workshops: What did we accomplish was explored and it was felt that we should continue to participate. The IGF Youth forum attended all the 3 workshops and the DCAD meeting. After contributing their experiences, it was decided to invite them to present at the next DCAD workshop at the 6th IGF meeting providing funding could be found.

Within the DCAD, the next steps and future activities the following points were discussed:

a) to discuss over the creation of a survey was discussed but no firm plan was decided, prior identification of adequate resources within the DCAD participants.
b) to discuss around the possibility to draft a report on the improvements of accessibility at IGF over the last five years, should proper resources within the DCAD participants being identified. As an outcome it was suggested as part of the new work plan, prior identification of adequate resources within the DCAD participants.

2. DCAD Activity no. 2:
3. IGF workshop no. 180 "From Athens to Vilnius: Beyond the UN Convention on the rights of persons with disabilities", organized by the Dynamic Coalition on Accessibility and Disability, 16 September 2010

The workshop was organized as an activity of the Dynamic Coalition on Accessibility and Disability (DCAD). ITU is one of the founder Members of the DCAD. The aim of the DCAD is to facilitate interaction between relevant bodies, and ensure that ICT accessibility is included in the key debates around Internet Governance in order to build a future where all sectors of the global community have equal access to the Information Society.

The event was held on 16 September, with the participation of some 40 delegates from IGF, including Africa, northern Africa (Tunisia), Latin America and north America. Remote participation was also possible through webex and captioning. The remote participation was ensured and coordinated by the DCAD secretariat and ITU-T Accessibility Coordinator Alexandra Gaspari. The documents are available on the DCAD website and on the IGF website

The participants could hear the 4 relatively new speakers presenting on the following items:

Claudia Gray, Universidad de las Américas-Puebla, Mexico
"Internet accessibility and development" (World Telecommunication Development Conference 2010 Hyderabad, India)

Jorge Plano, Argentina
"Web Accessibility and Older Persons"

Axel Leblois/Martin Gould, G3ict, global Initiative for Inclusive ICTs
"Benchmarking ICT Accessibility/closing the gap"

A DCAD panel was organized for a Q & A session from the audience: Fernando Botelho, Brazil, Gerard Ellis, Ireland, Cynthia Waddell, USA, Peter Major, Advisor, Hungary, Shadi Abou-Zahra, Egypt/Austria.

Like last year the BBC World News, Jonathan Charles, moderated the session and highlighted the key aspects of the progress made by DCAD into the work of IGF.

IT has to be highlighted that ITU-T and TSB and the Canadian fund for IGF related activities made the participation of most of the speakers possible. The speakers thanked the ITU-T accessibility coordinator and the ITU-T Director for the constant support.

4.   DCAD Activity no. 3:
     Workshop no. 182, organized by EBU and Dynamic Coalition on Accessibility and Disability: "Can 'Apps' create a new golden age of Accessibility?"

The event was held on 15 September, with the participation of some 60 delegates from IGF, including all the continents. Remote participation was also possible through webex and captioning. The remote participation was ensured and coordinated by the EBU secretariat. The documents are available on the DCAD website and on the IGF website. The workshop was proposed by the WBU/EBU with the support of the DCAD and UNESCO.

What do people with disabilities need to benefit from 'applications' on 'Internet Enabled Devices'? They will be a critical part of mobile Internet. 'Apps' hold tremendous promise to help people with disabilities to connect and participate. Today applications such as voice control and others are available giving a new meaning to accessibility. Is this the beginning of a new age of accessibility? The future may belong to 'Internet enabled devices', which will include smart phones and net-books. We move to a new world where a plethora of executable applications, downloaded from the Internet, helps us, amuses it, and monitors us. The session will examine Apps and what people with disabilities want and need from IADs.

The workshop began with an examination of the possibilities today for Accessibility Apps. It turned to an analysis of the role key bodies can play in helping to make the golden age a reality. Finally, the workshop drew conclusions and recommendations for the future.

The participants could hear the several speakers, most of them new to the work of DCAD, presenting on the following items:

Part 1: What is the situation today 'on the ground'?

Part 2: What are the technical accessibility requirements? (with the participation of the DCAD members)

1.   What has the World Wide Web Consortium done so far for handhelds?
     Shadi Abou-Zahra W3C, DCAD member

2.   What can be the Role of the Real Time Text Task Force?
     Arnoud van Wijk, R3TF, DCAD member

3. What has been done, and what needs to be done in standards and guidelines?
   Arun Mehta, DCAD member

Part 3: Interactive Session and Summary
Like last year, the BBC World News journalist, Jonathan Charles, moderated the session.

4. DCAD Activity no. 4:
   participation to the Workshop 114 "Digital inclusion: reaching the most socially excluded people in society", 15 September 2010

This workshop was held on Wednesday 15 September 2010: the DCAD coordinator co-chaired the meeting and many DCAD members, as well as the secretariat actively participated to this event. This workshop discussed the existing barriers to citizens being able to get online and highlight the experiences of countries that are working to tackle this problem. The youth forum participated expressing their views very strongly and wanted to be heard and for Libraries not to closed but available for home work with ICT equipment available for homework. This view was also expressed at the main forum

SECURITY, OPENNESS AND PRIVACY

16 September 2010

Chairman:

Evaldas Kulbokas, President, INFOBALT, Vilnius

Moderators:

- Frank La Rue, Director, Centro-American Institute for Social Democracy Studies (DEMOS), Guatemala City; United Nations Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression, Geneva
- Lisa Horner, Head of research and policy, Global Partners, London
- David Hoffman, Director of Security Policy and Global Privacy, Intel Corporation

Remote Moderation:

- Kieren McCarthy, General Manager (US), GIBC, San Francisco, CA

Evaldos Kulbokas:

I am the Lithuanian ICT Association President. We should resume our session, which is today: Security, Openness and Privacy. There is a problem in Lithuania, the farther you go into the forest, the more trees you stumble upon; and probably we've got the same issue with the Internet. During 5 years of IGF existence, probably most of us would agree that there are issues which are mostly related to a paradigm shift. It used to be considered a good manner to be able to use poetry to express one's feelings. Nowadays youngsters use You tube and other online services for the same purpose. It is just a natural way of communication for the young people, because we provided them the technology to do it, but with the current legal setup, imagine what a business could make with usage of Shakespeare's "to be or not to be", but is it right for society? Are our current laws open to use for everybody in the world? From the legal point of view, yes, but law is just a certain way of looking at world issues and it is not always right to stick to a century old paradigm. Laws can be changed as well. I believe that knowledge is something that doesn't shrink by sharing. That's why IGF is highly valuable as a platform of open minded discussion. We have many different angles towards the same issues. I believe we'll succeed in sharing our knowledge. I believe we'll have enough wisdom to encourage progress for the whole world.

Lisa Horner:

We'll be using three main thematic lenses to explore the issues today. The first theme that we'll be looking at is social media and we'll be looking at a range of Security, Openness and Privacy issues related to social media. Our second theme is the nature and characteristics of Internet networks, technologies, and standards. Theme 3 is international cooperation and collaboration on security, privacy and openness.

The aim of this session is to look at whether we can achieve our goals relating to Security, Openness and Privacy in ways that complement each other and to highlight any areas where there might be tensions between these goals. In the early IGFs, security and openness were dealt with largely as separate issues in separate sessions. In more recent years, we've tried to bring these themes together we've had very interesting debates and learned a lot from each other. It was still felt that we weren't doing enough to bring these three themes together. They're often being seen as incompatible with each other, as competing rather than perhaps complimentary goals. While tensions do exist and we need to be honest and open and really explore those, we'd really like to also explore how these issues can interrelate with each other and complement each other. Do they have to be zero sum in the way they're often treated? I think an open Internet can also be a secure one in which the privacy of citizens is respected.

How can we actually achieve this in practice? How can we make these three issue areas really work for each other and support each other? I think these three issues are critical and they're all cross cutting and relevant to all the themes that are discussed here at

the IGF. I think that openness is particularly important. In the past we've relied more on closed systems of communication: Television, broadcast, etc. These are largely one-way models of communication and we as members of the public are largely receiving information and did not' have many opportunities to really talk back, to express our ideas and opinions, to express our knowledge and our creativity. The Internet has really changed all that, as we all know. It is empowered humankind, placing the power of communication back in the hands of individuals, the everyday man or woman, and this is a revolutionary development. Never before have we really been able to tap human creativity and knowledge in the ways that we now can, using Internet technologies. The Internet is a hotbed of innovation in so many spheres: Commerce, art, culture, knowledge creation. It was openness that allowed the Internet really to develop into the powerful communications medium that it is today. It is obviously come a long way since the early days. The Internet is now so central in everyday lives, so central to the global financial, economic, social, and cultural infrastructure that we have. It is too precious and too important to really be left alone, which is obviously why we're here today.

We have to recognize that it is a powerful communications medium that can be used and indeed is used for harm as well as for good. We don't want the tool to be used to attack the values, goods and systems that we hold dear and that we rely on. We don't want people to lose trust in the Internet through feeling vulnerable to fraudsters and criminals when they go online. This would undermine the very value of the Internet as a network that really connects millions of people across the world. So we therefore have to work to promote and protect security online, and equally, we don't want people to lose their trust in the Internet and its applications, because they feel that their privacy is being violated because they're not sure who is monitoring their online activities or who's gathering information about them and why. So privacy and security are incredibly important, but we have to be careful not to irrevocably damage the characteristics of the Internet, its openness, and its interconnectivity that make it so powerful through policies that are perhaps very well-meaning but may be a bit misguided or disproportionate or even short sighted, policies that place unnecessary controls and limitations on communication, so we have to be careful and deal with all these issues together. So the question is: How can we foster the continued evolution of an Internet ecosystem that continues to support human creativity, expression and knowledge sharing in new and exciting ways while also protecting and promoting privacy and security? How can we make these goals work together? I'm looking forward to this discussion today and to working with you, to bring these three mutually reinforcing goals together so we can come away with a better understanding of how to foster an Internet ecosystem truly empowering and liberating for human kind.

David Hoffman:

The IGF is a unique and essential forum for voluntary multistakeholder dialogue. At Intel, I get the opportunity to work with some of our engineers who are in our laboratories and are developing and designing the technology of tomorrow. When

we look at that technology and we see what is evolving, we see what we refer to as the growth of the computing continuum. What we're starting to see then right now is that when individuals participate with technology, they are using applications and data for a great growing number of functions within their life, and they're using now a variety of different technologies. There was a time not too long ago when all of us, if we were using computing technology, had just potentially a stand-alone desktop computer at work, and potentially one at home, and we kept our work data at work and we kept our home data at home, and occasionally we'd have to work on how to get things from place to place, but did not have to do that very often.

The world we are evolving towards is going to be a very different place. We're evolving to a world where people are going to wake up in the morning and interface with a certain computing device that will have applications on it and data that they will be using in certain ways. They will then maybe potentially have breakfast where they'll go to their kitchen and have another tablet device or something on the counter in the kitchen. They'll then get in their car and there will be a computer in their car and then they will go to work and after work they will have their handheld PC that is also their phone. There could be 15 maybe 20 devices during the day that all look very different whether they're handhelds or tablets or a car PC, but those devices will be devices people are going to expect that they're going to be able to have, to a large degree, their applications and their data available to them, for them to be able to do that, those applications and those data are going to need to be transmitted from device to device. This is going to be a connected computing continuum, and that likely means that in most cases, we're going to be using the Internet for the backbone of that connectivity for individuals' participation in their personal and business lives.

Now, there's nothing all that revolutionary about any of that, other than to recognize that this is an evolution that we are going through. What that's going to mean is that many of those devices that we will use are not going to have the memory to hold all of those applications and data just on that device. This is going to create an increasing need for remote storage of these applications and data, and that could be done in a variety of different ways. One way to do it would be for people to operate their own server and communicate back to their own server, but more than likely, in most situations, individuals are not going to want to do that and they're going to take advantage of this growing aspect of remote data and application storage, which many people would refer to in some context as "Cloud Computing." Now we have a situation we're evolving to where people want to rely upon this computing continuum for these new and innovative lives in their use and businesses and they have to rely upon individuals to store this data remotely for them and that data could be stored, and applications could be managed, anywhere all around the world. This creates a tremendous need, since individuals will be relying upon to be able to trust that computing continuum. When we look at trust, we think that both privacy and security are fundamental components of that trust and creates the need to have the types of discussion we're going to have today: How do we provide a reasonable basis for people to be able to trust? And for people to have an understanding that it is reasonable for them to engage in these

computing activities because their data is going to be protected or the network is going to be protected? So there's obviously this great need for us to figure out how to provide reasonable privacy and security for individuals and entities that are using this computing continuum. Too often I think in the past, people have said: 'Well, if we're going to do this, this is going to be a great problem because we're going to need to balance privacy on one side with security on the other side. And if we want more security, we obviously have to give up personal privacy to be able to get that'.

I contend that that is a fundamental misunderstanding of the concept of balance. Instead, what I would say to you, speaking as a lawyer, is that we should think about things more in terms of what is thought of as a legal balance, the scales of justice. And with the balance of the scale, what you're doing is if you're going to need more security and you're going to put more on the security side, then you are absolutely going to need to put more on the privacy side. So what does that metaphor really mean? I think actually what I see in my daily practice overseeing my company's privacy compliance measures is that that's actually how it works. When we want to take more security actions in certain regards, we recognize that for the people that we do business with, or our employees, that they are going to need to have much more than understanding of trust. We're going to have to put better privacy compliance processes and transparency in place so things come into balance, that there's more on the security side, and more on the privacy side.

The additional complexity is that this computing continuum also is evolving on a global basis that what we have found ourselves in something that I refer to as the global digital infrastructure. We have an Internet infrastructure that is, to a large degree, made up globally of some common, fundamental hardware and software components that make this global infrastructure which we get tremendous benefits in interoperability and the capability for folks to design to a common infrastructure, tremendous benefits both for communication, for people to use technology as they travel around the world, and for economic growth and business development to be able to design new products and services to this global digital infrastructure; however, we have a global digital infrastructure that meets siloed policy structures, country specific regulation of a global infrastructure, and this is one of the things I think is the fundamental challenge we have today and we need to discuss during this panel, is how do we reconcile those two? How do we provide respect for differing cultures and the need for people to have differing regulation within their specific country, while providing enough harmony or harmonized regulation so as not to disrupt this computing continuum?

Frank La Rue:

How do we maintain focused on all the developments from a human rights perspective? I think this is crucial. We want to make a difference between what the technical sides of issues are, what the legal sides of issues are and what the human rights issues are. Although you can separate them to study them in an academic way, I will always insist that human rights are a perspective that should be applied to all forms of life. It is applied to all individuals all around the world to all aspects of their daily activity. I

think this is crucial and Internet has a very powerful element in that it is a new venue that has created an interactivity in the world that should enhance the multicultural dimension, the better understanding of the world, what UNESCO calls a culture of peace, and not be used to the detriment of dignity and rights of people around the world. For the first time we have a truly global means of communication around the world. That should be transformed into a better world with more respect for human rights and not less.

First, when we talk about social media, normally we're talking about the social networks, but let me begin a little bit backwards. Social media is the media that we use that is not of commercial nature, that is in a voluntarily exchange of views and positions. The social media really began with broadcasting, with community newspapers or journals, or community broadcasting in terms of community radios or even community television. It was a public service for all the community, not at the interest of anyone in particular. When this evolves into the Internet though, it becomes this sort of social communication and public service, using this excellent medium, this openness of the Internet, and it has a new added element, which is that it becomes an interactive form of communication. It is no longer the passive form of broadcasting. In this case it is effective, systematic and a constant interactive communication of all. This is where it then develops into the social networks that create a more specific type of framework for that interactive communication. Obviously there's a tremendous good and tremendous function in this, but at the same time, there are perils and fears as well.

There are legitimate concerns for security and concerns for privacy. Can Openness guarantee both? I actually think that it is not exactly a balance that we're looking for between privacy and security, because a balance seems like you're giving in one to achieve the other. Systematically, I think we have to begin by saying that privacy is a right. It is a fundamental right of anyone and it is a permanent right. And security is a necessity for exercising all rights. So it doesn't mean that we have to give away our right to privacy or we have to give away the protection of security or a right to security. I believe that we have to see how we can enhance both simultaneously and not allow that one erodes the other.

It is the speed and the Openness which creates a serious challenge for security. In this security oriented world, all this information actually has a tremendous value. A value for security, but also commercial value, and there are limits that were probably not thought of at the beginning that will force some form of regulation in the future to defend the basic rights, to defend the right to privacy but also to defend security as something necessary.

Cynthia Wong:

I'm with the Centre for Democracy and Technology. I would just like to start out by distinguishing online social media from traditional media along several different dimensions that I think are very important for the discussion. First, I'll say that social

media enables average users with little technical knowledge to publish and access information in unprecedented ways. Social media is also relatively inexpensive to use, basically allowing anyone with a computer and Internet connection to participate. Social media platforms also potentially allow users to engage with a global audience and support an almost unlimited number of speakers, making it one of the most interactive mediums that have ever existed. Finally, social media is uniquely user controlled. Users have a lot of choice over what content they will see and who they will interact with and it is precisely these distinct attributes that undermine a lot of the justifications for why we have regulated traditional media the way that we have.

I think most importantly here, social media platforms have played an indispensable role in enabling free expression, civic engagement and a range of our rights on the global Internet. It is precisely these services that provide platforms for users to access information and engage with the global community. Of course the openness of these platforms also means that they can be used for ill as well as good, including committing crimes, or disseminating expression that might be deeply offensive to some. So the question then becomes how do we address this reality in a way that preserves openness and protects privacy and security? I would really put forth that laws that hold the platforms themselves responsible for the bad behavior of users cannot only hurt the expressive potential of these platforms, but will also have a negative impact on openness and the privacy of users for a couple of different reasons. First, the fear of liability will encourage platforms to act as gate keepers and close these platforms for user activity; and second, the platforms might feel like they need to surveil users more for fear of legal action. That doesn't mean that the companies that provide these social media platforms themselves don't have a responsibility to protect the privacy and security of their users. There's actually a growing body of work that provides a common framework for how companies can do this on the global Internet. Companies who built their practices around the fair information practice principles and around the privacy framework created by the global network initiative will be best positioned to protect both privacy, security, and promote openness on the global Internet. Of course governments also have a role ensuring that companies live up to this responsibility. In any case, the policy approaches that we adopt must address the bad uses of social media in a way that fully assesses the tradeoffs and the impact on openness, security and privacy as well as a range of human rights.

Giacomo Mazzone:

Traditional broadcasters have a certain kind of obligation that comes to them from the contract that they sign with the Government, with the authorities that give them the license to broadcast. In this contract there are a number of obligations; among the most important is the universal service obligation. We need to talk to everybody and we need to be listening to everybody. We need to address also the minority. There is an obligation of reliability and security. Information has to be accurate, has to be verified, and has to be fair. There's an obligation of fairness respecting the rights of everybody that could listen to us and of course there are other obligations like the protection of

minors and so on. In the world of convergence where we are living together more and more, the traditional media are expanding their activities through the Internet. We have a different speed and a different kind of respect of the rights of the citizen in the Internet world compared to the broadcasting world. We live with different definitions; we have a precise definition in most of the countries about information. We have a certain number of obligations and rules for giving access time to minorities and other kind of people but this doesn't exist in the Internet in a qualified way. So the day that we arrive into the Internet world with our services, with our information, with our educational purposes, et cetera, etc., we have this disconnect between these two worlds. The Internet is a wonderful system to create communities around particular interests. There is more and more the capacity to aggregate people around a certain number of contents, a certain number of interests, and in that case we need to adopt as much as possible the same rules of fairness, accuracy and respect that we are obliged to keep in the broadcasting world. It is not easy, but we try to cope with this the best.

The problem is a lack of governance in the Internet world comparable to the governance that we have in the traditional media world. We had yesterday a workshop on how to measure the media consumption in the converging world. That is important in the sense that in the broadcasting world, we measure in terms of audience rate. In the Internet world, we measure in terms of clicks or time spent on a website. It is important to have a common index, a common paradigm in order to measure how the media is viewed because for instance, if you want to protect the pluralists, you need to know which media are reaching the population, the citizen to which they address. If you don't know, all the kind of measures that we have in place in terms of protecting pluralism and characteristics of Europe, they are no longer accurate and efficient for serving the scope.

Thomas Schneider:

What I would like to tell you about is some work that I happen to do as a chair of an expert group in new media at the Council of Europe, which might be interesting for this discussion. I think it is very good that you started by highlighting the fundamental importance of freedom of expression for the functioning of democratic societies and the relations to privacy and security. This is linked and maybe less opposed to freedom of expression. In the last 50 years the mass media has been the most important means for people to exercise their freedom of expression, freedom of information. With the convergence and the changes in technologies and in the use of technology, the media system has become a little bit more complicated. We have a lot of new actors that have entered the media system and have taken on some functions that used to be performed more exclusively by traditional media organizations. This has led people in Europe and elsewhere as well of course to realize that the traditional approach of regulating media that was mainly done according to the technique of the fusion like television broadcast or press or radio, that this approach somehow needs rethinking. The Council of Europe has decided that we should think of developing this new notion of the media and seeing to what extent traditional media regulation could or should

be applied to new actors in the media system, and to what extent new regulation should be developed. And by regulation, I do not mean control. I basically mean to focus on the underlying aim of that regulation as the Council of Europe understands it, to help these actors to fulfill their role in guaranteeing and promoting freedom of expression and information. This is the main goal of the regulation, and it should not be an overregulation.

What we are doing at the moment is we are looking at cases like social networks, and what we are trying to do is to see to what extent these new actors take on functions that are relevant for the media system. There are some new actors and it is not easy anymore to distinguish them from a traditional mass media actor because they fulfill the whole range of functions. And others maybe are just aggregating information or making them available or giving access like a serve engine which performs one particular function of the media system. So instead of calling all the media actors in the media field media, maybe we need to leave the organizational approach and go to a function approach, a graduated approach where we look at what services, what activities correspond to what functions, and therefore the regulation should also be graduated. So it might not be easy to say you're a medium or you're not a medium or you're just an intermediary at the other end of the scale that provides physical access to the Internet. There are many actors in between, many functions in between where we might have to see to what extent they fulfill some criteria that mean that they are part of the media system. And for these functions, for these aspects where they are relevant for being part of the media system and relevant for contributing to the exercise of people for freedom of expression, information, that the regulation should be adequate to the function, not overregulation and under regulation. This is a positive and negative regulation. We want to put the stress on the positive regulation meaning that these actors, from the access provider to the social network operator, what is their contribution that they can make to allowing their customers or people to exercise their freedom of expression? How should they therefore be protected, protected from other interests that might abuse their function in preventing them from contributing to freedom of expression and access to information? What are the responsibilities that they go through performing one or several functions that are relevant for the media system? This is the idea that we are trying to develop in order to have at least for Europe, a commonly shared notion of the media system as it is now with these new actors that are changing and the technical development that is changing based on the functions.

There are several ways, then, if you identify these functions, to react. Maybe for some functions you need an exact regulation which is prescriptive. For other functions you let people act and then put in place an ex-post regulation. Maybe you have binding regulations for clearly illegal things like child pornography. Maybe you have soft law provisions for things that are more dependent on cultural diversities between the societies where you just give guidance, but there might be reasons to treat it differently. So there is a whole range of regulation from very strict legal provisions to just recommendations on how you should behave. One thing that is very important is transparency and consumer protection and empowerment. For instance, if something

appears on a social network which might be considered illegal, who is liable? Is it the operator or is it you who put it on line? Is it the one who created the content? Is it the one who found the content on the blog and then put it on the social network? These questions have to be transparently discussed and there of course the network operator or the social network operator has a responsibility. That does not mean that he is responsible for the content that is on his network, nut these questions have to be made transparent, and the user should be aware of the part of the responsibility or liability that they share because if everybody just says, no, it is not the operator, no, it is not the user, in the end somebody will be made liable. And for the sake of legal clarity and avoiding chilling effects because everybody is afraid that he might be made liable, the more transparent and the clearer the words are to all the people working in the media system, I think the better freedom of expression is protected.

Vytautas Butrimas:

I work for the Lithuanian Ministry of Defense and have been working in the Cybersecurity area. I have been attending these conferences and workshops throughout the week and I hear the word "security" being used. I hear that the IGF has been meeting for five years, yet I find no evidence that the IGF has digested three significant events that took place during this five-year period. The first one was the cyber-attack against Estonia where for a few hours a whole country was cut off from the Internet. There should be a lot of concern for freedom of expression and access to the Internet there. The following year, 2008, we had a military action against another country that coincided almost to the hour of a military cyber-attack which resulted with a disruption to communication; a Government could not communicate with its people. The outside world could not figure out what was happening to a country. Third thing, the growth of the social networks can be a good way to express one's point of view, but one can also organize demonstrations or cyber armies. And you can attack and focus a targeted attack. I don't see any evidence of this being addressed at this conference and to me it is a naive way of looking at the real things that are happening in these worlds. These events by the way were perpetrated not by pimply adolescents but rather professionals. They have links to intelligent services and also links to Governments and militaries. Something should be thought about that. Security and the three things that were mentioned at the opening of this session, the way security is handled, will have an effect on openness and on privacy. If we don't do anything about reducing at least some of these freedoms, for example, you can't shout "fire" in a theater, you can't burn the Koran in public, and these things have to be considered. Some mechanisms need to be there for enforcement.

Allen Davidson:

I'm the Director of public policy of Google in Washington D.C. Social media creates these incredible challenges and we have been hearing, but it also gives us the tools themselves to address many of them. That's what I think is important to think about. What is in some ways the most interesting thing about social media is that we've really reached this long predicted world where users themselves are the creators of

content. Individuals are. That's been our experience. Goggle operates You Tube; every minute on You Tube, every minute, 24 hours of video is uploaded. Since this panel began almost two months' worth of new video has been uploaded to You Tube. Every minute on our bloggers' product, 270,000 words are uploaded. So we really have reached this world where individuals are the creators of content. As we have heard, this creates huge challenges. What do we do about it? We believe that it is not a zero sum game, that in fact there are opportunities to address these problems. Industry has a new role here.

Three quick areas where we can do a lot: One is privacy. We have the ability to create tools that give people transparency, control, and protect their security. There's a tremendous amount of experimentation going on, but it is essential from an industry point of view that we provide privacy because people will not use our products if they don't trust them. Safety, we can do a lot to give people the tools of control to protect themselves and their children and their communities, and the community itself can do a lot online to do that. Openness, interoperability is essential in this media. We have a new group called the data forefront to make sure that people can take their data with them. That's something that consumers should demand. Industry cannot do this alone. We need the help of Government. A lot has been said in some of the sessions about the importance of free expression and the dangers and risks to free expression around the world. We need Government to help us and to use the tools at its disposal to protect free expression. We need more transparency from Government about when Government itself is asking for content to be removed or asking for data about users. And we also need good legal regimes that allow social media to develop, particularly protections around intermediary liability. We do not want a world where the providers of social media services are themselves forced to become gatekeepers. So I would just say there is much for us to be done. Freedom and openness on the Internet is not inevitability but rather something we all have to work for.

Maja Rakovich:

I'm from the Centre for Research at the University of Belgrade. We had yesterday a very interesting panel about freedom of expression and intermediaries that asked: where do we go from this particular moment? We heard about different cases from around the world. From Italy, Estonia, Thailand, Pakistan and the United States, and discussed issues regarding defamation, protection of children, insult laws, copyright, and domain name registrars, legal immunity, legal liability and self-regulatory principles. What was stressed was basically when we speak about Internet intermediaries and freedom of expression, we need to take into account different types of categories of intermediaries and different roles they have in enabling communication and free flow of information on the Internet. It has been stressed that it is very important that clear roles and principles are defined between different stakeholders and that basically everybody's clear about these principles, because a lot of concerns have been raised about certain legal uncertainties, about certain transparencies, and arbitrary decisions

around the world which can have chilling effects on freedom of expression and Internet intermediaries. It is been stressed by the participants that it is necessary to have transparency, legal certainty and due process and there's obviously a lot of work to be done in this complex issue.

Jac Sm Kee:

I am with the Association for Progressive Communications. We had an interesting workshop on sexual rights, openness and regulatory systems. What we found is that sexuality lies at the heart of the debates on the need to limit the rights to freedom of expression, information and privacy on the Internet. For example, the problem of pornography is cited as one of the reasons for Internet regulation; however, sexuality has been raised as a negative issue at the Forum and also in other spaces rather than a positive rights issue. Issues of sexual health, sexual education and sexual equality are rarely tabled as policy dimensions of Internet governance. We found that solid research is recognized as essential in informing all important policy decisions. In relation to this issue, decisions are made based on assumptions that result in information of regulatory responses broad based and discriminatory in effect. Due to the value ridden and highly charged character of sexuality, policy needs to be based on research that aims to understand how users engage with sexual content and spaces, their motivations and the values that are given to them. We also talked about how the Internet has a key role in the realization of a broad range of rights. For example the right of association by lesbian or transgendered people to form online communities or the right to access information such on sexual health and pleasure, the right to privacy including control over personal data and respecting its contextual integrity and the rights to opinion, expression and assembly over the Internet which are important in the process of active and public participation in social, cultural and political life.

Finally, the participants stressed the rights framework is important in approaching the challenge of balancing different interests and concerns in regulation. Simply stated, the approach needs to prioritize the protection of rights of people as opposed to the protection of people, whereby rights are interdependent, indivisible and inalienable and applied equally to everyone. This will avoid the pitfalls of regulatory approaches that privilege the interests of one group of people over the other, or approaches that assume people having no limited ability to make good decisions about their own lives. It also provides opportunities to look at the issue in the multifaceted way and ensures that different stakeholders are guided by universally agreed and binding Human Rights agreements such as the Convention on the Rights of the Child, Convention on the Elimination of All Forms of Discrimination against Women, and the ICCPR.

In this regard, the state has the duty and obligation to ensure recognition and respect of people's fundamental rights and freedoms and to ensure there is access to justice and redress in the event of violation in an open and transparent way. The protection of a user's right to privacy, information, expression, assembly and so on cannot be entirely devolved or delegated on private entities.

Frank La Rue:

There has to be a rights approach, and all rights are equal, but I would not make the separation between rights and people. The rights originate on the basis that all people are born equal in dignity and in rights. We need to ensure that no special groups of individuals have special protection to the detriment of others that have less protection.

Xianhong Hu:

UNESCO is the only U.N. agency with the mandate to promote freedom of expression and we organized two workshops at IGF which are really important and pertinent to all the discussions here. The first workshop is on the freedom of expression and the freedom of connection. We launched a UNESCO commission report to see the ecology policy approaches shaping the freedom of expression on Internet. The study has shown that with growing access to information in cyberspace, there is censorship and filtering done not only by Government organizations but also by private companies, which have diverse goals and values. We need to explore their relations. There are also various policy approaches we need to explore further including industrial policy and regulation, such as copyright and child protection policy, net centric policy, such as linking to internationalization of domain names, and also the security policy in terms of the relation to privacy and the freedom of expression. The second workshop is focused on how to find applicable standards and legislation of the social media. How do we provide reasonable privacy and security in the computing continuum? How do we promote this in the same global environment, freedom of expression? Many participants called for more education initiatives such as the use of potential online tools to prevent unexpected results. All in all, UNESCO views freedom of expression and privacy within the Internet to be part of the larger legal framework of Human Rights. The challenge of applying the instruments exists in the discrepancy of the legal framework between online territory and the real world. To address these changes, UNESCO will continue to promote Internet collaboration between the different sectors.

Lisa Horner:

What do you see as the particular characteristics of the Internet networks and technologies that we have and that we want to perhaps preserve or protect?

Kieren Mccarthy:

We're being followed by various remote hubs around the world and online. In particular at the moment, there are 44 people in Dhaka and others in Jakarta watching this and providing comments. We were having a discussion online about the issues of privacy and security and it not being a tradeoff and Dhaka would agree. Jakarta said it agrees in general but in implementation you find security is sacrificed such as giving away your mother's maiden name. We've been running some polls and with regard to social media, quite a few people felt social media did live in its own special world and

needed special protections, because it enables person to person, individual interaction. You don't have to feed through people. Some people felt that was something that needed to be protected and was worth protecting.

Richard Allen:

It is been interesting to be a representative of Facebook at this event given the focus on social media, and perhaps that's not surprising given that social media has really exploded during the lifetime of the IGF itself over the last 5 years. Regarding the value of these services, I think it is worth perhaps celebrating the fact that in terms of some of the core objectives of the IGF around inclusion and diversity, and creating platforms for openness, the fact that we now do have platforms like ours that reach 500 million people in over 70 languages, accessible all around the world, the vast majority of those users being over 18 and are engaged in a wide range of activities including very important political speech, and that includes a country like Indonesia that we're hearing from at the moment, that I think has been quite a significant step forward. It does create challenges in terms of privacy because of that scale and the ease of access again. I think the fundamental change is one from a world in which we only had large organizations collecting personal data and publishing it about small citizens to now having citizens being much bigger in their own right as publishers and that raises a number of significant questions. I think it is a mistake to think it is an unregulated space already. Today if you're running a service, there's a wide range of regulation on everything from privacy to illegal content to advertising and commercial regulation, that if you want to be around for a few years, you have to respect, and we work with regulators and different authorities on a daily basis.

So I think that it is a space where the value is enormous, potential is enormous. Important questions are raised about individuals publishing information but I think the starting point is one in which it would be a mistake as I say to think that it is a completely unregulated space as we exist today.

Lisa Horner:

Indeed what we're trying to do here is try and work out, what is the best balance for regulation? What systems are in place and what can we do better? What are the roles and responsibilities of different stakeholders? Do we need the same kinds of regulation that we've had perhaps with additional media? And how are these issues different? How can we get the balance right?

Kieren Mccarthy:

The comments from Dhaka are that they feel openness makes the Internet what it is. Intelligence at the edge and not at the center is what makes the Internet spread and makes this possible and makes this valuable. They feel there are enough borders and divisions and boundaries already in place and that the thing that makes the Internet so terrific is enabled communication in a way the current political systems have never

managed. We spoke to more people from the Cameroon and Argentina and other places, and almost to a person they said that the openness, the openness of the Internet, the lack of ability to control the Internet, and the free flow of information was what makes the Internet so valuable.

Alejandro Pisanty:

I am from the Internet Society and the National University of Mexico. I think that many of us will easily agree that openness is one of the main values to be preserved on the Internet, but I don't think that there's enough depth going on around this thought. It has to be much more technically grounded. The Human Rights approach is undeniable once you state it but if it doesn't have attraction, chain, to the technical grounding of what an open Internet means, it may easily become too vague to be useful and lead to some serious weirdness. We need these debates to be technically grounded. We have to go up into the higher spheres of principles about the way humankind should develop and come down to a technical basis. The end to end principles, the interoperability principles, are key to the way the Internet is built and governed, and they have to be present in these debates. I have to address a second point here that security is also being dealt with in an extremely vague way. There's a time lag of at least 2 years between what happens outside the IGF and the way it comes in here. I'm revising this figure to 7 years with very basic security principles. We have again a need to have more exchange and make sure that there's more technical knowledge infused into the debate.

Bill Smith:

I am with PayPal. So I have 5 words: Openness, inclusivity, collaboration, experimentation and voluntary. They are the founding principles and characteristics of the Internet itself, I believe, and I think it is essential that we continue to live by those on a going forward basis.

John Laprise:

I'm a faculty member at the Northwestern University in Qatar. These are the words of one of my students and that is: 'the Internet is important because precisely it is not like the real world. They can do things there they can't do in the real world, and the ideas of freedom of expression are very important.'

Lisa Horner:

I'd like to perhaps move on to one of the areas we wanted to look at here which was that notion of traffic management. Obviously, we have maybe what's now an idealized version of the history of the Internet, where it was open and where we had the end to end principle, but things have since moved on. So in this session we really want to talk about whether it is okay if certain types of content are given priority across the Internet. For example, back in the early days, the network wasn't so capable of

distinguishing between different types of content online but now, new tools and new technologies are being used to manage the flow of data across the networks in new ways and I know there are concerns that this will be used purely for commercial gain and there's a worry this might undermine some of the openness of the networks that we've seen. We need to look at whether there are security issues here and whether there are privacy issues here as well.

Vladimir Rudonovic:

The first topic of our workshop was new developments in technology, and the need for future network management, especially when it comes to wireless networks, having in mind the next billion users will be connected through wireless and mobile networks. The second one was back to the principles that have already been discussed in the earlier years of nondiscrimination, transparency and choice of services on the Internet that we are using. The third one was the notion of new business models, especially mentioned also in the Google Verizon policy proposal where certain new advanced services might be prioritized. Business noted that this would not impact the Internet as we know, so that would be an additional service. There is a special concern of the developing world when it comes to the investments which are needed from the business on one hand, and on the other hand, of the innovations from small business that might emerge in developing countries, and then freedom of choice, especially having in mind high prices and small, limited bandwidth in developing countries. The fourth topic was how to do that. Transparency was widely mentioned as a key point, though the definition of transparency is something we still have to work on and there were two different approaches. One was mostly suggested by business, which is competition and case by case resolution of problems. On the other hand, by the regulators who mentioned that the soft law might be the best way, basically the coordination of the stakeholders to reach the principles that all should respect and that can be guided by the regulators as the safeguards. The concerns of people from developing countries were that the pure competition based on regulation of network management might not always be best because competition is not always available, especially in developing countries. The last point was future steps. That we need more formal participation from people from the developing world to raise their concerns about network management and network neutrality and we've heard very good valuable inputs yesterday. I think they were helpful for the business sector as well. Maybe the panels next year might be divided, maybe we can have more panels and give more focus to technical economical user choice aspects, and lastly, we should continue with discussions between the Forums including regional forums.

Lisa Horner:

Are the issues we're dealing with here different in the wireless world than they are in the fixed line world? What is the difference between these issues and do we need to be thinking about them in different ways?

Patrik Hiselius:

I represent Teliasonera, the leading Telecom operator in the Nordic and Baltic region. So the question that I have been considering is if a degree of traffic management is necessary, can we agree on certain principles, limitations or boundaries? Let me start by putting this question on openness in perspective. There are indeed threats to the Internet's openness. Governments are tightening controls. Internet companies are building walled gardens like closed email systems and integrated Web based services. Apps on your display are a more closed world than web browsing. When it comes to operators and openness, net neutrality is difficult to define and enforce, and efforts to do so merely address the symptom, concern about discrimination, rather than the underlying cause, lack of competition. (Quoted from Economist) In more and more geographies, there is competition and offers of Internet access. In many places like in the Nordics, there is fierce competition, so if an operator would discriminate between content providers, customers would leave for another ISP. Here we come to a principle that we should apply; the principle of transparency. The user needs to be informed. There needs to be user friendliness and not several pages of technical and legal text. So in our push for competition on providing Internet access do we also need limitations and boundaries? I would say no, rather, we need flexibility, flexibility for business to develop and flexibility to meet user needs. In any case, the specific access operator cannot control from A to B what will happen with communication which travels over the Internet. Let me conclude by saying in my view there is one more principle that we can agree upon and that is non- discrimination. All content and application services should flow across networks. This said, all types of applications will not be included in all price models in all offerings but provided as options. That is obvious already today on the mobile side.

Kieren McCarthy:

An interesting comment approaching it from a slightly different angle, from one of the remote hubs, in their country ISPs are getting pressure from movie companies to prevent movie copies from being downloaded from Torrent and Torrent software. Pressure is also on the ISPs to cut off service to those that are downloading the movies. Their question is what should service providers do in this situation?

Kurt Oprasahl:

I represent the Electronic Frontier Organization, a nongovernmental organization dedicated to defending civil liberties and rights online. The Internet is an engine of expression. It represents an extraordinary advance in the availability of information and opinion and intermediaries are the means by which people exercise the freedom of expression, making available new avenues for creativity, collaboration and civic discourse. This online content has flourished because of policies reducing the cost and barriers of user-generated content. For the Internet's infrastructure to allow users to post opinions and to seek, receive and impart information, it is critical to have the policy infrastructure that maintains this engine of expression. The protection of

citizens' freedom of expression, privacy and due process has to be a primary public policy objective. Citizens are directly impacted by Internet intermediary liability and obligations. Citizens are impacted because of the vast diversity of information and opinion online and transited by intermediaries. We enjoy such a wealth of content because of the policy of posting first and asking questions later. To maximize the amount of information available, it is final for intermediaries to allow posting without ex ante review. Posting out ex ante review, however, requires limitations of liability so the platform is not held liable for what the speaker has said, and user generated content websites have provided a tremendous amount of culture and value. They cannot function under a regime where somebody has to look at and review and analyze the material before it goes online. So imagine a different world in which you submitted a video for an online website and it took six weeks for the backlog to be cleared and the video to go online.

Kurt Opsahl:

There are problems as well with technical filters. It is ineffective at determining whether there are torts like defamation and privacy violations. For copyright violations they're ineffective at determining whether it is a lawful use of the copyright. So any form of ex ante review has severe problems. Ex post review must protect for due process and protect against misuse. To the extent that the Governments are deputizing intermediaries to engage in public policy objectives, they must do so affording the full rights to the citizens including due process. So the most appropriate role for intermediaries is limited to simply forwarding notices of alleged problems to their customer and then allowing the judicial system to determine the subsequent set. And this includes protecting the identity of the user and anonymity is an important aspect of allowing full and open conversations on line, and cannot be given up lightly without judicial process.

Lisa Horner:

I think we've heard a lot about the roles and responsibilities of different stakeholders and I think it is coming through quite clearly that there are principles here that we can be using and drawing on to guide us in our work. The importance of due process, the importance of these principles which have been long established and which do apply equally offline as they do online.

David Hoffman:

This is the portion of the program when we want to talk about Internet operability and technical standards. I talked in my opening about the evolution of this global digital infrastructure and the tremendous value we get out of the Internet as a global mechanism for conversation and communication and for free speech. It is difficult to think how that would be possible without interoperability of the different sub networks that end up making up the network and the different slices of the hardware and software stack that are created as part of the technology. I think the real question

is what really are the roles of technical standards as a part of interoperability? And what are the impacts to security, privacy, and openness from these interoperability and technical standards?

Pranesh Prakash:

I work for the Internet Society in Bangor. Standards are the infrastructure on which we carry on our digital interactions. They can be anything from network standards such as the Internet protocol to markup standards such as XML and HTML. These are important because our choice of infrastructure determines what we are able to build on top and the rules by which our interactions take place, and they themselves present policy implications. For instance, our choice of network standards based on end to end principles determines how censorship can and cannot take place on the Internet. Some policy implications are in the realm of governance. Standards determine how Governmental departments interact among themselves and how citizens can interact with their Government, thus having implications on citizens' rights. Some policy implications are in the realm of access for persons with disabilities, for illiterate people, for the aged or for developing country Governments. For instance, can your screen reader understand what is written on the Web? Can your Government afford in all senses of that word, to use proprietary standard? Some policy implications are in the realm of the rights of consumers. Can you as a consumer download data stored in gmail or Facebook and move to a different system? This races a question of interoperability and openness which is often a short form of saying allowing for innovation on top of existing infrastructure. So our choice of standards are important and thus equally important is the way those standards are formed.

However, having said this, I have to underline the fact that open standards, while they are a necessary condition for development, for innovation, for guaranteeing many aspects of citizens consumers and producers freedoms, they are not a sufficient condition. Even if a Government uses open standards, if it doesn't allow for transparent interaction with its citizen, the open standards do not fulfill their potential. Even if a social network stores user uploaded data in an open standard, it can still choose to prevent its users from downloading this data or from accessing this data using third party tools. The Internet Governance Forum provides an ideal process and platform to push for issues that require reflection on such interconnected issues.

David Hoffman:

I think this notion is very important, that there are elements and times when it is going to be very important to have open standards, and portions where it is absolutely appropriate, especially to encourage economic growth and entrepreneurship, to have proprietary standards. We'll now proceed forward with the third theme of our discussion, which is around international cooperation and security, privacy and openness.

Amelia Andersdotter:

I think the question about open standards is very often discussed from an economic or a business perspective, but it is actually more about the values we have in society as a whole. We need to have a discussion about open standards as a promoter of democratic rights and of freedom of speech.

Johan Hallenborg:

Security, Openness and Privacy on the Internet are fundamentally about our possibility to enjoy human rights in the Internet context, most notably the freedom of expression and the right to privacy. Sweden believes it is of vital importance to address these issues from a Human Rights perspective. The core Human Rights norms were established in binding U.N. conventions almost 50 years ago. In many specific contexts these norms have been interpreted and further developed and refined, in some cases paving the way for new conventions. A lot remains to be done to give meaningful interpretation to the core Human Rights in the Internet age and Sweden believes that there is a need to address this issue with some urgency. We have a responsibility to ascertain that such participation is done in accordance with the spirit of the norms, though we now see worrying trends around the world that point to the contrary. More than 100 bloggers and activists are in jail for merely expressing their views on the Internet. This is against the spirit of the norms and is not acceptable. Although we believe that there is no need for new Human Rights, we are convinced that international cooperation on these issues is the only way forward. A critical mass of Governments and other stakeholders must agree to make this happen. Several recent initiatives point to the growing momentum around this issue and this is something we welcome. On our side we are providing support to the U.N. special Rapporteur on freedom of expression and we look forward to his report to the Human Rights council on this issue next year. The first expert meeting on this issue was arranged in Stockholm in June of this year to be followed by regional consultations and a second expert meeting in Sweden during next year. We have also initiated a cross-regional statement in the Human Rights council on Human Rights on the Internet last June with the support from a group of countries from an all regions around the world.

Sweden will continue to give this issue priority in our work. Due to the unique character of the Internet, with its many cooperative and individual actors, developers and managers, it will be of continuous importance to retain the multistakeholder approach to Internet governance where we accept and understand our different roles and responsibilities. Consequently, Sweden also welcomes initiatives by civil society networks such as the draft charter on Internet rights and principles by the dynamic coalition on Internet rights and principles. Such policy frameworks serve to take the debate further. Finally, we would welcome more Government participation in such initiatives as their involvement nurtures the discussions on Human Rights on the Internet, and this is an issue that Governments are going to have to address with more vigor in the near future.

Arvind Ganesan:

There are two issues critical to keeping openness online. One is that Government should collectively stand up for freedom of expression and protection of privacy online. That will require Governments to work together to ensure that there is a respect for Human Rights within their jurisdictions as well as collectively abroad to make sure that the Governments that are trying to shut down this space are prevented from doing so. The second thing is to ensure that the companies that have provided the innovative technologies and services to make the Internet open actually commit to keeping it open through adoption of standards and principles to do that, such as the global network initiative. I think it is essential that both companies and Government make a commitment to freedom of expression online.

Susan Morgan:

The global network initiative is a multistakeholder initiative engaging companies, academics, investors and civil society which is looking at how to work to protect freedom of expression and privacy online. It is going to see some representatives from member organizations here today such as Google, Microsoft, the Electronic Frontier Foundation and Human Rights watch. We've developed a framework to help guide information and communication technology companies in the decisions that they have to make when faced with Government requests and demands, such as blocking or removing content or handing over data about users of their services. Another part of the work that we're doing is setting out the importance of developing mechanisms and expertise within companies to help understand and address the Human Rights risks that they're facing in their business, in the markets in which they operate and the products and service that they sell, and the technology that they're developing. We've developed three key things which underpin our framework. The first is an accountability process to assess the way in which companies were implementing the framework, the second is policy engagement and the final thing is shared learning in a safe space to really explore the issues and develop good and best practice.

Markko Kunnapu:

I'm from the Ministry in Estonia and am currently chairing the Cybercrime Convention Committee as well. I'd like to speak a little about the importance of international cooperation and minimum standards. In order to cooperate with each other, states need minimum standards. They need a certain legislative base and a certain level of harmonization in order to cooperate with regard to the fight against Cybercrime. There are standards provided by the Budapest Convention along with plenty of other tools, instruments and best practices in that matter. We have seen so much progress since 2006 when the first IGF took place; we can see that there is a global legislative process going on all over the world. Governments are implementing their legislation and the Budapest Convention is being used as a guideline.

The IGF, as a multistakeholder process, has been very helpful to achieve these results. I'd like to point out that we have already minimum standards. The standards are there and they need to be applied by the states and other internationally legally binding instruments in the fight against Cybercrime. This is the Budapest Convention, and here I would like to encourage others to join that club.

Alexander Seger:

I'm from the Council of Europe and I participated in three workshops that were related to Cybercrime. Tools, common standards and good practices are already available and applied in many countries, but full implementation of all of these globally is the most effective way ahead to help countries deal with Cybercrime.

The different workshops agreed that there is a strong need for capacity building at the global level to help countries implement what is already there and to do this we need a stronger contribution from development cooperation agencies. We should make Cybercrime an issue of development cooperation. In the workshops it was noted that progress has been made in the way industry, Government, and law enforcement officials cooperate, coordinate and share information but in order to advance, we need to define more clearly who are the partners in these partnerships and what are their roles and responsibilities. It was also pointed out that measures against Cybercrime are composed of many elements, which include prevention and awareness, technology and criminal justice measures. It was also raised in several of the workshops that criminal law is not only there to catch criminals and to deter crime, but also to prevent abuse of power, to establish safeguards and conditions in procedural law and ensure due process is followed and that rule of law and Human Rights are respected. Countries are rightly so very cautious when designing criminal law measures. There's need for stronger cooperation between the ICT communities and the criminal justice communities when designing measures against Cybercrime not only at a domestic level but also at the international level. The ITU and the Council of Europe and others need to cooperate stronger with each other. Perhaps we should think about a mechanism to mobilize resources for capacity building and monitoring the progress made by countries in the measures against Cybercrime.

Tadeusz Golonka:

I'd like to give you some insight on this subject from the perspective of Poland. In this session we're hearing that the Internet is creating security and safety risks for users; but in my opinion, it is bad actors that are responsible for most online security problems and crimes. Users and businesses need more help from law enforcement but we don't need a new entity or agency. In my opinion, we must cooperate across international borders and move quickly as soon as we identify the source of cyber-attacks and attempts to hack into websites which might be threats to personal safety.

Martin Boyle:

I'm from Nominet and we organized a workshop on protecting the user in an online world. My first point is that we must try to identify the specific issues in cybersecurity and Cybercrime that we're trying to address, otherwise you've got a massively broad area and you just can't cope. What we concluded was that you needed to try and put things that you could address into a narrow enough package where you could do something about it, and then take those practical steps, looking for solutions. In that discussion, there was the concept of the incentive for industry itself, which is their reputation. Remembering a comment earlier about the attack on Estonia, this was something that came up in a very much more general manner, and that was about the fact that for the infrastructure, there has been now the development of quite a number of cooperative arrangements that help the infrastructure operators to move very, very quickly, so the attack on Estonia probably helped to stimulate that, but certainly, we didn't pick up specifically on that one attack. My second point was something that was brought up by the young people involved in the session. They wanted to have access and they wanted to be safe. We need to help them understand the responsibilities of digital citizenship. People need to be educated to understand the consequences of what they're doing, and the implications their actions, so that when somebody uses a mobile phone to make a payment, they're actually aware of exactly what it is that they're doing so that they can make the right decision. We need to help them understand the risks. The last point was about legislation. Legislation is not the best solution. If it is going be effective legislation, it needs to be enabling legislation, not focused on particular issues. There was a very clear point that though we haven't solved crime in an offline world, that shouldn't stop us from trying to address crime in an online world. Business needs to take its responsibility and show leadership, and there is a shared responsibility for safety and security, with the ownership leading to a partnership for prevention.

Wim Rullens:

I'm from the Ministry of Economic Affairs from the Netherlands, and I would like to report back on the discussion we had in the workshop on the importance of public - private cooperation in the fight against Cybercrime. It is important that public and private parties work together on solutions to combat and prevent Cybercrime through cooperation and self-regulation, thus avoiding the need for new regulation on top of already existing laws. Governments are interested in doing that because they know that laws rarely prevent what they forbid and private parties are interested to cooperate because they want to avoid new regulation, but also because they want to show responsibility and to have a good corporate image. The experience in these countries also shows that starting small and learning by doing works best. They should not try to solve everything at once but see what is working, and what is not.

Everyone sees the need for public - private cooperation in the fight against Cybercrime, but the question is how does this public private cooperation refer to the Democratic oversight? How do we deal with transparency, accountability, and democracy? What is Cybercrime? How can we precisely define it? ISPs have engaged in the fight against

Cybercrime, but sometimes authorities tend to stretch the definition of what is clearly illegal to what is unwanted, and that's a much more subjective criterion. It is important to all stakeholders to invest in building trust and demonstrating value and cooperation between all parties involved. To name a few important ones: Industry, Government, Parliament and Civil Society. We need to move from action in isolation to action in collaboration, and we need to move from suspicion to trust. Issues like tracking down and prosecution is very important, but they're not the real solution for the problem. You have focus on prevention, including awareness.

Wout De Natris:

The Cybercrime working party is the cooperation between RIPE NCC, RIPE members and different actors like the FBI, the Dutch High Tech Crime and others such as the EU and public prosecutors on Cybercrime for several countries. It is working on creating an environment to build trust between all these different parties; we try to get to common standard and common answers to the problems we see. We'd like to organize a tabletop conference, which would bring all the actors involved in fighting cybercrime to discuss the shared issues. We can only do that, in my opinion, in a neutral, friendly environment like the IGF, by inviting these people to express their concerns to the world and from there look at what are possible solutions. That's my suggestion for next year, to try and organize that sort of meeting with the IGF. T

Mr. Hou Zhaoxun:

I would like to ask a question: which country has the largest number of microphones? My answer is China. How many microphones are there in China? At least 420 million, because China has 420 million Internet users, the largest group in the world. The number of microphones is 700 million because China has 700 million mobile phone users, also the largest in the world. The era of the Internet can also be called the era of microphones. In China, it has been increasingly popular to use those invisible microphones in everyday life and work. What do they use the Internet and mobile phones, those invisible microphones, for? They can be used in expression, socializing, work or entertainment. As for the use of microphones for Chinese people, updating blogs and posting opinions in some online forums or Bulletin Board System (BBS) top the list. So we can say that China has the largest forum for expression in the world. About 300 million netizens enjoy participating in discussions at BBS and the number of such 24-hour online forums has exceeded 1 million. Among the 200 million bloggers, at least 30 million have weekly updates. Besides sharing life experiences, happiness and ideas, those forum entries and blogs become a platform to criticize social events and supervise Government policies.

I'm a very active blogger and I write at least six stories on my blog every week. Like everyone else, I will depict my life and feelings on the blog, appeal for environmental protection, criticize behaviors that go against the social morality and oversee work in the Government. For instance, a local Government planned to tear down a village to develop the economy, which was a bad idea in my opinion. So I investigated the

old village to explore its historical values, emphasizing in my blog how important the village is to the local's inheritance generations, and reminded the Government of the terrible outcome if the peasants are deprived of rights. The story was widely redistributed on the Internet and admitted by the dictionary service of Baidu.com, China's largest search engine. More importantly, the local Government decided to revoke the decision of demolishing the village. There were times I criticized poor service by some telecommunication companies in China, and there was no response from them, but I received strong support from many netizens on my blog, which have received more than 40 million page views in less than two and a half years. I once wrote a story about the Wenchuan earthquake in May 2008, which garnered more than 3 million page views and over 25,000 pieces of comments. Millions of people were moved to tears by the story. QQ.COM, one of China's leading portal websites, selected me as China's top 10 opinion leaders in 2009. I'm not a leader, just an ordinary person who is willing and used to observing and writing from the grassroots perspective. These 40 million visits page views didn't bring me any money, but the support and attention of millions of netizens, which is more valuable than money. I believe the Internet gives rise to three most useful tools - search engines, blogs and instant messengers. Among them, blogs serve as the spiritual home, expression channel, cultural workshop and economic salon for the Chinese people. These are the four functions that I believe blogs should perform. When the population of Chinese bloggers hit 100 million, I wrote a story titled 'When 100 million people do the same thing'. A blog makes it possible for large-scale cultural creation, transmission and sharing. Blogs changed the cultural status quo of China.

As a blogger, I like to express myself in a lively way using pictures, audio and videos, all in accordance with Chinese laws and morality. Chinese morality originates from valuable Chinese traditions and civilization, such as these sayings "Do not impose on others what you yourself do not desire" and "Be strict with one self and lenient towards others." Abiding by Chinese laws and morality, I employ this new socializing tool in the information age to extol life, create fun, relax myself and encourage others. I like to express my opinions with light-hearted words and in a soft way. Chinese leaders have always been an advocate for "respecting differences and tolerate diversities." In China, a rational, inclusive, moderate and orderly online expression environment is emerging.

David Satola:

I am from the World Bank and I'm here to report on our workshop on international collaboration on legal issues of cybersecurity. We recognize that there are existing mechanisms and instruments of international cooperation on legal issues of Cybersecurity, and of course the Council of Europe's Budapest convention is primary among them. What we wanted to do in our workshop was to deconstruct matters of Cybersecurity in order to provide a new lens through which to look at how to enhance future cooperation and collaboration. The part of the deconstruction and the disaggregation that we talked about was first to look at just the question of Cybersecurity and what it is. Cybersecurity does not necessarily equal cybercrime,

which does not necessarily equal cyber war. Threats to Cybersecurity come from a number of sources. Outdated legal architecture that doesn't necessarily reflect or apply well to the Internet and a dissonance of policy and legislative approaches by countries make international collaboration and cooperation on certain levels difficult. We have buggy code and bad practices. We also have natural disasters that contribute to cyber insecurity. Going forward, what can we do as we approach these new issues of cooperation? The first finding and recommendation that we agreed on was to adapt a more layered approach towards the question of Cybersecurity, looking at the infrastructure layer, the protocol or software layer, and the applications layer. We also thought that we need to really adapt a more resilient-based approach instead of a perimeter security approach. Finally, we need to understand better the incentives of the different actors involved and those include economic incentives and personal incentives. I would reiterate in that regard the points made about building capacity for law enforcement personnel and the engagement of the private sector through public-private-partnerships.

Alun Michael:

I want to reiterate what has been said up until now which I think is interesting and important for the IGF itself. If the IGF process can't tackle tough issues, we will lose credibility and revert to a more traditional approach that won't work. The Council of Europe speaker referred to cooperation between industry, Government and law enforcement, and of course that's vitally important, but it is not enough. We need the engagement also of members of Parliament and representative organizations, as well as representatives of Government. We also need the voice of civil society to be involved. Government and industry need members of Parliament and civil society because otherwise there is no transparency and accountability. The example I would point to is in the U.K. in their efforts to tackle child abuse sites, the notification and take-down has worked precisely because of the engagement of MPs in civil society. For that reason we haven't needed to try to legislate because there's a system that everybody is aware of and is working well. We need a new model other than the traditional forms of legislation which cannot nationally or internationally keep up with the Internet; industry led; which engages Governments and includes law enforcement, with MPs and civil society providing the accountability. This will result in minimum legislation, minimum regulation, but maximum cooperation, delivery and transparency. This is what the IGF process, not just the event once a year, but the process at the regional level has to be about for the future.

David Hoffman:

I especially would want to take note of the importance of looking for other ways that we can bring people together to be able to address those threats even in the absence of legislation, while we layer the legislation on top as an enforcement backstop, I think is absolutely critically important and something that I think also closely applies to the area of privacy.

Leon Bayer:

Hello, I'm 15 years old and a security researcher. When you're looking at international policy regarding security, will see two things. First of all you will see the developed industry countries with hard security laws which disable security researchers to do their research because they could be punished in doing that. Secondly, there are countries where no law regarding security research or security and Internet exists. Those countries are used by criminals as well as by researchers because they're forced to do so, to hide their actions. This is a kind of situation which doesn't allow anybody to fight crime. And to fight crime is essential to hear the voice of security researchers, because they know well how criminals would work.

Christine Runnegar:

I'm from the Internet Society and will report on a workshop on The Future of Privacy. The following points reflect some of the views of particular participants on this theme and are not necessarily consensus views. In a world of global data flows and new technologies, privacy laws need to be harmonized with the aim of better adapting those laws to the characteristics of the Internet. International cooperation among data protection authorities needs to be improved, and resources need to be allocated to enforcement. It is important to note the considerable efforts currently being undertaken in various forums to assess whether existing privacy principles remain relevant and effective. For example, the reviews of the OECD Privacy Guidelines, the European Convention 108, the European Data Protection Directive and the U.S. Federal Trade Commission series of public privacy roundtables, to name a few.

There are challenges to achieving broad international harmonization because privacy is a broad subject matter with limited international consensus in certain areas and indeed, even at the domestic and regional level, privacy issues are currently undergoing re-examination. There are also difficulties introduced by jurisdiction and conflicts of law. It is important to support the open development of globally-applicable privacy standards, both technical and regulatory, to continue having confidence in the Internet Ecosystem. Transparent architectures that secure private information and enable information sharing in a secure, privacy-enhancing manner are fundamental to effective privacy.

Technical work needs to be backed-up by providing incentives to incorporate privacy into system design and at the same time to keep the speed of innovation and the openness of the Internet intact. Data protection must take into account many different rights. The concept of accountability means that the obligation flows with the information, a useful paradigm for global systems and global data flows. It may be accomplished with tools, practices, contracts, etc., and not just by relying on laws. The Madrid resolution of data protection authorities on international privacy standards has been a useful guide for developing countries that do not have active data protection

laws but need specific provisions regarding cross-border jurisdiction and conflicts of laws. Privacy by design technology is not a silver bullet; privacy by design is a concept of people, practices and technology. We need to look at all these aspects to have privacy by design; privacy needs to be designed in from the beginning. Finally, search engines should be instruments of freedom, accurate and accessible democratic knowledge. In order to assure this, it is important to include Intermediate Liability Exceptions for intermediary service providers in new revised privacy principles.

Francisco Sosa Wagner:

I'm a deputy in the European parliament, and I'd like to stress here the importance that the E.U. attaches specifically to this particular question of the governance of Internet, which is the central theme of this meeting. Proof of this is that the plenary of the European Parliament has adopted a resolution in June of this year. The European Parliament has stressed with emphasis the character of the Internet as a world public good that should be managed attending to common interests. It has already considered that an essential element of the Internet was its use for the exercise of fundamental freedoms, especially the freedom of expression, specifically cultural diversity, pluralism and means of communication, democratic citizenship, education and access to information. Therefore, the European Parliament believes that the Internet is a very vigorous and powerful means of propagating throughout the world the democratic values that are included in our treaties. The exercise of these public and fundamental freedoms requires also that it should be combined with the scrupulous respect of the private life of European citizens. Therefore it is very urgent to have appropriate legislation for data protection.

This appropriate legislation for data protection cannot be done at the level of the old states, or the entities of states such as the E.U. This matter goes beyond those traditional institutional frameworks and requires a global response. And in this sense, Europe is contributing some very important input in order to define the content of privacy. I would like to refer to it, because I think it is particularly relevant. The European parliament is very much aware of the problems which stem from the freedom of expression and requests that one should ensure significant and relevant guarantees against any form of vigilance or control monitoring by public actors or private stakeholders so that access to Internet and protection of private life are real and not usury. Lastly, something which doesn't fit within the strict framework of what we're discussing here is the bridging of the digital divide. We have to find a way of including everyone in the web, regardless of their economic situation, the place where they live or their language or culture. This is an enormous endeavor where both public authorities and society as a whole should be involved. I conclude by saying that a world forum such as this one, where we find ourselves now, is a most appropriate place to motivate everyone to make the Internet this wonderful resource that I have referred to. Let us ensure that there will be continuity of this forum because this will certainly be a very fertile endeavor if we do so.

Jorg Polakiewicz:

I'm from Germany and am working for the Council of Europe. I think the light motif that came from all the workshops I attended on privacy is that the general standards and principles are quite common and that there's a broad agreement worldwide, if you look at the OECD principle, the U.N. declaration or indeed convention 108, that the challenges to adapt these standards to this new reality of the Internet will be a gradual process. We don't have to replace them or throw them away. They have stood the test of time, but we indeed have to compliment them to adapt them. This will be the work which will be carried out in the coming years. There are many important forums for this including the OECD, the European Union and the Council of Europe. I would just mention convention 108 because what distinguishes it from the other forums is that it has the force of law and can be applied potentially worldwide. It was drafted not for Europe; it was drafted with the participation of non-European countries like Canada and the U.S. and now the 47 Governments have launched a process to modernize this convention. We want this to be a global process and that's why we were so happy to be here at the IGF. We will work hand in hand, not only with Government experts but also with Parliaments, with industry and with NGO's. We need global standards for the Internet, that's the call from the NGO community and that's the call from industry. You need certainty for these standards.

Alvaro Galvani:

I am from the Brazilian Government. In the last 10 or 15 years, we have seen many regional or specific initiatives towards the question of security and the Internet, mainly from industry, from the Convention of Europe, the Budapest Convention, and law enforcement initiatives and so on. We understand these are all valuable contributions but they must feed the international consultation process where all stakeholders can participate and write the principles and mechanisms within their own capacity towards a secure Internet. This approach of international participation is very important. My second and very brief comment is on the experience of Brazil in that respect. We evaluated that privacy; security and openness are issues that must be dealt with together. In this sense, last year we produced internally the principles for Governance and use of Internet. Two of the principles are directly related to our debate today. The first principle is that the use of Internet must be driven by the principles of freedom of expression, individual privacy and the respect for Human Rights, recognizing them as essential to the preservation of a fair and Democratic society. The other principle was that the functionality, security, and stability of Internet must be actively preserved for the adoption of technical measures that are consistent with international standards and encourage the adoption of best practice.

Frank La Rue:

I was delighted that the focus I see taking hold and being now assumed by all if not the majority is that Internet has to be seen under the light of the right to freedom of expression and the principles that guide freedom of expression. Secondly I agree

that there has to be an international response, as Human Rights are built upon the international consensus that each nation of the world should then adapt their internal legislation but ultimately the most important instruments of Human Rights are part of that worldwide consensus that has advanced and is still moving. In that way I think, with Internet, we will begin building on the structure and the framework of Human Rights that we already have. Finally, coming from a developing nation, although privacy and data protection are the main concerns in the developed world, for the developing nations and the peoples of those nations, an equal priority is the question of access. I believe access has been focused on as an element of technology, in terms of new technologies that facilitate access for those that are illiterate or those people with disabilities, but access also has to be seen as bridging the digital gap in the world, sharing technology from the developed nations to the developing nations, and also has to be seen in terms of the population that suffers from extreme poverty around the world, we cannot talk about freedom of expression if we don't guarantee access to the Internet.

SECURITY, OPENNESS AND PRIVACY

Reports of the Workshops and Other Events

WS 18. Principles of Internet Governance Dimension of Open Knowledge Environment in Bridging Digital Divide

WS 23. Cybercrime – common standards and joint action

WS 37. The New Breed of Location Services - Challenges for Child Safety

WS 66. The Future of Privacy

WS 73. Sexual rights, openness and regulatory systems

WS 81. Freedom of Connection – Freedom of Expression: The Changing Legal and Regulatory Ecology Shaping the Internet

WS 82. Privacy and Social Networking

WS 84. How to measure communication and media in digital converging era

WS 85. Freedom of expression or access to knowledge: are we taking the necessary steps towards an open and inclusive Internet?

WS 88. Enhancing Transparency in Internet Governance

WS 93. Internet – an instrument to foster democracy.

WS 94. Well Being of Youth and Parenting in the Digital Networks

WS 111. Freedom of expression and Internet intermediaries: Where do we go from here?

WS 112. Protecting the User in an on-line world

WS 120. Public sector information online: democratic, social and economic potentials

WS 123. Legal Aspects of Internet Governance: International Cooperation on Cyber-security

WS 134. Child Online Protection in northern Europe - Methods and Approaches for Educating your Children Online

WS 156. Why we need an Open Web: Open Knowledge Governance for Innovation

WS 172. Public-private cooperation on Internet safety/cybercrime

Report of the ICC Open Forum on Data Protection and Privacy

WS 18. Principles of Internet Governance Dimension of Open Knowledge Environment in Bridging Digital Divide

Report by: Ma Jing

List of panellists and/or participants:

Prof. GAO Xinmin Standing Vice Chairman of Internet Society of China, Member of the Advisory Committee for State information Dr. William Drake, Director of the Project on the Information Revolution and Global Governance, the Graduate Institute of International Studies, Geneva, Switzerland Prof. TAO Xiaofeng School of Telecommunication Engineering, Beijing University of Post and Telecommunication Prof. LIU Chuang Director of Global Change Information and Research Center, Institute of Geography and Natural Resources, Chinese Academy of Sciences Prof. Wolfgang Kleinwächter International Communication Policy and Regulation, University of Aarhus Ana Neves: Head of International Affairs, Knowledge Society Agency, Ministry of Science, Technology and Higher Education, Portugal

The presentations of the workshop focused on the following fields: 1. Principles of Internet Governance Dimension of Open Knowledge Environment in Bridging Digital Divide 2. The importance of the knowledge, openness and access to the knowledge. 3. Practices in Open Knowledge Environment for future Wireless Communication 4. Teaching the Internet Governance. 5. Principals and Norms of the Internet. A great debate took place numerous questions were raised after the presentations, regarding the challenges and experiences that the developing and developed countries were facing.

Through the panel discussion, the following consensus's were reached: (1) The OKE is necessary, as it will help developing countries in the innovative research, education and development; (2) Practices and cases on strategy and policy reform from China as well as European countries were presented. Diversity modes of Internet governance of OKE are from e-Library and 4G training course. (3) For best practices and public services, it needs more open education and training. It needs also some related search for law, for examples, open licensing, legal tools and the public domain, security of general platform. (4) It is necessary to continue more detailed discussions and exchanges regarding the Internet governance dimension of OKE, especially the principles and best practices of OKE.

Discussions on principles and guidelines of Internet governance of open knowledge environment (OKE) in bridging the digital divide will follow up, since so many audience members showed their continued interests. China Association of Science and Technology (CAST) will work with the partners to continue the discussions. Next time we will mainly focus on principles and best practices.

WS 23. Cybercrime – common standards and joint action

Report by: Alexander Seger

List of panellists and or participants:

Panelists: - Markko Künnapu, Ministry of Justice of Estonia and chair of the Cybercrime Convention Committee (T-CY) - Rusudan Mikhelidze, Ministry of Justice of Georgia - Zahid Jamil, Pakistan - Jayantha Fernando, Director/Legal Advisor, ICT Agency of Sri Lanka - Laurent Masson, Director for Anti-Piracy and Digital Crimes for Microsoft in Europe, Middle East and Africa (EMEA) - Cristina Schulman, Council of Europe Moderator: Alexander Seger, Council of Europe

Most countries are concerned about the growing threat of cybercrime, and many tools and instruments against cybercrime are available. The Budapest Convention on Cybercrime provides a framework for comprehensive legislation and international cooperation and a basis for joint action against cybercrime in a broad sense. Good practices are available and can be shared in view of encouraging others to join a global capacity building effort. Experience also shows that the agreement on a common framework of reference, that is, the Budapest by Convention, helps mobilize resources and create partnerships among public and private sector organizations. However, tools and instruments available are not necessarily implemented in all countries and regions of the world, nor is there necessarily longer-term sustainability built within countries. This is vital to ensure longer term success in fighting cybercrime, and building and "institutionalizing" capacities. In order to add impetus and resources to efforts against cybercrime and allow societies worldwide to make best possible use of tools, instruments, good practices and initiatives already available, a global action plan aimed at obtaining a clear picture of criminal justice capacities and pressing needs, mobilizing resources and providing support, and assessing progress made should be considered, preferably by the United Nations and the Council of Europe in partnership with the European Union, Parties to the Budapest Convention, and other interested parties. The workshop shared good practices available, informed about initiatives underway and discussed the feasibility of a global technical assistance and progress review mechanism regarding cybercrime.

The workshop demonstrated that common standards are available to undertake joint action against cybercrime. Examples from Georgia, Estonia, Pakistan, Sri Lanka as well as private sector initiatives (Microsoft) provided evidence to this effect. These examples could be replicated worldwide. The discussions underlined the value of the Budapest Convention as a common standard and framework for joint action against cybercrime at the global level. This is particularly true for developing legislation, investigations and international cooperation. Other tools and instruments can complement the Budapest Convention, such as the Convention on Prevention Terrorism, Convention on Protection of Children against Sexual Exploitation and Sexual Abuse, Convention on the Protection of Individuals with regard to the Automatic Processing of Personal Data). Additional tools have been developed to ensure adequate legislation, training

for judges or prosecutors and public-private cooperation. There was agreement that countries worldwide need to be supported through technical assistance in order to establish the necessary capacities to apply existing standards and tools. Official development aid agencies need to make cybercrime a topic of development cooperation. The workshop identified the need for stronger commitment from political leaders with regard to measures against cybercrime. The creation of a mechanism ("Cybercrime Action Task Force") to identify needs, resources for capacity building, assess progress made by countries and thus to generate stronger commitment could be given further consideration.

The proposal made during the preparations for the Salvador Crime Congress and underlined at the Octopus Conference 2010, namely, to focus on capacity building with a primary focus on implementing the tools and instruments already available, is increasingly becoming accepted by different organizations. The IGF helped continue the discussion launched at the Octopus Conference 2010 and the recent T-CY meeting on the need for a review or monitoring body for cybercrime (in the form of a partial and enlarged agreement) based on the experience of other CoE monitoring body and Financial Action Task Force. Such a mechanism ("Cybercrime Action Task Force") could be tasked to identify needs, mobilize resources for capacity building, assess progress made by countries and thus generate stronger commitment.

WS 37. The New Breed of Location Services - Challenges for Child Safety

Report by: John Carr

List of panellists and/or participants:

Chair: Diana Sutton, NSPCC John Carr, eNACSO Stephen Deadman, Vodafone Jonne Soininen, Nokia Larry Magid, ConnectSafely John Morris, CDT Sabine Verheyen MEP, European Parliament

Diana Sutton of the NSPCC opened by explaining that the purpose of the workshop was to discuss the child safety implications of the emergence of a range of different applications which can exploit location data that are broadcast from mobile phones in particular but also from other Internet connected devices. John Carr explained how mobile applications worked and how they utilized the different technologies that were commonly found in most of the newer mobile phones and smart phones. Location services had first emerged in the UK in 2002/2003. Some of them were specifically targeted at tracking the whereabouts of children. All of the location data at that time was owned, managed and controlled by the mobile networks. These networks negotiated a code of practice to which all of the mobile networks adhered. The code made a number of specific provisions in relation to the safety of minors. The arrival of the new breed of Internet based applications seemed to have wiped many, possibly all, of the former providers of personal location services and thus made the old ode redundant. No new code had yet been developed to self-regulate the new Internet

based location services but the potential dangers to minors remained and were very obvious. Children could be using these apps to broadcast their location to complete strangers and that put them at risk in several possible ways.

Steve Deadman of Vodafone and Jonne Soininen of Nokia explained how the new location services utilised a range of data which were entirely outside the ownership or control of mobile networks or the handset manufacturers. Different companies were working together to try to elaborate details of best practice but not all players had the same stake in the issue or the same possibility to influence the very large community of application developers which was scattered across all parts of the world and comprised companies of all shapes and sizes. Larry Magid gave a more detailed explanation of how several of the different types of location apps worked and urged people not to put a brake on technological developments on the basis of fears about what might happen. It was always important to be guided by what was actually happening. So far, and this was not disputed, no one was aware of any children being harmed as a result of the misuse of location apps. Larry also produced some numbers which gave him reason to wonder whether or not location apps were really being taken up in a major way by anyone, whether adults or children. John Morris explained how in the USA the privacy community was very much engaged with location apps. Their view was that when a company is handling a person's location data they had to be held to higher standards of security and accountability.

Everyone was agreed that this was a fast moving area which would require close attention. The difficulties of finding a workable set of standards that would be guaranteed to be widely observed were acknowledged on all sides.

WS 66. The Future of Privacy

Report by: Christine Runnegar (ISOC) and Katitza Rodriguez (EFF)

List of panellists and/or participants:

Catherine Pozzo di Borgo, Council of Europe Consultative Committee of Convention 108 (T-PD) Hugh Stevenson, Deputy Director for International Consumer Protection, Office of International Affairs, US Federal Trade Commission Rosa Barcelo, Legal Adviser,European Data Protection Supervisor Rafael García Gozalo,Head of the International Department, Agencia Española de Protección de Datos Pedro Less Andrade, Senior Policy Counsel Latin America, Google Inc. Joseph Alhadeff, Vice President for Global Public Policy and Chief Privacy Officer for Oracle Corporation Kevin Bankston, Senior Staff Attorney, Electronic Frontier Foundation Christine Runnegar, Senior Manager Public Policy, Internet Society Ellen Blackler, Executive Director, Regulatory Planning & Policy, AT&T Co-moderators - Katitza Rodriguez and Christine Runnegar [Remote Moderator - Cristos Velasco]

The workshop was an information sharing exercise and as such participants did not attempt to reach any consensus conclusions. Nonetheless, the list below is some of

the points that were made during the workshop as they prove useful in future policy discussions on privacy frameworks. Please note that these points reflect some of the views of particular participants and are not necessarily consensus views. Further, in the time allocated, it was not always possible for participants to comment on all views that were expressed.

- In a world of global data flows and new technologies:
  - Privacy laws need to be harmonized (or perhaps, rather there needs to be convergence) with the aim of better adapting those laws to the characteristics of the Internet;
  - International cooperation among data protection authorities needs to be improved; and o resources need to be allocated to enforcement.
- There are some challenges to achieving broad international harmonization because privacy is a broad subject with limited international consensus in certain areas. Indeed, even at the domestic and regional level, privacy issues are currently undergoing re-examination. Further, there are also the significant difficulties introduced by jurisdiction and conflicts of law.
- It is important to support the open development of globally-applicable privacy standards, both technical and regulatory, to continue having confidence in the Internet Ecosystem.
- Only by multi-stakeholder collaboration will viable solutions emerge, be deployed, and maintained.
- Data protection must take into account many different rights and dovetail with other laws geared to ensuring the protection of individuals.
- New paradigms will need to be considered – for example, accountability (i.e. the obligation to put in place appropriate and effective measures to protect personal data, independently of where the information flows).
- Privacy by design is a concept of people, processes, practices and technology – privacy principles need to be embedded in the design from the very beginning right through to the end.
- There needs to be innovation and focus on usability of solutions that offer individuals control over their personal data.
- Transparency in data collection and processing is important to equip consumers so they can make informed choices, and give informed consent to the collection, use and disclosure of their personal data.
- Consent should be informed, freely given and obtained through fair means.
- Further work needs to be undertaken to inform and educate people as to how their personal data is being collected and used.
- The future of privacy should include the protection of privacy vis-à-vis the Governments, and especially legal safeguards against Government access to citizens' private communications, and related communications records.

WS 81. Freedom of Connection – Freedom of Expression: The Changing Legal and Regulatory Ecology Shaping the Internet

Report by: Xianhong Hu and Theresa Maas

UNESCO supported a team of leading academics, Prof. Dr. William Dutton and Dr. Victoria Nash, from Oxford Internet Institute to develop a study whose results are presented in a report entitled "Freedom of Connection - Freedom of Expression: the Changing Legal and Regulatory Environment Shaping the Internet".

The background of this study is a theory called "The Ecology of Games" which assumes that freedom of expression is not an inevitable outcome of technological innovation. On the contrary, it is perceived as nested within a larger ecology of choices in policy areas, such as digital rights, industrial policy and regulation, user-centric policy, net-centric policy and security. Within this context of policy-making there is a wide range of different goals and objectives followed by different actors influencing the shaping of freedom of expression. It is the outcome of decisions made about these policies that determine the form of freedom of expression in the longer term.

Therefore the study did not focus solely on filtering or censorship as major instruments for freedom of expression. Instead it shows that freedom of expression can be enhanced or eroded indirectly during the pursuit of other goals in a larger ecology.

The study's results are both positive and negative. The increasing penetration and diffusion of the Internet and the networking empowers individuals. There is more content in more languages and scripts which enable people to find, share and create information. On the other hand a remarkable growth of filtering and censorship is acknowledged, but many those efforts to limit freedom of expression can be circumvented.

The study focused on the following policy areas:

Industrial Policy and Regulations

The protection of copyright and intellectual property within the Internet is seen as an increasingly difficult issue. Governments have made certain efforts to guarantee it. By contrast the pirate party, a newly emerged party, stands up for issues such as legalizing file sharing and reducing surveillance of Internet usage.

User-centric Policy

User-centric policy includes policies and regulations concerning especially child protection and aims at blocking illegal child abuse images and limiting exposure to content to reduce harm to minors. Here it is essential to use policies solely to limit risk to children, and not to use them for larger political purposes.

Net-centric Policy

This policy deals with the introduction of internationalized top level domain names to ensure that countries which do not use Latin based script are able to use scripts in their language. This has enabled a large number of people to use the Internet which is a great success for freedom of expression. On the other hand some are concerned that this might restrict freedom of expression by vulcanizing the Internet into content by language groups.

Security

Security is a policy field that is clearly implicated in freedom of expression, including issues such as privacy and national security. One example that might be mentioned in this context is the current discussion between RIM and countries like Saudi Arabia and United Arabic Emirates concerning the use of Blackberry.

Intermediate Conclusion

The study outlines different findings and conclusions. First of all it explains the context within which the development of freedom of expression has to be perceived. It points to the large variety of choices being made across many different policy areas and their impact on the future shaping of freedom of expression. Furthermore it emphasizes the different types of actors, such as governments, regulators, firms, NGOs and also individuals. In addition to this it highlights the wide range of goals that are pursued by these actors, e.g. national security, privacy, protection of intellectual property and the protection of minors.

Moreover the study shows possible directions for policy. Continuing efforts to counter the digital divide are seen as essential for ensuring freedom of expression as well as the renewing and informing of debates about appropriate regulatory models for the Internet. It is also indispensable to strengthen and clarify global approaches to Internet governance.

Further research might serve to assist policy efforts by providing certain information. Research may monitor worldwide Internet filtering in a more systematic and sustained manner, and it also may track an expanded range of policies and regulatory issues within the mentioned ecology.

Further input:

Dr. Yaman Akdeniz (Associate Professor of Law, Istanbul Bilgi University) is especially concerned about content-related blocking of websites that do not promote illegal content. He states that in first instance governments used law or amended existing laws to try and control the content on the Internet. This is now shifting towards methods such as blocking and filtering. He criticizes that blocking policies often lack

transparency and the responsible administrators lack accountability. Therefore he questions the compatibility of the increasing usage of blocking and the fundamental right of freedom of expression.

Dr. Alan (Director of Policy, Google, USA) affirms the fact that freedom of expression is not an inevitable outcome of the Internet. On the contrary, in his opinion governments today do have greater ability to control opportunities of expression in digital spaces than one had expected. Google itself experienced blocking of its services in several countries. Furthermore he reinforces that the legal environment has a great impact on freedom of expression on the Internet.

He points out that the Internet industry, governments and civil society share responsibility to ensure freedom of expression on the Internet and therefore must cooperate. Especially governments must include freedom of expression in their policy agenda. Finally he emphasizes the significance of transparency with regard to digital restrictions of speech and requests for information, about users being given to industry.

Frank Delajolla (Special Reporter on Expression on the Council of Freedom Rights) expresses his concerns about the usage of filtering technologies, at first being applied to protect certain rights, but always including the risk of being misused by States and governments. He also emphasizes that blocking might entail no further investigation of the actual crime by the State. Moreover he alludes to States which delegate responsibility by setting filtering standards and handing them over to Internet Service Providers who are supposed to carry out the filtering. But it remains unsure whether the ISPs obey these standards.

Andre Cherpovic (State University Moscow, Russian Federation) suggests to divide political and technical aspects of filtering, and to divide the censorship as a political matter and the limitation of the information flow which is allowed in some cases by the European Court of Human Rights. Possible reasons are public security, children's security, the protection of public moral issues etc.

Andrej Unej (UNESCO) points out that the report lacks a reference to the Right to Information Act which has a profound impact in countries with suppression and censorship since it enhances the discussion of freedom of expression.

Stuart Hamilton (Senior Policy Advisor, International Federation of Library Associations) stresses that in some countries public access points such as public libraries suffer from increased filtering and censorship. He considers this to be a major problem because libraries often serve people who cannot afford their own computers and are dependent from public access to information. Since public libraries are publicly funded institutions, they are unable to use methods of circumventing blocking and filtering.

Vladimir Rakmanoff (Legal Advisor of Geneva Institute for the Internet) expresses the need to clarify the relationship between freedom of expression and freedom of connection. People must learn to connect and respect each other's life and privacy at the same time, supported by governments and civil society, to promote this relationship.

John Carr (European NGO Alliance for Child Safety Online) states that child protection is not supposed to provide a cover for States which intend to hide a wider political agenda. Therefore he absolutely supports the notion of transparency, accountability and the potential of judicial review with regard to governmental actions of filtering etc.

Final Conclusion

Regulation is going to be the key issue to look at in terms of its impact on freedom of expression since there exists both the threat of overregulation and under regulation of the Internet. Finding a balanced way of regulation might be the major challenge of the future development of the Internet and its frameworks. The instruments of regulation are controversially discussed, especially in the area of child protection and pornography. In general, deletion is seen as a common goal. But there are different opinions with regard to blocking. Some perceive it as an intermediate mean until the content has been successfully deleted; others consider it being ineffective because the content is still on the Internet and might lead people into temptation to circumvent the barrier. Furthermore blocking is seen as dangerous since it might lead to an infrastructure of random censorship and control of expression and information.

Another instrument that goes even further is disconnection which includes taking away computers and arresting people. This means the severe end of freedom of expression.

WS 84. How to measure communication and media in digital converging era

Report by: Giacomo Mazzone

List of panellists and/or participants:

Chairperson: Ismo SILVO, Director of strategy and development, YLE SPEAKERS: Frédéric Bourassa, OECD - Statistician on Communications indicators. telecommunications, Internet, ICT and trade in ICT goods and services statistics - INTERGOVERNMENTAL ORGANIZATION Alex Shulzycki, EBU Strategic information Service - ITU SECTOR MEMBER André Lange, European Audiovisual Observatory - Council of Europe Prof. Antonio Granado, Universidade Nova Lisboa Prof. Preben Sorensen, president EUROPEAN ALLIANCE OF LISTENERS AND VIEWERS ASSOCIATIONS (Euralva) Jeroen Verspeek (Head of Audience Research Department) and Marije Andela (Internet resp.)NPO,

The objective of the workshop was to raise the awareness of the problems in measuring the impact of the Internet on the audiovisual industry. The development of Broadband has made possible the rapid development of web TV, VoD, catch-up TV, video sharing and non-authorized file sharing, but it is still difficult to provide coherent statistics on the level of equipment, new consumers practices, the importance of new services in media companies' investments and revenues. During the workshop the different

ways to measure media were compared. In the TV world measure is based mainly on audience rates. In the telecom world what counts is the number of subscriptions, the volume of communication, and the turnover of the companies and so on. In the Internet world measure (apart of the turnover of the companies) is web-based, with parameters such as number of visits, reach; time spent in the navigation, or is based on panel of users, analyzing their behaviors.

Some proposals emerged from the debate:

• Public authorities and stakeholders need to define a set of concrete basic rules to implement the transparency of the AV market and create a level playing field.
• Obligations of disclosure should be defined for indicators of general interest.
• Public institutions active in the data collection on the Internet, telecommunications and AV industries should have the means to better coordinate their activities and face the challenge of increased complexity.
• Public bodies have a role in democratizing the access to the strategic information.

The proponents of this workshop (OECD – that provide data on telecom industry-and EAO & EBU that provide data on audiovisual industry) decided to converge their forces in order to tackle the problem of how to best measure the industry of convergence, a problem that is larger than their own single forces. A joint work to identify the relevant indicators of the convergence will be launched soon, open to all stakeholders that have an interest in having this data made publicly available. OECD shared its experience on the development of wireless Broadband indicators and underlined that such a process can be long and should be done with a large consensus among the various stakeholders.

WS 85. Freedom of expression or access to knowledge: are we taking the necessary steps towards an open and inclusive Internet?

List of Panelists and/or moderators:

Moderator: Robert Guerra, Freedom House, Speakers: Anja Kovacs, Centre for Internet and Society, India, Jeremy Malcom. Consumers International, Malaysia, Kurt Opsahl, Electronic Frontier Foundation, Marília Maciel, Center for Technology and Society, Brazil, Johan Hallenborg, Swedish Ministry for Foreign Affairs, Ivo Correa, Google, Brazil, Cornelia Kutterer, Microsoft, Susan Morgan, Global Network Initiative (GNI)

Workshop description:

The workshop was dedicated to the discussion of three main themes: a) civic empowerment online; b) cases of tension between copyright protection and access to knowledge online; c) governmental and private control over information and personal data. Speakers were asked to comment on the status of each of these themes, on the main issues and controversies and on measures to be taken in the regulatory and policy levels.

The aim of the workshop was to come to a more in-depth and more rounded understanding of each of the themes in order to start communicating about these issues with greater clarity and to have an idea of regulatory frameworks, policies and strategies that should be fostered. As this workshop was also identified as one of the feeders of the discussion of the IGF main session on security, openness and privacy, there was a concern to raise concrete issues to be discussed by a larger group of people.

A brief substantive summary and the main events that were raised:

a) On the issue of civic empowerment online:

The debate about civic empowerment and freedom of expression has been reduced to discussing censorship in non-democratic regimes but there are several other issues that have an impact on freedom of expression, such as ensuring network neutrality and fair use provisions on intellectual property laws, and this in democratic and non-democratic countries alike.

Network neutrality, access to knowledge and intellectual property rights affect freedom of expression on the global scale. Network neutrality and fair use provisions are crucial for the right to receive and impart information.

Freedom of expression is endangered not only in non-democratic countries, but in western democracies as well. An example of a concrete threat is the three strikes policies.

The degree of openness of mobile phone platforms has to be taken into account. If the developing world supposedly is going to connect to the Internet mostly through mobiles, it is important that mobiles allow these users access to the same Internet as other devices do. At the moment, among other reasons because mobile phone platforms are proprietary, this is often not the case.

It is important to have a policy infrastructure that allows and encourages free expression and access to knowledge. Two important aspects of this policy infrastructure are:

a) Clarifying the role of intermediaries. Hosts should allow the upload of content without prior review. It is important to protect intermediaries from liability for the acts of their users. Protection from liability fosters the diversity of information (specifically of sensitive information about corruption, for instance). It also allows for innovators online, as small companies can start new businesses without significant resources.
b) Allowing anonymous or pseudo anonymous speech on line, so long as activities are not in violation of the law. This contributes to open communication and robust debate. This can be very valuable in the context of criticism of political figures, of corporations or bureaucrats.

b) Cases of tension between copyright protection and access to knowledge

- There were some important setbacks in terms of access to knowledge in previous years such as: a) the approval of WIPO copyright treaties; b) the negotiation of ACTA, which may have a worldwide negative impact as it can move the standards of IP protection upwards; c) the approval of laws of graduate response or three strikes.
- Copyright flexibilities haven't kept pace with the new fair uses that have emerged in the digital environment and the few flexibilities that are available for consumers are many times not exercised in practice because of DRM limitations and the use of proprietary formats, for instance.
- There is a great deal of attention given by governments, intergovernmental organizations, and corporations to protecting proprietary knowledge, but there is very low priority given to protecting non-proprietary knowledge. Public policies should be put in place on this regard.
- Access to knowledge has lost space in the IGF. It is not being mainstreamed in the main session about access neither in the session about SOP. Its importance needs to be reinstated.
- It is important to make bridges between the themes of access to knowledge and development and to deal in the IGF with correlated themes that are being discussed in other organizations, such as WIPO development agenda.
- There is a campaign to amend the United Nations Consumer Protection Guidelines to include principles on A2K.

c) Governmental and private control over information and personal data:

- There is an increasing pressure from governments on companies around the world to comply with domestic laws that may potentially impact on human rights such as freedom of expression and privacy.
- The Global Network Initiative has made some suggestions for companies to deal with this situation:
  a) companies need to understand and address the human rights risks of their business by quantifying the risks for the products and services that they sell, the technology that they develop, and the markets that they operate in.
  b) If companies face a government demand or request for information they should interpret that request narrowly.
  c) Companies should disclose the policies and procedures they have in place for responding to government demands and give prominent, timely notice to users when content is being removed or blocked.
- Three important processes are taking place concurrently in Europe: provision of the data protection framework which includes privacy in law enforcement locations, implementation report of the data retention directive, and the draft

proposal for European investigation order (which will replace the European evidence warrant and mutual legal assistance agreements).

Conclusions and further comments:

It is high time that the debate on freedom of expression is opened up to allow for more intense scrutiny of developments in democratic societies, whether in the developing or developed world, especially where the role of network neutrality and access to knowledge and IPR are concerned.

Particular importance should be devoted to ensuring that copyright flexibilities are updated to keep pace with new fair uses and that non-proprietary knowledge too receives appropriate protection. Within the context of the IGF, access to knowledge should be reinstated as a topic of crucial importance.

Where the role of business is concerned, the role of intermediaries in particular requires urgent and detailed clarification to ensure that human rights are protected worldwide.

WS 88. Enhancing Transparency in Internet Governance

List of Panelists and or Moderators:

Thomas Dailey (Verizon), Pilar del Castillo Vera (Member of the European Parliament, Spain), Wout De Natris (Cyber Crime Working Party/De Natris Consult)

Bill Graham (The Internet Society), Maria Häll (Ministry of Enterprise, Energy and Communications, Swedish Government), Moderator, Alice Munyua (Communication Commission of Kenya), Ruth Puente (LACNIC), Paul Rendek (RIPE NCC), Moderator, Jonathan Zuck (Association for Competitive Technology), Chris Buckridge (RIPE NCC) served as Remote Moderator for the session.

Over the past five years, the Internet Governance Forum (IGF) has demonstrated the value of open, wide-ranging communication between the many stakeholders who have an interest in Internet governance. Better understanding of the concerns of different stakeholder groups is essential to the creation of effective and sustainable solutions to the increasingly complex issues presented by the global growth of the Internet. This workshop looked at a variety of initiatives from both the private and public sectors to enhance transparency and increase understanding of different stakeholder concerns.

A brief substantive summary and the main issues that were identified:

Moderator Maria Häll noted the Swedish government's close cooperation with industry leaders on Internet governance issues, which includes holding multi-stakeholder meetings to gather ideas and discuss important concepts before different meetings and events that the government attends. Government and the private sector generally share a lot of common goals, but there can be a lack of understanding about differences in

how the two sectors operate. By pro-actively bringing the two sectors together, these problems can be minimized.

Ms. Häll also noted some areas where government would like to see greater transparency from the private sector, such as the information that Internet Service Providers (ISPs) provide to their customers when providing the product access to Internet.

A speaker noted that the private sector needs to know specific details of how government decisions are made, including the information used, how that information is filtered, and the parties involved. This is vital to improving the private sector's ability to work with governments.

Another speaker highlighted the link between transparency and human rights in general, including the rights to information and freedom of expression – he noted that the Swedish government is supporting the UN Special Rapporteur on Freedom of Expression regarding human rights on the Internet, but also noted that there are many different initiatives coming from various governmental stakeholders.

Panelist Jonathan Zuck suggested that transparency is simply a stepping stone to the real goal of participation, and argued that there are three stages of transparency: visibility, understanding, and accountability. We have achieved some level of visibility, but to broaden participation, the Internet governance community still needs to work on improving understanding for all stakeholders, and on creating accountability for the various stakeholder groups. Mr. Zuck suggested that a first step would be to survey all of the processes involved and pare these down to a set of more easily comprehensible processes.

It was noted that these issues must be considered at more than just the ICANN/IGF/global level. It is vital that the messages and developments at this level be carried through to the local level, but differences in regional industrial and political environments can make this difficult.

A speaker argued that the Internet governance process must continue to expand activities like webcasting and remote participation to maximize the range of people participating. However, he noted that it is possible to be "too transparent"; particularly when there is so much information that only a full-time observer can actually understand what is going on.

Bill Graham of the Internet Society (ISOC) agreed that clarity is a key to transparency, and emphasized the importance of strategic communication. He noted that transparency will never be absolute, that it is always an experiment that all stakeholders need to be committed to.

Pilar del Castillo Vera, panelist from the European Parliament, suggested that there remains a need to define many of the concepts in this discussion, including "Internet Governance" itself, "transparency" and "visibility". She noted that a lot of attention is focused on ICANN, which has taken significant steps towards greater transparency in

recent years. There is a need, however, for users at the local and regional level to have discussions on specific issues, and this requires ICANN to produce information that is both accessible and understandable.

To define "Internet governance", Ms. Del Castillo suggested that we need to define who the actors are, what roles they play, and what information they can provide.

A speaker noted that it is important that Internet governance discussions focus on things that actually need fixing; this may not include ICANN, but rather issues like broadband deployment, IPv6, and data protection. It was agreed that it is important to clarify the concept of Internet governance, and that for many people in developing economies, Internet governance is about local issues that relate to their community's cultural, economic, and social development.

Another speaker emphasized the need for a simple and direct definition of Internet governance (an "elevator pitch"). He suggested the concept of a three-legged stool, made up of the technical and standards bodies, the operational organizations (including ICANN and the RIRs), and the IGF, which allows the wider community to have input. He noted that while it is easy to participate in forums like the IETF, not everyone will, and therefore it is our responsibility to act on behalf of others. There was agreement from the floor, and it was suggested that many participants from the government sector still find the open technical community forums very difficult – while there is free discussion within government, government representatives speaking to an external audiences will generally stick very closely to a script. Helping to find compromise between these two ways of working is another key to ensuring clarity and understanding, not just transparency.

It was further noted that even a concept such as "the technical community" is not well defined, and that many "technical" people would not recognize the technical community that participates in Internet Governance Forums.

Alice Munyua noted that from the Kenyan perspective, Internet governance processes are not inclusive enough, that many in government do not understand these processes, and that this confusion has resulted in governments looking to existing institutions like the International Telecommunications Union (ITU). She highlighted her work with the Kenya ICT Action Network, which has helped to bring the different stakeholder groups together. This has had practical effects on Kenyan issues such as 3G network regulation.

Ms. Munyua also noted that the word "governance" discourages many industry stakeholders, who see it as a threat to their business. The East African IGF has been attempting to shift the focus away from intangible "governance" discussions to public policy issues with a local relevance.

Thomas Dailey, panelist from Verizon, provided some perspective from the private sector, noting that the idea of "governance" is preferable to "regulation". In areas such as customer relations, advertising law, copyright issues and technical standards, a

governance approach of multistakeholder discussion and engagement is far preferable to a top-down regulatory approach. He also noted that transparency is vital to helping the private sector understand the goals and perspectives of government and regulators. Industry can then work with government to develop the best strategies for achieving those goals, without causing unintended side-effects.

Regarding unintended side-effects, a speaker noted that the Finnish government's attempt to block child pornography sites had merely served to create a database of child pornography sites. Another speaker noted that Brazilian ISPs do not block content, but have worked with the judicial system to remove criminal content from their networks. Another commenter noted that having the law enforcement sector working closely with industry in a non-transparent way can also be problematic.

Panelist Wout De Natris noted that earlier efforts at law enforcement on the Internet took place on the national level, but that as the Internet grew, the need for a more coordinated, global approach emerged. Such an approach requires the cooperation of stakeholders other than law enforcement and government - a first step is to determine who needs to be part of these discussions, who is affected and who can help. Some progress has already been made through the formation of groups like the Cyber Crime Working Party (CCWP), which brings together part of the LEA and technical communities.

Ruth Puente, panelist from LACNIC, spoke about the work being done by the RIRs in promoting transparency, both in their own communities and through close cooperation and relationships with government, Law Enforcement Agencies (LEAs), regulators, and industry.

A speaker noted that to take full advantage of bottom-up policy development, participants must be as well-informed as possible; otherwise the results simply reflect a small group of well-informed participants.

Another speaker posed a question about how to ensure that the ideas discussed at the IGF actually filter back to the day-to-day operations of different stakeholder groups.

A speaker noted the work being done by the Council of Europe (Coe) and the Association for Progressive Communications (APC) on a framework of principles and guidelines intended to help improve transparency and inclusiveness. This framework was to be discussed in a separate workshop.

The moderators closed the workshop with a quick summary of the ideas discussed, and noted the importance of continuing these discussions, both at the IGF and in smaller, regional forums around the world.

Final summary and main points:

• Transparency is vital to effective cooperation between different stakeholder groups, especially government and industry.

- Transparency is more than just providing information; clarity and understanding are equally important.
- Work still needs to be done on defining many of the concepts in Internet governance, including "Internet governance" itself, the players involved, and the roles they play.
- For many people, Internet governance is about local issues, whether legal, regulatory, economic or industrial.
- While "governance" remains a misunderstood term, many in industry would still prefer it to regulation.
- Transparency is also vital in the area of law enforcement, both to identify all of the players affected and to improve how law enforcement deals with criminal activity on the Internet.
- The discussion begun in this workshop needs to continue, both at future IGF events and in other forums.

WS 93. Internet – an instrument to foster democracy.

Report by: Mr. Marijus Neliupsis

List of panellists and/or participants:

Mr. Bertrand de La Chapelle, Special Envoy for the Information Society, MFA of France Mr. Dan Baer, Deputy Assistant Secretary of State, USA Mr. Marc Berjka, Senior Policy Advisor to the Secretary of Commerce, USA Mr. Dzmitry Karenka, Lecturer at the European Humanities University, Belarus Ms. Aistė Žilinskienė, Chairwoman of the Lithuanian Internet Media Association, Head of Communication, DELFI Newsportal, Lithuania Ms. Dunja Mijatovic, OSCE Representative on Freedom of the Media Ms. Susan Morgan, Director of the Global Network Initiative, UK Mr. Antti Peltomäki, Deputy Director General in DG Information Society and Media, European Commission Ms. Meg Roggensack, Senior Advisor for Business and Human Rights at Human Rights First, USA Ms. Justina Raižytė, vice-president of the Students' Scientific Society in The Institute of International Relations and Political Science (IIRPS) of Vilnius University, Lithuania Mr. Evaldas Ignatavicius, Vice Minister of Foreign Affairs, Lithuania Mr. Philip L. Verveer, United States Coordinator for International Communications & Information Policy

Main ideas of the workshop:

- Internet should be described not only as a tool to promote democratic values; it is also a space where it can be done.
- With its global spread the Internet is becoming a space where different cultures and their influences converge and try to coexist.
- The Internet should not become an arena of struggle for democracy. It should be a platform for communication, cooperation and a tool for development.

- However, authoritarian regimes are increasingly using the Internet to assure control over their societies.
- Initiatives which strengthen societal bonds and empower people for action are welcomed.
- Democracy can be promoted by using non-direct measures such as trade or development cooperation agreements, which would clearly determine the use of financial, technical, humanitarian support to be in line with democratic values.

The workshop discussion was very useful and the ideas raised should be further developed and discussed in the possible future IGF meetings or other international discussion formats.

WS 94. Well Being of Youth and Parenting in the Digital Networks

The workshop on wellbeing and parenting was very well attended, with many participants in the room and by remote participation. The attendants agreed on the legitimacy of associating media education to the issue of Internet governance. As the "digital natives" can also be "digital naives", and the need to be move from mere consumption to more production in order to reach more sustainable and meaningful access to the networks. Some of the major conclusions to promote the wellbeing of young people and the end-users are:

- The need to empower parents, especially with peer to peer parenting, that can be a useful counterpoint to the provision of online filters, as it allows for developing critical thinking.
- The necessity to solicit a proactive attitude from the private sector, not only to protect but also to educate, with the provision of resources such as tools and platforms, with online community guidelines and terms of service that are user-friendly and easy to understand.
- The requirement to encourage policy makers to use and promote research as well as to create awareness campaigns for teachers/parents outreach. The sharing of good practices can also be combined with the provision of toolkits and handbooks that need online as well as offline follow-up and continuity.
- The need to encourage civil society to continue its grassroots mobilisation for literacy, not just with a focus on protection against risk and for safe connections but also for the promotion of all sorts of solutions, such as increasing the role of librarians as media educators, or encouraging children to be key stakeholders in the design of media education tools. The dynamic coalition on media education should move forward in aggregating the good practices already existing and assessing how they could be shared and transferred.
- The necessity to move towards a resolution on media education at a global level (not a convention), to be promoted by Inter-Governmental bodies such as the Council of Europe or/and UNESCO.

In conclusion, the workshop attendants called for continuation of the dialogue in future IGF meetings, and mentioned such possible future themes such as "the internet of things and services", "the use of mobiles to further media education in development".

WS 111. Freedom of expression and Internet intermediaries: Where do we go from here?

Report by: Maja Rakovic and Dixie Hawtin

Moderators: Maja Rakovic, Eddan Katz and Dixie Hawtin (remote moderator)

Workshop Organizers: Lisa Horner (Global Partners and Associates), Cynthia Wong (Center for Democracy and Technology), Lee Hibbard (Council of Europe), Chad Lubelsky (Association for Progressive Communications), Milton Mueller (Internet Governance Project), Thomas Schneider (Swiss Federal Office of Communications), Eddan Katz (Electronic Frontiers Foundation), David Banisar (Article 19), and Pedro Less Andrade (Google).

Panellists: The workshop was an interactive discussion with speakers from the audience rather than panellists. Interventions were made by participants with a diverse array of affiliations including: the UN Special Rapporteur on freedom of opinion and expression, OECD, UNESCO, Council of Europe, European Commission, European Parliament, Australian government, Swiss OFCOM, Google, Teliasonera, Microsoft/Global Network Initiative, Centre for Democracy and Technology, University of Graz, Serbian Data Protection Office, and the Brazilian Getulio Vargas Foundation.

The aims of the workshop were to explore:

- how imposing certain forms of liability on intermediaries can impact on freedom of expression
- what the roles and responsibilities of governments and intermediaries are from a human rights perspective
- what appropriate legal and regulatory frameworks might look like
- what best practices currently exist

Key Messages emerging from the workshop:

- Internet intermediaries play a crucial role in fulfilling the human right to freedom of expression online, providing platforms, tools and channels for people to seek, receive and impart information and ideas.
- A global trend can be identified of Internet intermediaries increasingly being held responsible for content produced by third parties. This is having a chilling effect on the right to freedom of expression through giving intermediaries incentives to remove content rather than face legal proceedings. Steps therefore need to be

taken to protect intermediaries in order to maintain and strengthen the capacity of the Internet to support freedom of expression.

- There is currently a general lack of clarity regarding the liability of intermediaries, exacerbated by inconsistencies in the removal of content and opaque and arbitrary decision making processes. There is a need for greater transparency, legal certainty and due process regarding the roles and responsibilities of intermediaries and the procedures for dealing with illegal content online.

- Rights of due process are currently being abused, as content is being taken offline by private actors without court orders and rights to appeal. Many workshop participants argued for judicial control of disputes over the legality of content online; it should be courts/judges that decide whether content is illegal or not, rather than private companies.

- The workshop highlighted that, under international human rights law, any actions against illegal content must be strictly proportionate to the threat at hand, and narrowly targeted to the specific content in order to avoid unintentionally limiting legal content and expression. Any mechanisms designed to control content must be assessed against these criteria.

- A new regulatory approach needs to be developed which is specific to the Internet, taking into consideration the important role that intermediaries play in fulfilling the human right to freedom of expression. It is not enough to simply apply regulations that govern offline media, or to promote complete deregulation.

- One solution will not fit all. Different approaches are likely to be needed to regulate different forms of illegal content supported by different types of Internet intermediaries. The impact of any regulation on freedom of expression must be a primary consideration.

The workshop began with a brief background to the current debates. Speakers reminded the room about the Internet's key value as the biggest facilitator for the full realization of freedom of expression. Web 2.0 services were pointed to as the primary tools allowing users to engage online, and these services rely enormously on intermediaries including ISPs, search engines, blog hosts, and social networking sites. These services can be used for any type of expression, from celebrity gossip, to political and social speech, to hate speech. The question to be examined in the workshop was: should intermediaries be held legally responsible for the illegal activity of their users?

A speaker from the Oxford Internet Institute outlined the history of the debate over Internet regulation. In the 1970s the dominant thinking was that the Internet should not be regulated. In the early 1980s the Internet was beginning to be used for computer mediated news and information and the debate emerged again over whether the Internet should be considered analogous to the press, to broadcasters or to common carriers. The debate however soon disappeared as some consensus emerged that the Internet should not be regulated so as to maximize innovation and development. This decision was made in the context of the Internet having a relatively

small role in society, however, "now that the Internet is becoming extremely significant and central across all media, governments are now moving back into this area, and they do not have a model for thinking about it." Governments are beginning again to make analogies to press, broadcasters and common carriers, despite the fact that none of these models apply accurately. So, thinking must be directed towards the goal of developing "a new model of Internet regulation, which is not trying to fit the Internet into old models of media regulation, which are entirely inappropriate and will have a chilling effect on freedom of expression."

A participant from the OECD gave an update on the OECD's work with Internet intermediaries. In 2009 they began to look at the economic and social functions of Internet intermediaries, this phase has finished and the resulting report has been published. The second phase has now started and is expected to be completed by March 2011. This phase involves developing a set of good public policy practices with respect to Internet intermediaries. The OECD representative emphasized that one of the key questions from their perspective is to what extent should Internet intermediaries be responsible for third party content. "While many Internet intermediaries do and in many cases are required to take ex-post action to take content off their platforms, there is concern because increasingly, governments are asking them to take ex-ante action, which can be quite costly to them and can lead to many uncertainties because it's never clear exactly what they should be preventing from being put on their platforms." He pointed out that "given that the Internet is becoming key to our economies, creating uncertainty in the marketplace should be of concern to governments". He also agreed with earlier points about intermediary liability raising many difficulties in terms of the right to freedom of expression, the right to privacy, innovation and competition.

Case studies

A Google representative described two examples of intermediary liability that have affected Google recently. The first is the well known criminal case in Italy which found three Google employees guilty of violation of the Italian privacy code. The case concerned a video showing an autistic boy being harassed. The video was against Google's terms and policies and had been removed following receipt of notice. The representative commented that while Google is currently large enough to swallow the impact of this ruling, if it had taken place when Google was a smaller company it could have ruined them. This demonstrates the potential impact of liability on small businesses and on innovation. The representative also referred to cases in Latin America where Google (and other search engines) are being sued in relation to the results which come up when celebrities are searched. Rather than pursuing the website, "they go directly to the search engines".

A representative of Teliasonera (the dominant telephone company, mobile network operator and Internet Service Provider in Sweden and Finland) addressed the room on the Anti-Counterfeiting Trade Agreement (ACTA). He stated that one of the major flaws of the ACTA process was the lack of transparency meaning that discussions about the agreement were based on unconfirmed leaks. The leaked documents suggest

that the agreement will move away from viewing intermediaries as "mere conduits" and thus sheltering them from liability, and moved towards embracing demands from the copyright industry that operators be required to police their networks against copyright infringements. He pointed out that if intermediaries are made liable for content which is uploaded by others but which they disseminate, they will strive to reduce their risk of liability and are likely to overcompensate - removing speech in violation of freedom of expression standards.

Another case study presented was about domain names registrars. Speakers from the Internet Governance Project of the Syracuse University pointed out that intermediary liability has been of great concern for almost 10 years in the domain name industry, particularly in terms of censorship of top level domain names. They spoke about ICANN as an intermediary and had a number of relevant examples: current efforts to censor TLD strings and to vet TLD applicants based on "morality and public order" and/or "cultural, linguistic sensitivities"; efforts to impose trademark protection on registries; the suspension of the domain name seclists.org by the domain name registrar GoDaddy based on its contents; and about efforts to reduce anonymity in China by requiring extensive personal documentation to be provided before a domain name can be registered.

We heard from the executive director of Prachathai, a small non-profit online newspaper from Thailand. She has been arrested for user comments on a forum on her website which infringed *lèse majesté* laws and is facing a criminal trial; she has also been forced to hand over the comment poster's IP address to the authorities.

In Estonia a recent Supreme Court ruling concerning user comments on a media outlet website found that where an intermediary has any direct or indirect economic interest or any kind of control over user content, the intermediary will be held strictly liable for that content.

Library associations are also being subjected to increased liability as intermediaries. In Germany a library was sued when a user used its wireless network to download a movie in contravention of copyright regulation. And the library association in New Zealand had to use many resources to resist being included in "three strikes laws" which would have exposed them to the risk of having their connections cut off.

What principles should we be promoting in terms of intermediary liability?

A speaker from the University of Graz kicked off the discussion on principles with an overview of private sector responsibilities under human rights standards. He outlined the UN "Protect, Respect and Remedy" Framework for Business and Human Rights. Under this framework states have an obligation to protect citizens from human rights abuses, thus the state must protect the citizen from human rights abuses by businesses. Under this framework, businesses have a duty to respect human rights standards. An important standard here is that of "due diligence". Companies have the responsibility of exercising due diligence in avoiding committing human rights violations. Human

Rights Impact Assessments may be an element of this. The third aspect of this framework is to provide victims with access to effective remedies when a human rights violation does take place. The speaker also presented a number of principles which are emerging through his work with the Internet Rights and Principles Dynamic Coalition on a Charter of Human Rights and Principles on the Internet. One was the principle of transparency, that if an intermediary is forced to censor user content they should inform the users about the censorship criteria being used, and specify the laws and regulations which are relied on. Another principle is the principle that intermediaries should not be forced by the policy to provide information about users, or to censor content, but that such actions should only be taken following a court order to do so. And the intermediary should only become liable if it does not comply with such an order.

Another speaker built on these arguments by describing the correct process for fulfilling the right to freedom of expression. First the freedom needs to be established in law and only then can exceptions to that right be addressed. And exceptions are only permissible within precise limitations: the exceptions must be defined as an exception through a legal procedure; the exception must be necessary in a democratic society, for a legitimate aim, and proportionate to that aim.

A participant from the Brazilian Getulio Vargas Foundation presented the Brazilian Civil Rights Framework for the Internet as an example of best practice. The framework was developed using an open format which allowed all actors to engage in the debate. The framework had initially stated that intermediaries could not be held liable for third party content unless they were duly notified about the content and had failed to comply with that notification. This had provoked outrage, especially amongst journalists who felt that the system advocated risked being abused for censorship purposes. Thus the framework was changed so that intermediaries could only be held liable for failing to remove content following receipt of a judicial order to do so. He presented other principles in Brazilian law which have a bearing on intermediary liability. One is the concept of risk, so that if intermediaries engage in activities that create risks (of, for example, violating the rights of others) then they are strictly liable if those risks materialize. The other is the concept of fault, whereby intermediaries cannot be held liable unless there is some evidence of fault, such as of not complying with a judicial order.

The Council of Europe's approach in this field was presented by the chairman of the Committee of experts on new media, who explained the ideas behind the Reykjavik "New Notion of Media" conference and the ongoing Committee of Experts on New Media (MC-NM) work. The project examines changes in the media system and the implications for regulation, with the overall aim of fulfilling freedom of expression. The project is attempting to define a graduated approach towards liability which takes into account the "function that an act or service [has] in the media system". He stated however that a graduated approach needed to be sufficiently definite and comprehensible so as to protect against the risk of uncertainty which contributes to the chilling effect and leaves the media system vulnerable to censorship. He mentioned

Wikileaks as an example of the benefits of a graduated system. The entire Wikileaks website has been blocked in the past to stop the transmission some of its content. He claimed that under a graduated liability claim Wikileaks could have been held liable for the precise content, without closing down the entire website. However, another participant argued that this is not a good example given that the injunction was dissolved speedily once the judge was informed about the implications of blocking the website from a freedom of expression perspective. This speaker pointed out that the injunction resulted from an agreement between the claimant and the domain name service provider to grant the domain name service provider with immunity in a court case – thus this case demonstrates that the risk of legal action can have a severe chilling effect on an intermediary's willingness to host controversial speech.

A participant from the European Parliament presented the Parliament's response to controversial EU Telecoms Package which included, controversially, a sanction of cutting off people's Internet access following repeated accusations of copyright infringement. An amendment was inserted by the Parliament which provided that Internet access could only be restricted following a prior ruling by the judicial authorities. This amendment was inserted on the understanding that access to Internet is a fundamental right. The Council of Ministers twice rejected this amendment, initiating the conciliation process. Finally, the Parliament and Council agreed for softer requirements within a so-called "Internet freedom provision", namely that Internet restrictions can "only be imposed if they are appropriate, proportionate and necessary within a democratic society" and with the possibility of judicial review

A participant presented Pakistani laws in this area arguing that much national policy in the area of filtering and blocking is consistent with the primary international models, and these models can be traced back to mainly European countries. Thus there is a great deal of policy making affecting people around the world which is made without their input, and this is something that should be addressed when thinking about best practice.

A Microsoft representative argued that while in some very extreme cases a company can make a judgment that certain material can (and must) be prohibited under international law (such as child pornography), she argued that in most cases a company will not be in a position to make that judgment. She promoted the Global Network Initiative as a way of assisting intermediaries to fulfill their human rights obligations. Under this initiative Microsoft is currently running employee training programs on a number of topics including how to handle requests for information from governments and the importance of being transparent with users when their access to information is limited.

A participant from the ChildNet Youth IGF group suggested that users should play a bigger role in monitoring online content through systems similar to the reporting system on Youtube.

A participant from Russia pointed out that legislation will not always be enough to protect intermediaries in countries with weak rule of law, and where public opinion is not in line with government thinking. In Russia, surveys indicate that more than half of the population is in favour of strict censorship of the Internet and in favour of strict liability of intermediaries. He stated that regional courts pass decisions holding intermediaries liable despite this not being in line with human rights standards or the Russian Constitution.

A participant suggested an alternative approach of identifying the rights of Internet users, and approaching intermediary liability from that basis. He suggested that this would allow different forms of intermediary liability to develop which would take in different legal systems, as it may be too difficult to agree on one standard global form of liability. He stated that liability must arise when an intermediary has editorial control (as with other forms of media). The idea that one solution couldn't fit all was backed up by other speakers who suggested what was needed was a set of abstract principles that could be implemented in different legal systems.

One participant asserted the merits of self-regulation, holding that intermediaries can play a valid role in protecting human rights through their company guidelines, harassment for example, provided that they are not threatened with liability. However, other participants questioned whether self-regulation is appropriate. In particular many people questioned whether notice and takedown should be promoted as an example of "best practice". A participant from the Serbian Data Commissioners office referred to surveys in the US and the UK which showed that many ISPs simply remove content on receipt of a complaint, and without undertaking any study of the merits of those requests. This demonstrates how easily a notice and takedown system can be abused. She said that there is evidence that the copyright sector is abusing the notice and system takedown system for anti-competitive objectives. An Italian academic pointed out that speech cannot be removed unless it is illegal and that it is impossible for even the best lawyers to determine this, as ultimately the content is not illegal until it has been ruled so by a judge.

Concluding Remarks

The workshop was extremely well attended for the full three hours of its duration, demonstrating the high levels of interest in, and concern about, the issue of intermediary liability amongst a wide range of stakeholders. The Internet offers unprecedented opportunities for fulfilling the human right to freedom of expression, largely due to the role that a range of intermediaries play in facilitating communication and access to information. It is therefore essential that steps are taken to clarify the roles and responsibilities of intermediaries within national and international regulation and law to ensure that excessive or unclear liability does not have a chilling effect on freedom of expression online. The rich knowledge and range of experiences that were presented in this workshop underline the need for this process of defining standards of protection

and responsibility to involve a wide range of stakeholders so that their expertise and experience can be built on. Finally, there was common agreement amongst all stakeholders in the workshop that policy related to Internet intermediaries must have consideration of the implications for human rights at its core.

WS 112. Protecting the User in an on-line world

Report by: Kieren McCarthy

List of panellists and/or participants:

Panelists: Alice Munyua, Communications Regulator, Kenya , Rt Hon Alun Michael Member of UK Parliament, Pillar del Castillo, Spanish Member of the European Parliament, Alexa Raad, CEO, PIR (.org) Moderator: Liesyl Franz, TechAmerica Remote Moderator: Kieren McCarthy

Aim of the workshop:

To look at the issue of international cooperation on the issues of security, privacy and openness, with examples of good and bad practice, lessons learnt and future routes to take.

Main threads/conclusions:

- Cooperation – both between countries and different stakeholders – is the best, and possibly only, pragmatic way forward when dealing with issues of security
- Legislation is not the best solution, but industry needs to recognise that it has to look beyond its own backyard and expand its responsibility if Governments are to be persuaded not to seek solutions through laws
- People need clearer definition of what is, and is not, cybersecurity – the term is used too broadly and different issues are mixed up
- There are hard-learnt lessons from the offline world that can be applied online
- Educating people about issues of security and privacy is crucial

Stand-out comments and examples

- Young people who live and breathe the Internet want to be able to move around without restriction – but with certainty of safety. Assumption that security and privacy are mutually exclusive is not necessarily true, and needs to be revised.
- The issue of industry self-regulation would be more usefully viewed as "cooperative regulation" – where industry works with Government and consumers to arrive at solution, and so avoids the need for legislation (which is slow, can be ineffective and can had unintended consequences), and avoid negative PR (consumer campaigning that undermines broader confidence). Legislation and regulation

would be better used to enable collaboration, break down barriers, and provide relief.

- Cybersecurity needs to be clearly defined so can create ways of dealing with it that are effective. Often, issues involving value judgments are included with actions that are universally disliked. This can "muddy the waters" and make finding solutions harder.
- Cyber criminals are very smart and adaptive. The Internet also moves very fast and with global impact. So the best approach may be preventative, rather than seek to find and punish criminals after the event.
- Awareness campaigns where people are helped to understand the issues and are educated about what to do, as well as how to understand the risks of the Internet is vital if security, privacy and openness are to be dealt with at the broader societal level. Both children and adults need to be educated. Participants exchanged information about existing awareness campaigns and expressed need for teaching digital citizenship in the earliest possible educational curriculum.
- IGF and multistakeholder approach best way to deal with these issues.

Other Comments:

- Legislation can be limited and enabling, but it often isn't. We need business responsibility and Government engagement
- Safety, security, and consumer protection online have mixed ownership among Government, industry, and the users; actors need to pay together
- We need to be practical. Define what we are trying to solve and go for low hanging fruit where we can make a difference in the near term. We need to approach the issue practically, and not try to do everything at once. It is not about forcing the industry, but incentivizing them.
- Need to continue efforts to come to a common understanding of what Cybersecurity and cyber safety are. Continue the multistakeholder approach, and acknowledge that policy making needs to be flexible.

WS 120. PUBLIC SECTOR INFORMATION ONLINE: DEMOCRATIC, SOCIAL AND ECONOMIC POTENTIALS

Report by: Christopher Corbin

List of panellists and/or participants:

Chair: Mr. Christopher CORBIN, United Kingdom Panel Members: Ms. (Professor) Anne FITZGERALD, Australia – Academic Research Mr. Rolf NORDQVIST, Sweden – Private Sector Ms. Waltraut RITTER, Hong Kong (SAR) – Private Sector Mr. Antonio SARAVIA, Spain – Public Sector Mr. Parminder JEET SINGH, India – NGO Moderator: Ms. Keisha TAYLOR

The geographic spread of the panelists combined with the interventions made by members of the audience both in the room and remotely highlighted the differences that exist with respect to the public sector information online policies in the European Union and OECD member countries compared to the majority of Countries that are members of the United Nations. As a result one of the key questions raised during the debate was: How do countries that do not have policies related to the utilization of public sector information commence? One of the conclusions reached related to this question was that there was a need perhaps through United Nations forums such as the IGF and other international forums for the development of a global policy on public sector information online that built upon the policies developed within Europe and the OECD together with the implementation experiences.

The debate also highlighted that where public information online policies existed in countries and regions across the world it was apparent that technology was not holding back the full potential of the policies but rather human and organizational behavior and as such the focus needed to be on how these cultural issues could be addressed such that the culture was transformed from an introspective sector based benefit perspective to a perspective that provided benefit to the whole of society. By doing so a number of global issues could be addressed and those cited by the panel members included, the societies involvement in managing the worlds natural resources and global warming to name but two examples.

The interventions from the panel members brought out a range of good examples that demonstrated the potential that can be achieved from adopting and implementing public sector information online policies. The examples showed that this provides local content that engages and is immediately relevant to civil society that is in the society's natural languages. However it was acknowledged that once this has been achieved the issue of bridging across the language barriers was one of the next issues to be considered and addressed. The examples also brought out the role of intermediaries such as non-Governmental organizations, as not all members of society may have access to or able to use online information services. The examples also highlighted that the fears that people and organizations may have do not necessarily materialize when these policies are implemented.

The debate also raised the role of licenses used by the public sector organizations where they existed and the need to move towards a unified simple global license that supported both human and machine understanding. Creative Commons Licenses were seen as one of the possible steps towards simplifying existing licensing frameworks that would facilitate the use of public sector information particularly in a cross-border context.

Overall the workshop debate reached a consensus view that there was a need to continue joining efforts to resolve issues such as:

• The interoperability of systems, frameworks and formats for public sector information;

- Improving transparency on the conditions for access and the use of public sector information;
- Developing an adequate system of indicators to measure the benefits achieved from public sector information policies;
- Providing guidance through open and transparent dialogue with society to make policies more effective with respect to opening up public sector information;
- Releasing a broader range of public sector information, based on experience and user demand;
- The intensification of the dissemination and awareness;
- The political implication of leaders and public sector managers, with special attention to the local level.

The workshop concluded that there was a growing conviction, globally, about the benefits of the democratic, social and economic effects of the release and re-use of public sector data and information and that there was a clear interest on the part of participating organizations, both public and private as well as civil society, to continue working to identify and resolve the social, economic, technological and organizational issues that still hinder the re-use of public sector information from the local right through to the global level.

The conclusion was that there was a need perhaps through United Nations forums such as the IGF and other international forums for the development of a global policy on public sector information online that built upon the policies developed within Europe and the OECD together with the implementation experiences.

WS 123. Legal Aspects of Internet Governance: International Cooperation on Cyber-security

List of Panellists and/or participants:

Vint Cerf, VP & Chief Internet Evangelist at Google opened the session with a speech. Hank Judy, Of Counsel at law firm K&L Gates, gave an overview of the Workshop's Background Paper (attached to this Report). The Workshop then moved to get the perspective of regional organizations. Ivalo Kalfin, Member of European Parliament, gave a European perspective. Rolf Weber, Professor of Law at the University of Zurich and representing the Council of Europe (CoE), gave a perspective current and future work of the CoE. This was followed by Alexander Seger, Head of the Economic Crime at CoE, who focused on the CoE's Budapest Convention. The Workshop then moved to hear the perspectives from different countries of their experiences and observations. Jayantha Fernando, Director/Legal Advisor at ICTA Sri Lanka, started off, followed by Erick Iriarte, Partner at law firm Iriarte & Associates in Peru. Andrew McLaughlin, Deputy U.S. Chief Technology Officer of the Executive Office of the President US concluded the country section. The Workshop then heard the perspectives of industry and civil society. This part of the discussion was opened by Mike Silber, Member of the Board of ICANN. Bill Smith, Technology Evangelist at PayPal then spoke. John

Morris, Director at the Center for Democracy and Technology concluded the Workshop. The Workshop was moderated by David Satola, Senior Counsel, at the World Bank.

Main Themes

This Workshop was about identifying opportunities for enhanced cooperation on cross-border legal issues affecting cyber-security. Of course there are numerous examples of existing cooperative initiatives, and CoE's Budapest Convention is but one example. However, the purpose of the workshop was to attempt to view these opportunities for enhanced cooperation through a different lens.

In his keynote address, Mr. Cerf provided the citizen-centric, volunteer fire brigade as an analogy for one way in which to address cyber-security issues. When a house is on fire, anyone can call the fire department, and the fire department will do what it can to put out the fire, contain the fire and minimized fire damage to the house. This analogy of loss-minimization (in addition to prevention and detection) was carried throughout the Workshop. National CERT's play this role in part, and achieve an international cooperation through FIRST, for example. The analogy provided a useful foil around which the Workshop was galvanized.

A disaggregated and deconstructed approach better understand Cyber-security.

The first cross-cutting theme that emerged during the Workshop was that in order to better understand issues of cyber-security, and therefore our ability to respond to them, requires us to deconstruct and disaggregate the issues. In its most obvious form, cyber-security must be distinguished from cybercrime and cyber-war. All three may share some common elements and even overlap in the fashion of a Venn diagram, but differences among them also exist. It was noted in this regard that even the term "cyber-war" can set the wrong tone for the debate; and that the term cyber-crime, in itself, could de-escalated a particular threat, without actually changing the nature of the threat. Participants also expressed reluctance to characterize uses of force involving use of ICTs as acts of cyber-war if only because of the problems of attribution, that is, the ability of initiators to disguise the origins of the use of force. In general they preferred to apply a combination of defensive actions, diplomacy and resort of criminal processes. They nevertheless recognized the reality of cyber-war preparations, defences and past actions. In some cases this disaggregation is done in a layered fashion. In that vein, network security (the infrastructure layer) could be distinguished from protocol security (the software layer) and from applications security (the applications layer). Cyber threats can be cyber-attacks, but can also be the result of "mistakes" or even natural disasters. Similarly responses can be viewed as preventative (ex ante) or loss-minimization (ex post). Even among ex post responses, there are at least two types, emergency fixes (loss prevention) and forensic analysis. New paradigms in international law such as shared responsibilities of states to ensure the protection of critical internet resources should be discussed. One size does not fit all.

Vulnerabilities

The Workshop discussed a number of causes of vulnerabilities. Among these were:

- *Dissonance in national approaches to cyber-security*. Different countries, even members of regional organizations, can take different approaches to the concept of cyber-security in terms of the national policies, laws and implementation. This can lead to a lack of effective coordination. It was also observed that this dissonance resulted in part because of a lack of multi-stakeholder participation in both policy making and legislation.
- *Policy and implementation incoherence*. Even in countries there can be a disconnect between upstream policies promoting an "e"-agenda and the downstream protections of rights and property.
- *Outdated legal architecture that doesn't fit cyberspace well*. Cyber-security is a 21st Century problem that requires 21st Century responses. However, in the legal sphere, many concepts simply do not apply, or cause friction when applied. For example, the lack of consensus on the fundamental and related issues of jurisdiction and sovereignty make it difficult to effectively cross borders to address cross-border incidents. Jurisdiction is used in the sense of the legal capacity to make laws applicable to particular persons and events within a territory and to compel legal process and enforce laws with respect to such persons. Sovereignty is used in the broader sense of the total independent power of a nation state. A nation state may view its sovereignty as being impaired if another nation state may exercise jurisdiction within its borders. However, nation states may view their sovereignty as being enhanced if by mutual agreement they obtain jurisdiction within each others' territories. In order for the rule of law to prevail the inherent cross-border nature of cyberspace seems to require such agreements for the mutual expansion of jurisdiction.
- *Buggy code, bad practice*. There are a number of easily identifiable problems that could be addressed. These include issues with software code, human error and behavioral problems.
- *Existing tools and instruments not fully applied and partial implementation of existing agreements*. Where there are regional or international instruments, they are many times not fully applied or are partially implemented

Balance/proportionality issues

Accordingly, a number of balances emerged. Perhaps the most basic balance is that between ensuring security on the one hand and protection of rights. In this sense, cyber-security should not be used a pretext for restricting rights. Another example is that when dealing with cyber-security incidents, one needs to address both prevention as well as repair and damage limitation.

Finally, there is a balance to be struck (or a trade-off recognized) between legitimate efforts by governments to promote security through application of laws and legal process and the potentially negative impact this may have on promotion of innovation and competition.

Findings and Recommendations

Extracting from the discussion of the Workshop, following are some of the key outcomes and recommendations for enhanced cooperation going forward:

- *Layered approach*. Cyber-security should be approached in a layered fashion.
- *Resilience vs. perimeter security*. Concepts of security based on "securing the perimeter" applicable in past decades to closed systems should be reviewed in favor of concepts of surety based on resilience (flexibility of response to type of threat and ability to recover and adjust more quickly to changing threat environments).
- *Identify incentives.* A range of incentives (including economic and behavioral incentives) exist that should be (i) understood and (ii) employed in the design of security response systems. This could even include identifying innovative incentives to change behavior of users, such as an insurance market, that could accurately price the risk of security.
- *Fully implement existing instruments.* It was argued that many tools, instruments and good practices are already available to help societies cope with cybercrime, including the Budapest Convention.
- *Increase awareness and build capacity*, including especially of policy makers, legislators, regulators and law enforcement personnel.
- *Ensure cyber-security needs are adequately resourced.* (see above)
- *Create cyber-security accountability*. In some countries an accountable cyber-security "czar" is named, but in others, or in systems with diffuse accountability, lack of clear identification of responsibility can lead to vulnerability.
- *Law Reform*. Here there were three areas meriting mentioning: first is that in developing countries, a robust, comprehensive law reform component should be included in development projects; second, national laws should drafted with a view towards achieving, if not harmonization, then interoperability across borders; and third, international law responses can provide for improvements of the functioning, stability, and resilience of the Internet.
- *Sovereignty issues may require re-examining existing concepts of the "State"*
- *Use of PPP models and approaches*. Recognizing that no country or entity can address cyber-security alone, governments should be encouraged to work with industry and civil society in addressing cyber-security needs. Indeed, the private sector, since it owns much of the infrastructure and since it has resources and incentives for security, should be actively engaged, perhaps through a variety of public-private partnership models.

WS 134. Child Online Protection in northern Europe - Methods and Approaches for Educating your Children Online

Report by: Erika Hersaeus

List of panelists and/or participants:

Moderator: Anna Lauttamus-Kauppila (the Finnish Communications Regulatory Authority, FICORA) Panellists: Heli Alanko (Project Coordinator, FICORA), Susanne Boe (Head of secretariat of the Danish Media Council for Children and Young People, Line Ugland Nyseth (Project Coordinator, the Norwegian Post and Telecommunications Authority), Ann-Katrin Agebäck (Head of the Swedish Media Council for Children and Young people), Maria Soares Lindberg (CEO at the Web Coaches), Patrik Hiselius (TeliaSonera), Gudni Olgeirsson (Expert and Senior Adviser at the Icelandic Ministry of Education, Science and Culture)

The workshop provided a multi-stakeholder perspective on work regarding Child Online Protection in the Nordic countries. The panelists represented five different countries, Governmental as non-Governmental organizations (NGO) and the industry. There were also youths contributing and taking part of the debate through a remote youth panel situated in Stockholm. The aim of the workshop was to share concrete successful initiatives on Child Online Protection (easy to copy) from each national campaign, share and debate on methods and approaches for empowering adults, teachers and children and young people in this regard, illustrate public-private partnership models, share information on challenges. Lastly, to share common messages on COP. Between the national orientations on successful projects on COP, short movies - available over the Internet - of each country were shown, illustrating positive occurrences as well as pitfalls, by being on the Internet.

After the orientations, there was a panel debate amongst panelists and the remote youth panel in Stockholm, debating on methods and approaches for empowering/ educating children and young people. The project coordinator of the Finnish national awareness campaign, working for the Finnish Communications Regulations Authority, shared experience on a national Online booking System where comprehensive schools anywhere in Finland can book IT-experts, giving a seminar on IT-security and safe usage of the Internet at schools.

The head of secretariat of the Danish Media Council informed about the Danish National web portal, providing educational material about the Internet, smart phones, social media, web ethics, etc. The portal addresses teachers of primary and secondary school, and the educational materials are targeted the students.

An expert and advisor from the Ministry of Education, Science and Culture in Iceland informed about the Icelandic National multi-stakeholder partnership for COP and about their key messages to young people and children in this regard. For more details about the initiative, please see http://www.saft.is/english

The project coordinator of the Norwegian awareness campaign Nettvett.no, working at the Norwegian Post and Telecommunications Authority (NPT), informed about the Norwegian approach to raise awareness and knowledge on COP amongst children and youths. NPT has conducted presentations on awareness on COP, social media, use of mobile telephones, online bullying, and harassment etc. for children, youths, parents and teachers. NPT carries out school visits and cooperates with the University of Adder. NPT provides the university with information and expertise concerning awareness into the curriculum for the students.

Three representatives of the Swedish National awareness campaign shared information on successful national COP initiatives, knowledge and work in the field. The director of the Swedish Media Council for Children and Young People informed about a new play touring around in Sweden at schools performing for children of the ages of 9-12. The play is about "Webba and Wibe". It illustrates possible challenges that might happen being on the Internet.

The CEO of the Swedish NGO the Web Coaches informed about their activities for empowering children and young people on the Internet. The Web Coaches is a team of adults (psychologists amongst others) being present on the Internet, especially on popular social foras for young people like the MSN, coaching young people and children in any matter that occur to them.

A senior advisor on Public Affairs from the Swedish telecom operator TeliaSonera informed about the Swedish National awareness campaign on COP, Surfa Lugnt (http://www.surfalugnt.se), the campaign's key messages to adults, teachers and children and young people and the objectives of the campaign and how TeliaSonera addresses these issue.

Conclusions and common messages of the Nordic organizations

- The Internet, and all the services coming with it, is beautiful! (i.e. a positive approach)
- Public-private partnerships are fruitful and powerful
- Empower children and parents! - You CAN and should!
- Just as in the physical world, apply "Good citizenship" on the Internet.
- Media Literacy; less restrictions, more engagement = more awareness and better skills

Results:

The arrangement of the workshop resulted in organizations looking into the possibility of arranging a Nordic IGF, taking into account the youths' participation on place to a greater extent, having their views and reflections regarding the Internet.

WS 156. WHY WE NEED AN OPEN WEB: OPEN KNOWLEDGE GOVERNANCE FOR INNOVATION

Report by: Iryna Kuchma

List of panellists and/or participants:

Stuart Hamilton, IFLA, Panel Moderator Teresa Hackett, EIFL, Panelists: Emilija Banionyte, Lithuanian Research Library Consortium (LMBA), Eddan Katz, Electronic Frontier Foundation (EFF), Iryna Kuchma, EIFL, Julia Mortyakova, The Right to Research Coalition, SPARC, John Wilbanks, Creative Commons

The workshop discussed the concept of openness for maximizing creation and sharing of knowledge in the networked digital environment. The workshop aimed to provide a holistic, ecosystem-based approach – called "knowledge governance" – to the topics it will focus on, by presenting a structured understanding of the layers Internet governance needs to impact: hardware, software, content and community. The open web – open source, open standards, open access, open educational resources, open data and open science, and the interoperability it allows, has a significant impact on the advancement of sustainable social and economic development, and innovation. The workshop included the viewpoints of policy makers, civil society groups, students and librarians advocating for an open web. It also discussed the role of libraries as stakeholders in Internet governance and the necessary role they play in ensuring access to knowledge. Libraries are one of the most vocal advocates for open access and access to knowledge and they are uniquely positioned to reach a large constituency of the public through the services that they provide to their communities. The speakers addressed the many facets of the open web, including open standards, open source, open access, open data, open science, and open educational resources, and the role of libraries on the open web. The workshop provided recommendations to the national Governments and international organizations.

The panel discussed the concept of openness from a development perspective with an emphasis on library's work in developing countries however not neglecting the key role that libraries play in all communities around the world and the diverse user groups they serve. Open architecture of the Internet allowed unexpected innovations (World Wide Web and Wikipedia are two examples). The open web concept – the idea of permissiveness, standards, interoperability embedded in architecture has begun to form knowledge and not only technology. But we need not only web and internet, we also need document standards and legal tools facilitating remixing of knowledge and content (e.g. Creative Commons licences). The web has emerged as a critical piece of social infrastructure and libraries became one of the first access points to internet, digital resources and knowledge. That's why it is so important for libraries to participate at the Internet Governance Forum (IGF). We have seen impact of openness

on education, impressive development of repositories of open education resources that can be used in classrooms all over the world. The advent of the open web over the last ten years has been followed by the advent of the open access movement promoting the idea that all the world's scholarship should be available via the Internet and the web – freely available on the public Internet, permitting any user to read, download, copy, distribute, print, search, crawl for indexing, pass data to software or to use for any lawful purpose. It helps to bring interoperability (that we have for computers and for documents) to the content of these documents, to a web of data (e.g. to a web where the human genome is available anywhere in the world). It is also important to understand the need for new stakeholders that can step in and help us deal with the web of data, get the benefit out of that, we get out of the web documents. We need to engage with new stakeholders and bring those stakeholders into the policy debates about public Internet and open web. Attached is detailed summary of the workshop, including contributions by the participants.

Our workshop concluded with the following recommendations:

- Require open access to publicly funded scientific research.
- Commit to public domain status for publicly funded data.
- Start tracking and rewarding researchers who share their research results in open articles, and share open data, materials, and tools.
- Increase funding for library resources and new training for librarians
- Commit to the advancement and increased usage of open educational resources
- At the international level, the World Intellectual Property should advance discussion on copyright exceptions and limitations
- Consider a patent policy that does not hinder the process of open innovations.
- Encourage researchers and students to publish in open access journals, and self-archive in open access repositories.
- Encourage libraries to set up open access repositories, help researchers and students to self-archive, help to publish open access journals and create open educational resources, help in data curation and sharing.

WS 172. Public-private cooperation on Internet safety/cybercrime

Report by: Sophie Veraart, ECP-EPN

List of panelists and/ or participants:

Moderator: Liesyl Franz, Vice President for Information Security and Global Public Policy, TechAmerica, Remote moderator: Sophie Veraart, ECP-EPN, Dutch Platform for the Information Society Information, Alun Michael, British Labour Co-operative politician and Member of Parliament, Annemarie Zielstra, NICC, Mrs. Rusudan Mikhelidze, Deputy head of analytical department, Head of research and analysis unit, Ministry of Justice, Georgia, Marietje Schaake, European Parliament, Thomas de Haan, Ministry of

Economic Affairs, The Netherlands, Roelof Meijer, SIDN, Jochem de Ruig,CFO of RIPE, NCC, Laurent Masson, Microsoft, Wout de Natris, Chair CCWP, De Natris Consult.

In workshop 172 we discussed the importance of public private cooperation in the fight against cybercrime illustrated by good practices from the UK, The Netherlands and the most recent model from Georgia.

- It is important that public en private parties work together on solutions to combat and prevent cybercrime through cooperation and self-regulation, thus avoiding the need of new regulation, which seldom solves the problems.
- The experience shows that starting small and learning by doing works best. Do not try to solve everything at once but see what is working and what not. Think big, act small. During the debates some issues were raised, which are useful for further discussion
    - Everyone sees the need for public private cooperation in the fight against cybercrime. But how does this public private cooperation refer to the democratic oversight? How is dealt with transparency, accountability and democracy?
    - ISP´s have engaged in the fight of cybercrime but sometimes authorities tend to stretch the definition of what is illegal to what is ´unwanted´
    - It is important to all stakeholders to invest in building trust and demonstrate added value in the cooperation between all parties involved such as industry, Government, parliament and civil society

Conclusion:

It is important that public en private parties work together on solutions to combat and prevent cybercrime through cooperation and self-regulation, thus avoiding the need of new regulation, which seldom solves the problems.

Report of the ICC Open Forum on Data Protection and Privacy

Report by: Elizabeth Thomas-Raynaud

List of panelists and/or participants:

Andrius Iskauskas, Chair ICC Lithuania's EBITT Commission, Member of the Board, ICC Lithuania , Moderator: Ellen Blackler, Executive Director, Public Policy, AT&T, Christopher Kuner, Partner, Hunton and Williams, Chair, ICC Task Force on Privacy and Protection of Personal Data , Joseph Alhadeff, VP for Global Public Policy and Chief Privacy Officer, Oracle Corporation; Vice Chair, ICC EBITT Commission, Zahid Jamil, Barrister-at-law, Jamil and Jamil, Chair ICC Pakistan's EBITT Committee and Member of the Executive Board, ICC Pakistan

A brief substantive summary and the main issues that were identified:

Andrius Iskauskas, Chair ICC Lithuania's EBITT Commission, Member of the Board, ICC Lithuania, opened the Forum and welcomed the participants. He spoke about ICC's work developing global data protection and privacy policy and practice tools and their utility from a Lithuanian perspective.

Ellen Blackler, the moderator, introduced the International Chamber of Commerce (ICC) and the panelists setting the stage on how ICC's global, cross-sectoral activities assist policymakers and business from around the world to better safeguard personal data of users by streamlining processes and facilitating compliance.

Christopher Kuner, Partner, Hunton and Williams, Chair, ICC Task Force on Privacy and Protection of Personal Data introduced the work of this international body of business experts. He noted that data protection is not a niche issue but rather a critical business concern that ICC has been actively addressing for over 30 years. Through the task force which brings together global experts from companies around the world ICC develops policy guidance for regulators and practical tools to help companies best streamline efforts while ensuring appropriate safeguards of personal data. He mentioned that today there are 60 countries with some form of regulation on transborder data flows so the complexity of the issue is increasing not the contrary. Mr. Kuner stressed that data protection is recognized as an important enabler for e-commerce so business works together through the task force to ensure the appropriate protections are in place and sufficiently streamlined to improve compliance allowing business to thrive and grow while protecting personal data of individuals.

Mr. Kuner highlighted some of the task force's successful activities including the proposal of a set of contract clauses for EU data transfers to third party countries and their approval by the data protection authority working group and then the European Commission. Similar efforts were made to streamline the application process for binding corporate rules that resulted in an EU adopted version of IRC's proposed checklist and allowed companies to use the same template for multiple countries within Europe. He mentioned work identifying conflicts in law with data protection requirements, as in the case of the BASEL II regulations for financial institutions. He noted the task force also follows and inputs into policy developments through intergovernmental activities such as Council of Europe, OECD and APEC.

Joseph Alhadeff, VP for Global Public Policy and Chief Privacy Officer, Oracle Corporation; Vice Chair, ICC EBITT Commission described the state of privacy as one in flux. He stressed the importance of business coordination to advise drafters of the many regulatory reviews or initiatives to avoid unintended consequences, contradictory laws or overly burdensome procedures unable to improve outcomes.

Initiatives noted include the EU Directive under review, Council of Europe reviewing Convention 108, APEC advancing its work on cross border data transfers and the US FTC exploring new policy options. He stressed that business has to be part of the

dialogue and that it cannot only be seen as compliance issue but rather an enabler and differentiator for companies in earning trust and loyalty of their consumers Mr. Alhadeff presented the ICC Privacy toolkit and outlined the contents and how it offers business and regulators guidance in understanding privacy and the different elements in ensuring appropriate mechanisms and enforcement. He noted that there is significant potential for administrative challenges and overly burdensome approaches to fall short of their aims. While well-intended, some measures are not as productive in delivering real outcomes as they could be.

He described the move to enhance cooperation in the international community to move towards more harmonized approaches and accountability. Given the global nature of the Internet and the rise of ICT devices and services such as RFID, cloud computing, this international view to data protection is essential and must be considered in national application of regulation.

He shared his view that principles were in place to cover new considerations but that work needed to be done in better understanding the application of these. Using the example of notice and while the need to apply remains for all technologies the manifestation of that application for technologies such as RFID tags needs to be considered. ICC has an important role in bringing together business views on these topics and assisting policymakers in identifying these and considering how to benefit from technological change while ensuring the protection and appropriate use of personal data.

Zahid Jamil, Barrister-at-law, Jamil and Jamil, Chair ICC Pakistan's EBITT Committee and Member of the Executive Board, ICC Pakistan described his experience working with the ICC global commission to inform and advise his government to help them avoid unintended errors in taking data protection law from one country and 70% of its outsourcing market. Mr. Jamil's participation in the ICC global discussions on data protection allowed him to consult with EU and US experts to identify alternative measures to allow Pakistan to develop a law that ensured safeguards to meet the level required for EU data processing through model contracts without impairing their ability to retain business with other countries. Both the ability to consult with peers from other countries and the ability for the IT minister to speak to international experts allowed for rapid improvement of the proposals and adoption of legislation best suited to Pakistan's circumstance.

Conclusions and further comments:

This is a crucial time for privacy with many intergovernmental bodies; they are reviewing existing frameworks that were drafted before the mass expansion of Internet: EU directive, OECD guidelines and Council of Europe. Stakeholders' collective efforts are needed to ensure this evaluation of current regulation considers the ubiquitous nature of global transfers and applies principles in a way that can increase confidence in e-commerce, address the challenges yet avoid adding complexity or conflicting laws that result in burdensome administration unable to deliver outcomes desired.

Participants discussed the increasing interest, particularly in the developing world of mobile telephony issues including marketing and location- based services. ICC noted it would be looking at these policy questions and aiming to work more with developing countries to identify ways to put data protection measures in place that can energize the economic potential of Internet and ICT services.

INTERNET GOVERNANCE FOR DEVELOPMENT

16 September 2010

Chairman:

- Vyatautas Grubliauskas, Member of Parliament, Chairman of the Lithuanian Information Society Development, Vilnius

Moderator:

- Nitin Desai, Special Advisor to the Secretary-General for Internet Governance

Floor Moderators:

- Christine Arida, Director of Telecom Planning and Services, National Telecom Regulatory Authority of Egypt, Cairo
- Ayesha Hassan, Senior Policy Manager, E-Business, IT and Telecoms, Executive in charge of ICT Policy, International Chamber of Commerce (ICC), Paris

Remote Moderation:

- Olivier Crépin-Leblond, Founder, Global Information Highway, London

Panellists:

- Everton Frank Lucero, Counsellor for Science, Technology and Environment, Embassy of Brazil to the United States, Washington D.C.
- Ndeye Maimouna Diop-Diagne, Director of ICT, Ministry of Posts, Telecommunications and ICT of Senegal, Dakar
- Zahid Jamil, Senior Partner and Barrister-at-Law, Jamil & Jamil, Karachi
- Raúl Echeberria, Executive Director, CEO, Latin America and Caribbean Internet Addresses Registry (LACNIC), Montevideo
- William Drake, Senior Associate, Centre for International Governance, Graduate Institute of International and Development Studies, Geneva
- Anriette Esterhuysen, Executive Director, Association for Progressive Communications, Melville

Vytautas Grubliaskas:

As all of us already know, Internet Governance for Development has been a cross cutting theme at the IGF since the first meeting in Athens in 2006. In my opinion, for the past two years, a series of really successful workshops have brought out the notion that development should be more central to the IGF, and that the relationship between Internet Governance and development has not been widely explored. Our session this afternoon is a result of this need. Our panelists will explore links between local Internet Governance, mechanisms and development. We ask them to consider the institutional arrangements for Internet Governance, and the resulting policy procedures and policy outcomes generated at the global level and how to relate to development consensus. It is my understanding that in most Internet Governance discussions outside of the IGF, the topic of development is rarely covered and the question of the relevance of policies to development is rarely asked. We shall begin our discussion by asking the question: What does Internet Governance for Development really mean? Furthermore, we shall also consider the regulatory issues and investment relevant to the development. Our overall goal should be to consider how to take the agenda for Internet Governance for Development forward in the IGF and other international settings. The IGF must be relevant to the needs of developing countries.

Nitin Desai:

I think the intention behind this session is to see if there are issues where Internet Governance impinges on development, which we have not addressed adequately either in the IGF or in the various Forums that are involved in the management of the global Internet. We should look here at institutional processes as well as the substantial policy outputs of the Governmental arrangements and ask ourselves the question: Is there something we can do there which would enhance the possibilities of the Internet being supportive of development, particularly in the developing countries? As you know, four questions have been posed: What do we really mean by Internet Governance for Development? What do we have in mind when we say we want to talk about Internet Governance for Development? And let's not forget the word Governance is there, we're not talking about Internet for development, what we're really concerned with is: Are there issues in the way in which Internet Governance is managed which does have an impact on the possibility of development?

The second question that will come up from that is to try and give examples of specific Governance issues that may have relevance, and there are many which have been listed in that including the Governance of names and numbers, the technical standardization, and issues about security, international interconnection, intellectual property, and transnational consumer protection. I hope people will come up with what they had in mind when they wanted to discuss Internet Governance and development in more specific terms. Third is a slightly different question, and that question is that after all, the Internet is a global infrastructure, and everybody who uses it in one form or another

has to participate in its management and Governance. How then should developing and other countries organize and manage their national level engagement in global Internet governance? This is an issue that many here may have views on, particularly people from developing countries. Having done this, having had a better sense of what we mean by Internet Governance for Development, hearing some examples and issues of how developing countries and other countries can connect with global institutional arrangements, we come to our final and fourth question, which is, given all of this, how can we take this agenda of Internet Governance for Development forward in the IGF and in other international meetings?

Ndeye Diop-Diagne:

The question of Internet Governance for Development in my opinion should be seen from the viewpoint of sustainable development. If we look at the usual definition of durable development, that meets the needs for giving capacity for future generations to respond to their own needs and sustainable development should meet three essential needs: Social equity, preserving the environment, and economic efficacy. In order to see the impact of good Internet Governance, I can give you just one example, and that is the example of my country, with which on the 6th of August last, underwent a complete breakdown in services of the operator. That break in service led to national losses of more than 50 billion CFA Francs, 60 billion U.S. dollars. If we base ourselves on that observation, the question which arises is: In the context of Governance, how does Internet Governance currently affect economic activities, in particular generating employment and wealth? The second question we may ask ourselves is: What should be improved in the current Governance to create optimum conditions for the sustainable development of nations? Since 2003, the first phase of the summit enabled us to conclude that Governance was related to a number of questions, particularly names and numbers. So how can the decisions taken in connection with a broader series of questions have a lasting impact on the sustainable development of nations? I wish to remind you here that 80% of Internet Governance aspects are local aspects, national aspects. Only 20% are dealt with internationally.

That is why I believe that this debate concerning Internet Governance for Development will enable us to reframe our national policies and enable us to ask the right questions in the right places. I think in this international forum, we are not truly going to be able to solve national development issues, but we are, nevertheless, going to ask the right questions, and then enable Governments to apply themselves better to find out how to include these Governance aspects in their development policies.

Everton Frask Lucero:

On your first question I'd like to reply with another question which I believe embodies the answer to what is the meaning of IG4D. The question is: Is the developing world adequately represented and heard at the global mechanisms in which decisions are taken to shape the use and the future of the Internet? Do the existing processes correspond to the share that developing countries have in terms of Internet users and Internet

growth in terms of traffic flow, domain names and content production? Everybody knows that the demography of the Internet is changing. The Internet is growing much faster in the developing world, and it has become one of the most important tools for development policies in the developing world. The economy of the Internet is changing as well. Those institutions that were created in a different time before this phenomenon, they need to respond to it, they need to evolve as well, in order to take into account the new configuration of how the Internet is used and is distributed in the world: How can Internet Governance mechanisms impact the life of that woman who's living in a rural area in a developing country? She's probably raising her kids, does not speak English, does not have access to the Internet and perhaps can barely express herself in writing in her own language. The seriousness of this question requires us to keep it floating perhaps for some time for us to analyze it and be clear about what is the effect of all of the decisions that are taken be it in ICANN or IETF or at the ECOSOC or CSTD, or whatever mechanism that is related to Internet, and those who are taking those decisions, are they aware that they may make a difference to the life of that poor woman? This is how I would frame the debate.

Nitin Desai:

Three basic things have come across. The Internet is clearly crucial for development and therefore Internet Governance matters for development. Two, the demographics of the Internet are changing. It involves the developing countries seeing that their voice is heard in the way in which Internet is managed and governed is one of the key issues that have been brought up. And the third issue that has come up is putting Internet Governance for Development in the context of the impact that it would have on the lives of ordinary people.

Zahid Jamil:

I'd take a slightly different approach to the topic of IG4D. One of the things we were conscious of was that this should not become ICT for development but rather more related to the national and international impacts of Governance as related to Internet. Now, how does development, for instance, solve or work at developing new innovations to impact development not only in developing countries, but also in developed countries? It maybe broadens the definition a little more than just looking at developing countries. For instance let's look at wireless Broadband which is an issue not only for developing but developed countries also. Maybe we should look at IG4D as developing the Internet and the issues surrounding that, and we must not forget the developing countries, to make sure that they are a part of the process, that they're also being served, but we must look at slightly broader issues as well. Things like developing a greater enabling environment that will have innovation and creativity and give rise to investment, so that then infrastructure can be invested upon and brought to the developing countries as well as the developed countries. And capacity building, for instance, is a very important part of developing Internet Governance in most places, to take the Internet to the next billion. What does it take? How do we develop that? How do we develop the Internet and what Internet Governance can do to develop

that to the next billion and to allow developing countries to take advantage of it? These are the challenges. It is important to see at this level and these international fora how to set frameworks for better Internet Governance so that national and local rules can actually be impacted that lead to development and the use of the Internet, and all services related to that Internet. So maybe my definition would be slightly different and a little broader.

Raúl Escheberria:

I will respond to your question about what is Internet Governance for Development. To me there are two perspectives on the Internet Governance for Development issue. One perspective is how the current governance mechanism adopts the convention of development in the daily work. I think that we have made huge progresses in this area in the last few years. I'm sure that this in part is a result of the debates that have been held during IGF. And this is one of the positive consequences of the IGF. The second perspective of Internet Governance for Development is the impact of the Internet governance initiatives on development. I think that this is probably the most interesting part; how the different initiatives that are being discussed impact the life of the people. When we discuss the Internet Governance proposals, we should have in mind how they impact the development of countries. We should also explore what Internet Governance initiatives are needed for support of development. Not only the current initiatives that have been discussed impacting development, but also what IGF initiatives are needed in order to support the development in different fronts.

William Drake:

It is interesting that in walking over here I ran into several long-time participants in the IGF, and they said, what is this session about? What is Internet Governance for Development? The first two Internet Governance Forum's had as their overarching theme Internet Governance for Development and we have been invoking this term for years. Yet in reality we have never actually tried to nail down, in any kind of systematic way, what it is the term might mean. It reminds me where we were with the term Internet Governance during the WSIS process in 2003, when you had a lot of people saying it meant a lot of different things to them personally and the different parties were talking past each other and sort of failing to connect. It was only through a process when we sat down in the working group on Internet Governance, in the larger WSIS process, and worked through a definition, that we were able to really make sense of the topic. I think that has to be born in mind because we are in this case, I would say, breaking new ground. We're at the front end of a discussion hopefully that doesn't just end at the end of this session.

It would be important to the IGF and to Internet Governance more generally if we could have some sustained ongoing attention to the question of development, because it is absolutely central to the reasons Everton and others have already suggested. I guess in abstract terms if you define Internet Governance for Development, its Internet Governance that advances the development of the Internet in developing

and transitional countries, and promotes Internet enabled development, which may not be exactly the same thing as just having the Internet, because it is possible to roll out the Internet and still not fully leverage the benefits of it if the use or access to it is constrained by improper policies and other conditions. There's been a lot of work done over the years on what kinds of national policies sustain the Internet's development. What does it mean with regard to the global IGF arrangements though? That's the kind of connection that we generally have not tried to make. We had a workshop yesterday on development issues where I suggested that Internet Governance is kind of a complex multi-dimensional phenomenon. You take any given issue and you can look at it from many different angles. You can look at Internet Governance from a variety of angles, economic, political and others. To me Internet Governance for Development is fundamentally about putting the development angle at the foreground for a moment and asking the question, how do these institutions and processes and policy outlets relate to development? In many Internet governance processes we're talking about very detailed solutions to particular functional problems without asking what might this mean in the developing world. How easily would this play out? How would people within countries that don't have perhaps the same access to information or technological capabilities, how would they be impacted? So I think this is an important exercise to go through and I hope it is just the beginning of the dialogue about how we actually do that.

Anriette Esterhuysen:

I think it really is about the recognition among the people in this room and the people in the workshops that this is a real issue. In my experience unless you actually live in a developing country and experience the daily difficulties of dealing with the matters of improving governance, dealing with poverty, and dealing with a lack of infrastructure, then this development doesn't feel very real to you, and I certainly feel like that in the IGF. I feel that I have to speak a certain language and project my concerns in a particular way for it to be taken seriously because it is not a very developing country or developing world experience-friendly space. I say that not meaning to be offensive, and I know that's not the intention of participants, but that is how it feels. Secondly, I think it is important to remember that it is about the inclusion of the needs of users, of people who cannot be users because they don't have access, of Governments, and of other stakeholders. I think often in international forums when decision-making processes take place, there's a conception of inclusion of development and developing country concerns as being equal to inclusion of developing country Governments. It is much more than that. We need other stakeholders involved.

Thirdly, I think it is about more broadly developing a common understanding of what development is. I don't think we can pretend that we are not going to deal with having to problematize, in the same way that forums dealing with development, there are debates about what we mean by development. Is development growth or is development something more, like sustainable development? We're going to have to deal with that same challenge of building a common understanding in the IGF. I think what's interesting about doing it in the IGF is that we can do it and should do

it not just as a developing country or not just from a developing country perspective but from a global perspective, because the issue in the longer term of sustainable development, looking at social development, economic development and impacts on the environment. That ultimately is going to apply as much to developed countries as it is going to apply to how we approach development in developing countries.

Zahid Jamil:

I think what some people are saying is that IG4D is for developing countries. I'm saying it is also for developed countries. IG4D for the Internet, for the global community is the way I look at it. What does that mean? It means where Internet governance led to the Web 1.0, and what do Internet governance rules and frameworks do to allow 2.0 to come? Where do we have to go from here to make sure that Internet Governance frameworks allow the next evolution of the Internet to get to the next level? That includes the person in Pakistan, a woman who wants to send money through the use of a mobile phone or access to Internet protocol services. I think that we can probably give it a broader definition as well.

Ava Cristina Nevés:

Really what we are talking about here is the development for both developing and developed countries, because the developed countries have a lot of constraints as well. And that's why it is possible to have this dialogue. I would like to emphasize another thing, the basics for this discussion are education, it is training and it is open access to knowledge.

Qusai Al-Shatti:

I'm from the Kuwait Information Technology Society. It is important to differentiate between the Internet as a development tool and Internet governance. There is a difference between the two. There is no doubt that the Internet is a tool that can be used for development, especially for developing countries and the least developing countries. The issue here is how Internet Governance is related to the development issue. In that sense when we look at paragraph 29 of the Tunis Agenda, when it said that IG should be multilateral, transparent and democratic, it asks for a participatory Internet. It asks for a multistakeholder involvement when we are discussing issues related to Internet governance and the fact that when we talk about enhanced cooperation, it asks Governments to coordinate the effort for policy development that may affect several aspects of life and several social and economy factors that may relate to IG activities. In this sense IG definitely contributes to the agent of development. These are all issues, really, that were all discussed within the Internet governance framework during all of the last meetings. It is directly related to the issue of development. So it is important to differentiate between the two issues, between Internet as a tool for development, and between the topics that we are discussing within the framework of Internet governance that relate and support the development of the developing countries and the least developed.

Raúl Echeberria:

Internet Governance for Development of what? My answer to that is that it is Internet governance for human development. It comprises developing and developed countries, of course.

Everton Frask Lucero:

The beauty of this kind of exercise is that we come from different perspectives and each of us brings our own experiences here. What I want the most as a result of this is that we will be able to kind of construct a common ground of understanding around this concept. To me since the beginning I didn't even care to explain that Internet Governance for Development is for Development of people because the whole World Summit on Information Society was about the creation of an information society that was people centered, Development oriented and inclusive. When we talk about Internet Governance specifically, are the mechanisms adequate to take into account that basic mandate that resulted from WSIS?

Viola Krebs:

Working in ICT for development, I'm very happy to see this panel, and I think it is a very important discussion. We just had over lunch a discussion of the Dynamic Coalition for linguistic diversity, and many of the issues that were discussed during this very vibrant meeting are very much connected to development. One of the things that was outlined and mentioned multiple times by different speakers was the fact that at the end of the day, it needs to be people centered.

So to the panel, my question would be about linguistic diversity. We have 6,000 languages, and maybe 350 of those are represented in cyberspace, and this question is very much connected to development and getting the next billion on the Internet. So how do we best tackle that?

Anriette Esterhuysen:

Maybe we do agree Internet Governance is not about ICT for development but is it not about the relationship between Internet Governance at a global level and ICT for development? There are Governance decisions that are made globally that can impact how ICTs can be used for development. We've had an example from our representative from Portugal looking at access to knowledge and there is another example about linguistic diversity, so looking at how those two modalities relate to one another is probably the simplest and quickest way of getting to it.

William Drake:

Of course we are talking about human development. Amartya Sen says development consists of the removal of various types of unfreedoms that leave people with little

choice and little opportunity of exercising their reasoned agency. It involves the promotion of crucial instrumental freedoms including economic opportunity, political freedom, social facilities, transparency guarantees, and protective security. Those are things that you can look at, the relationship between Governance arrangements and economic opportunity and political freedom, and start to try to make connections. Of course that's not limited to developing countries. Nobody was suggesting that it is but from an operational standpoint it seems to me that the challenge for the IGF in particular is to try to foreground somewhat the concerns of developing countries, the kinds of issues that particularly arise in developing countries precisely because we have not given them central attention in this Forum and they're not given central attention in most of the other Internet Governance processes and that's the challenge. There's a political as well as a normative and operational reason to say: Yes, development occurs everywhere, but we want to try to really take seriously the question of: What are the particular concerns that apply in developing and transitional countries.

Nitin Desai:

Our next question is: Now, what are the specific elements of Internet Governance which are most relevant from this perspective? One or two have been mentioned. The question of linguistic diversity, the capacity of the Internet to handle diversity is one of the things which have been mentioned. Issues of access have been mentioned. Are there other dimensions of things that we have talked of under the heading Governance which do impinge on development in the sense they help or hinder it?

William Drake:

The planning group that put together this session had identified a few issues that they thought were particularly relevant from a development perspective, where you could see both positive effects that are quite clear, but then you might also in some cases see problems, where potentially the existing procedures or policies might not be completely optimal from a development standpoint. So this is the kind of discussion that one has to have to go through the issues and sort of identify: Where does it work well? And where are the potential issues that we can tackle? Now, the list that we had talked about in the group was, for example, to address questions of names and numbers, technical standards, security, intellectual property. I don't know that I can rank and say which I think are the most important to development, but I can say that it is useful to look at the whole range of Governance arrangements and try and figure out: Are there issues that arise in each of these spaces?

For example, if you take names and numbers, the whole question of IDNs has been very important to developing countries for a long time, and many people felt for a long time that the progress on that needed to be accelerated. Now of course, things are rolling, so we can say that here's a case where things are moving along. There are of course discussions about IPv4 exhaustion and IPv6 rollout, how that transition will be handled, how that could affect developing countries is again a distinctive issue that one could drill down and try and talk through. New gTLDs, there was a workshop

the other day that looked at this in some detail, and we talked about it yesterday in another workshop that I organized. There is a process now within ICANN to try to think about how to assist potential applicants from developing countries and other groups to deal with new gTLDs, because of the cost involved of applying and actually operating a gTLD. I have heard it said by some developing country folks that perhaps new gTLDs would raise a problem for our new ccTLDs that are still trying to get their footing and we should worry about this. I think expanding the name space is pro- development.

I think it would be good for developing countries but it has to be approached in the right way, and it is simply a question of asking the question and saying: Are there particular concerns that might arise from the standpoint of the market structure and market access entry for developing countries that perhaps we could take into account more fully? The reason that this process is happening now in ICANN was I think there was a feeling among some people that it hadn't been given due consideration the first time around, when the process for applying for new gTLDs was first conceived, including the $185,000 application fee, the view was that there were no special concerns that had to be addressed that would be too complex or too difficult. When we were in the Nairobi ICANN meeting a number of people started to say perhaps that will raise some the difficulties for developing countries. Let's give this a second thought. A group was formed within the community to try and think it through. That's the kind of process that I think is healthy, to take a second look sometimes, to think through the development aspect. Is there something there? Are there any things we can do to make this work for effectively?

Olga Cavalli:

What I find relevant for development is having a healthy competitive environment for all of the things that you mention. For example about the name space, I would rather see many actors in countries coming from the local perspective, and gTLDs and ccTLDs competing in a competitive environment which is fair for both, so I would like those rules being applied too. In Latin America, we only have six registrars in the whole region. Why do we have so few and such a limited name space environment? Why is that not more developed? Do we have enough infrastructure for ISPs? Do we have really good prices of international connectivity for the developing regions? Well the answer is no. It is because we don't have many actors investing there. We should look to try to find the ways that make these issues work in a competitive environment.

Zahid Jamil:

When you look at the new gTLD process and applying for the new gTLD, it is an issue. How does that impact developing economies and the businesses in developing economies? I'm commenting on behalf of business, so the question again to be asked is: did we do a market assessment and an economic analysis before we said we should go ahead and do this? Did we do an assessment of the economic analysis before we set the rules, before we set the barriers, before we created the complexity and before

we set the prices? The answer is no. The economic analysis has come out now and we know that, so maybe we need to also ask a second question. If you look at the economic analysis it is focused on markets but the next question is: does it focus also on developing country markets? Maybe that's a question that should be part of the economic strategy as well. I think that both the developed as well as developing countries on this issue of new gTLDs have common grounds. If you listen to a lot of developed countries they have issues on cost, so do developing countries. They have issues on complexity as do developing countries. They have issues about who will go first and how will they choose this and so do developing countries. They have issues on intellectual property and so do developing businesses because they have to buy more names at the second level. We need a level playing field so that not only can the developed countries continue to innovate and create, but also the developing countries can do that and they need an environment to do that as well.

Everton Frask Lucero:

We should aim at the institutional aspect I believe if we want to consider how the gTLD policy making process is relevant to development. What we have to do is to check where these policies are defined at the GNSO at ICANN, when they are defining the policies, to see if they have criteria that take into account the needs of the developing world. If they don't, then it is about time to do this. How are we going to do that? Just by opening a market for gTLDs in the developing world? I have doubts about that. I believe that in some cases or perhaps in many cases, it will actually create some undue competition with the existing ccTLDs that are fighting to establish themselves. So there are some things that require a deeper analysis, and what is most important of all is that developing countries are part of the decision making process on equal footing, because we should not presume that we will be able to choose what is more and what is less important in terms of development without listening and bringing the decision making process to those that are from developing countries.

By the way, developing countries people and Government and industry, they know very well, what they want, and what they need. It is just a question of listening and allowing them to participate at the decision making process and we will get there together.

Ndeye Diop-Diagne:

As far as the new gTLDs are concerned, I think we've done a lot of work on this in ICANN for categorizing the new gTLDs in order to make it possible for communities and geographical areas to be able to create content in their languages and to be able to create new gTLDs. I think it is important for this categorization to take place and to look at commercial and noncommercial gTLDs, and for them to meet the needs of developing countries, because we don't necessarily have a market oriented approach.

As to prospects in Africa, I stressed what Internet Governance can do to enable our countries. I think there's a considerable impact on sustainable development and that

this is becoming a need increasingly. We've talked about gTLD but there are also several routes. We need better worldwide distribution of highways. This means that we need to have better infrastructures both locally and nationally for us to be able to aggregate our efforts. I think we have to look at the redistribution of these other routes to enable better traffic flow amongst the various regions. I think also we need to create security and stability for networks. This is especially important for developing countries because we're more vulnerable. We are more vulnerable because it is harder for us to make our networks secure. I think that it is very important today to be aware of everything that is being done with mobiles and with e-banking and so on and so forth. We can do better with more secure systems but we have to move forward and carry out this transition as quickly as possible. I think against this background, the Internet Governance Forum can help developing countries to take the step and to move towards IPVCs directly. Capacity strengthening is important and training is important. Above all, we have to improve the participation of Governments from developing countries in this process.

Parminder Jeet Singh:

I am from IT for Change. I think 'what is IG4D' should come from our understanding of what development is, and it has been said by a few people here that it is a complex issue, it is very complicated. Once we at least start accepting that it is a complex issue and that the complication is on the side of development as much or as more as it is on the side of technology, we would have made a start and then we might be able to influence the decisions of people who work in the development field, which is as difficult and as specialized as the technical field, and I think there should be a balance there. In that context there were those references that we need to be talking of development in both developing and developed countries, and we understand the fact that there are poor people in developed countries, but development has traditionally also depended on structural conditions generally associated with certain societies, and while there is time that there's opportunity to keep on changing our definitions, we should be careful about what we're proceeding on. That in itself would be a good thing to focus on, that there is a manner in which development is constructed and there are many complications. There's human development, there's sustainable development, there's economic growth, there's development of freedom, all of them very different. Every issue about Internet Governance would have different implications or different models; it will have different implications for different groups of people within developing countries. If we start appreciating the complexity and start understanding development, we would start understanding Internet for Development.

What we need to do here is that for Me, we have to define Internet Governance for Development as being Internet Governance which is substantially driven by people who are seriously involved in development, development actors who represent people, who represent those constituencies which are typically called development constituencies, marginalized groups, marginalized people and marginalized countries, if those actors are driving IG, then it is IG for development. One side of IG for

Development can be a set of issues which are more technical and expertise based, it is obvious that these issues are important, but the second side is participation. If you allow them to substantively determine the agenda, they will tell you what it is. It is a moving agenda but the participation is essential. In that context, what probably happens in many Internet Governance open forums is that there is devaluation of politics of representation. If we're talking about participation of those groups we're talking about Internet Governance for Development.

If I have to identify one issue which is most important for development today, it is the network neutrality issue. The most important development issue during this was interconnection regimes. It simply disappeared and it never got discussed around that because we could not frame a response to a complete mechanism that market is the only way traffic would get exchanged. Any kind of public framework which could complement that market framework could enable it and could cover up the residual parts was simply not acceptable and therefore the issue disappeared. Now it is the same issue, there's global network neutrality. Earlier it was whether traffic would be exchanged on equitable terms but now the issue is whether globally the traffic would flow in equally paid for channels, or there would be faster channels of traffic flow across the globe, and if network neutrality is not observed we would see a distortion of flow of content, of application, of businesses and of cultures across the globe. That has started to happen and that's the biggest developing country concern, that's the biggest global issue relating to development, and at the local level, increasingly, the mobile Internet is no longer net neutral. In India, we have the top Telecom which gives Facebook free, free not as it is free for all of us but free that there are no download charges. If you want to go to Facebook it is free. The rest of the Internet is paid for. This is a violation of network neutrality. There's another carrier which gives 10 services such as Twitter and Google for about a dollar, but not the rest of the Internet. The rest of the Internet is higher priced. So these kinds of definitions have started so we're shaping Internet for the poor. You want this Internet? Take this. This is a compromised Internet you get and we are pushing mobile phones as the final frontier and final panacea for development, both from the global level and the local level. Network neutrality is a major issue which is distorting the shape of the Internet against the interests of the marginalized groups, rather than giving them protective discrimination which is normally the rule when we talk about the marginalized communities.

Raul Echebberia:

I think that all the issues that we're discussing in this Forum related to Internet Governance have an impact on development but I have to agree that some of the issues that we're discussing have a limited impact in development while there are others that are very important and have a huge impact. The first issue in my net is network neutrality too and I think that this is the most important. I'm more concerned about those issues that could affect the equitable conditions of access not only to the network itself, but to the services and the information. The loss of the neutrality of the network could be caused for different reasons. One of the reasons is obviously the difference in

business interests of different players of the Internet, but there are also other reasons, there are political reasons. I think that in some cases, in some places, the network has not been neutral for a long time. Probably we have not been dealing properly with this issue in IGF and this is one of the things that we have to focus on. In the same category of problems, I think that access is obviously one of the most important points and also the development of regional infrastructure and interconnection. I think that those issues that could affect the possibility of the people using the Internet are most important in its relation with development, and I think that all the aspects that are related with Human Rights are very important, as well as freedom of expression in the network. Last but not least, I think that language diversity is also a key issue and of course, related with language diversity is also the point of content development.

Jaime Wagner:

I'm in the Internet steering committee of Brazil. I'm in the Internet business and I never felt a need for new gTLDs. I think the real divide is the divide ahead of us, the inclusion of access to all and the divide between providers of information and tools and the users and consumers of information and tools.

Romualdas Krukaukas:

I'm representing the Lithuanian Computer Society. I would like to say that Internet is about 15 years old and during its existence its paradox of success was that it was not Government-centered. And now since 2005, we have had Internet Governance Forums. We must remember not to govern too much and not too less. I think we can achieve good results here, but only by remembering that the best paradox of Internet is that Internet was developed very well without governance at all.

Zahid Jamil:

The question is how helpful, how essential and how much of a priority should the new gTLDs be? I wish that we'd had an economic analysis before we'd embarked on this. I wish that economic analysis had been a little more focused also on developing countries before we embarked on this. So maybe we could have actually set our priorities. So the questions would arise - how many do we really need? What is the global demand for it? Do we really need a mass roll out of 300 gTLDs a year? This is what should have been addressed at that time.

William Drake:

I guess I have a slight concern. I agree that if you were to ask the question of which issues are the most important to development, then of course I would probably say that everything pertaining to access, including interconnection, the changing economics of the telecom and ISP industry, neutrality and ensuring freedom of expression, that these are more important to development than whether or not there's substantial developing country participation in the global registry market. The problem is I feel like that's

kind of a false choice. It reminds me of the kinds of debates we had back in the early 2000s and 1990s when people were first raising the issue of the global digital divide and the response you would get from some folks would be: 'do developing countries really need networks? What they need is bread.' Of course people need to eat more than they have to have Internet, but that's a false choice. I would rather not take things off the table at the front end by saying the priorities are only issues 1, 2, 3, and we don't need them to think about 4 or 5 and 6. To me I would rather arrive at priorities after having done a sort of panoptic assessment of the range of issues. For example if you do it in a way that takes things off the agenda, then you would never even ask the question about the pricing and the access to new ccTLDs, and it was precisely because people turned around and asked that question in ICANN that we now have a process where people are trying to work it threw. Let's not sort things out and narrow the field too early without at least exploring whether there are legitimate issues in either direction associated with the range of different questions.

There's a whole range of Internet governance mechanisms and quite frankly, most of the stuff pertaining to the underlying infrastructure and service provisioning are more to do with national policies and private contracts than global arrangements. That isn't to say that maybe we shouldn't talk about them, but my concern was to not have the global arrangements fall off the radar as something that's legitimate.

Pierre Dandjinou:

I'm from the Strategic Consulting Group, formally with UNDP. I would like us to actually link the idea of development to growth, prosperity, and inclusiveness, especially when it concerns developing countries such as Africa. When we are discussing the new gTLDs, to me this would be an opportunity to build what we might call the African Internet industry and business. It is about building capacity so that people from Africa are also included in the work of the Internet. This is not really the case today as Africa is just consuming and not producing. Talking about inclusiveness, we are seeing more and more people from the local communities in Africa now using the social networks to link up with people outside their region. I think this is one of the places where I think IGF could really help, because it also is connected to other issues about the accessibility to Broadband and things like that.

Everton Frask Lucero:

Governance, I believe, in one way or the other has been present to the Internet since its inception. Since one computer was connected to the other and to the other and then to the 10th and then to the 10,000th and 10 millionth. I have also to remember that it is not about connectivity of machines; it is about connectivity of human beings that we are talking about. I think it cannot be stressed enough, the importance of considering net neutrality for development, in this perspective of development. Why? The barriers of entry. If you go away from the network neutrality approach and if you abandon the end principle, you may very easily elevate the barriers of entry for new actors and where are the new actors now? In the developing world where the Internet is

growing. If we are serious about development, we should not see the developing world as a big market to explore, of billions of new consumers and users of digital data. If we are serious enough, we have to look at that part of the world as potential contributors, producers and developers of applications. That is development. I believe what we all want is a completely developed world that will provide conditions for every citizen to express their own potential and their creativity using this wonderful tool that we have.

Anriette Esterhuysen:

I think, as was said earlier, the issue of net neutrality in mobile has specific challenges. The reality is that most people in developing countries are using the Internet primarily through mobile phones. There are different governance challenges that arise from that. For example if you don't have a personal bank account but you are using a mobile phone for money transfers, there are particular consumer protection issues. You're not covered by financial services legislation, so what are you protected by? When people are using SMS for political protest, there are anonymity issues there. It is hard to be anonymous on a mobile phone or through a mobile phone if you're criticizing your Government. How do we deal with that? Similarly, user-generated content, which is what's created so much energy and diversity on the Internet, how do people who primarily interact with the Internet through mobile phones that are increasingly not very neutral and that have very limited opportunity for the creation of local content, how is that going to affect the development of Internet in those countries? How does the introduction of the Internet affect human and social and cultural development? With access to a computer, it is very easy to create a local newspaper, but how do you do that if your only access is through a mobile phone and if you tie it into Facebook through one particular provider, and that's your only way of sending content onto the Internet? We need to deal with regulation in a particular way to create the kind of openness and competition that we want in the mobile Internet industry. I think that brings us back to some more generic issues such as intellectual property and our own standards. How can we look at this and use more open standard enforcement in the industry to help counter some of these effects of closing up in the mobile Internet space?

Leslie Martinkovics:

On the issue of infrastructure build out and access, I believe that this is an area that we would be well served to focus on some more in the future. I had the opportunity over the last several years to work in a part of sub-Saharan Africa that was among the least connected regions of the world. And that region is East Africa, which until recently, until the arrival of the new undersea cables, was really only connected to the global Internet via satellite connectivity. This is all changing now. That region now has three undersea cables and a fourth is on its way. These cables have been financed some by private investments, some by Government investments. What these cables are now doing is they are putting forward an opportunity for the regulators of the five East African countries to put forth new policies encouraging investments into the region that were not there earlier. These investments in turn are building out fiber rings that

are connecting those countries that are landlocked and do not have immediate access to these undersea cables. These fiber rings in turn are putting forward new opportunities for the construction and implementation of Internet exchange points. ISPs are critical to lower the costs of access and also are tremendously important to help local content, and we know that local content is one of the very significant building blocks of access. I believe that if we have the privilege of having an IGF in East Africa in the future, I think it would be a very good idea to spend some time looking at the factual data from the region as well as from other parts of sub-Saharan America and even perhaps Latin America and Southeast Asia, of what these new networks look like and seeing what they provide? How are the demographics of access changing? What does this mean to the various business models that are being contemplated and that are being used? How are the regulatory structures changing, and how are these structures impacting the way Internet governance will be discussed years and years from now? I believe that would present us with a very good opportunity to have a further discussion on this point, which I think is extremely important.

Bertrand De La Chapelle:

This is not about replacing one mechanism with another. It is not about replacing what we're doing in Internet Governance and in multistakeholder processes. It is not about replacing the representative democracy model with another one. In this case this is that not what we're talking about. We're talking about enhancing and strengthening democracy and adding layers of decision shaping and agenda setting to the mechanism of representative democracy that allow decision making and validation.

In all countries that have a democracy or representative democracy model there's a distinction between the elaboration of the law that is usually done by Parliament, and the moment when the executive has the responsibility of signing the law into force. If you look at what happened during the World Summit on the Information Society and the creation of this very IGF, the drafting, the preparation, the discussion was done in a multistakeholder format, but the Governments endorsed.

On the other issues, the new gTLD question is clearly an important debate and there's one element that has been raised that deserves attention which is the current mechanism of vertical integration that requires the use of registrars that are accredited, whereas in many countries the registrars do not necessarily exist, that set criteria for technical competence at a level that a lot of ccTLDs, even the best ones in Europe, are not meeting today, and raises a price that is obviously beyond the reach of most developing countries and this is a problem, and why is it a problem? There is one fundamental flaw, which is the single model, or the single rule for all TLD applications. We're setting a standard that is the same for all TLDs. Regarding the need, if we had asked anybody in 1991 or in 1980, do you really think that all companies will need a Domain Name to have their activity on the Internet? 99% of the companies would have said: 'What is the Internet?' The opening up of the Domain Name space is not bad or good in itself. It depends how we do it. I do strongly believe that there's a benefit in terms of enabling innovation, in opening the Domain Name space, and the new GLDs. The

introduction of IDNs, the introduction of TLDs that will serve communities is one element that can help development, but the bottom line is that if countries do not do the necessary investments to have the connectivity and the necessary investments to allow the social spaces that emerge on the Internet to be fully accessible, then there's no way they will benefit from the development. So freedom of access and a flow of information is as important for the development as just connectivity.

Raul Echebberia:

I strongly agree we have to look at all the issues and I think that it is important to have the development dimension considered in every decision that is taken in Internet Governance. I think that we with have to recognize that there are prioritizations and that there are issues in which we have made progress, and others in which we're in the same situation that we were five years ago, and others on which we are facing the risk of going back. So this is something that has to be present at the time of taking decisions.

Nitin Desai:

Our third question is really what it says: How should developing and other countries manage their national-level engagement with global Internet governance in the context of their wider national ICT strategy? So I have a national ICT strategy which focuses on a certain type of development and the question that has been posed here is: How effectively can I ensure that these priorities of my national ICT strategy can be reflected in the way in which the global Internet governance system is managed? This is where issues of representation, which have come up in our discussion do arise.

Everton Frask Lucero:

I am from a country as you know, Brazil, that has a multistakeholder model embodied in its structure for managing the Internet and it is not a heavy structure at all. It is actually just representatives from Civil Society, the business community, the Government and the academia, which makes things much easier both to discuss and coordinate and get to common grounds and understandings related to national issues that should be raised internationally, as well as to support the participation at international events and conferences like this one. That's what explains, for instance, why we have such a big delegation at the IGF meetings. I would say that from the first day after the conclusion of WSIS, we took very seriously at the national level the recommendations and the principles that were embodied in the Tunis agenda and are related to Internet Governance. We are now in our own process of establishing some legal framework and civil framework for the Internet, and we think using this mechanism that I described; we have developed certain principles that are not casting stones. So I believe that by following the multistakeholder approach at home, it made things easier for us to channel our expectations and our needs at the international fora. That's why we always have a very strong delegation and many arrangements for decision making at ICANN and the GAC, and we also are represented here, and we

are also at the other fora, where the subject arises. The kind of institutional setting that you establish will be a very important and determinant factor. That is the experience that I can bring to you, because that's what I know, and I would also like to stress that within our region of Latin America and the Caribbean, LACNIC has done an extraordinarily wonderful job by being transparent, inclusive and bottom up. We're very glad to be part of LACNIC and to support it as well.

What we cannot do is to come to the conclusion that we can have this list, let's say, here at this global open environment, because some organizations may just feel like that it is an issue that does not concern them, and that is wrong. Development is an issue that should be in the agenda of each and every organization related to Internet Governance and that is the message that I believe everybody should take home after this meeting.

Ndeye Diop-Diagne:

Thank you for giving me the opportunity to talk about the national IGF and also the regional one we hosted two weeks ago in Dakar. At the national level as you know we have a Head of State which is very involved in ICT and in the WSIS process, so like what's happened in Brazil, we also promote the multistakeholder approach. In our delegation, we have Government, civil society, the private sector and youth. What we try to promote is building infrastructure, the Broadband infrastructure. We started years and years ago and we have one of the best infrastructures in West Africa. We also try to promote research and educational networks; because we think that we have to work on education to achieve our objectives in ICT4D. We also tried to put ICT as a priority on our development document and strategy and also as the tools to support the other social economic domains like education and health, local connectivity and so forth. If we talk at the regional level, it is not easy because only 70% of the population is literate, so we face another issue of illiterate people and how to put ICT on these people. We try to create also industry, on this issue and we also work a lot with the regional infrastructure. I think that one of the issues in Africa is that we have to work not only with the Government and with society and the private sector, but we also have to work with our regional because they do a lot on coordination among countries. We also try on our local registry, which is AFRiNIC, to set up a high level group of Governments on public policy development issues. We always try to involve more Government, who make decisions on these projects. I think that's what you try to do and about the participation, we participate since the beginning of the preparatory meeting of WSIS, and we'll continue to participate on the development of this process.

Anriette Esterhuysen:

The inclusion of other stakeholder groups is important for Governments to enhance their national arrangements. We've heard that in Brazil that happens but it often doesn't happen elsewhere. Secondly, including the health sector, the educational sector, libraries and groups whose work directly relates to the development of the Internet

and the impact of the Internet on development is crucial as well. There needs to be more of an integrated approach. Governments I think need to look at the scope of development challenges and then bring those actors in.

William Drake:

If we talk about a few of the more cutting edge engaged countries, it is easy to name Brazil, Kenya and Egypt, among others are very much engaged in these practices, the model looks pretty encouraging. I spend a lot of time around the United Nations though and what I see is that many countries don't have any mission at all because they can't afford it, or they share a mission or something, and countries often if they do have representatives they follow one or two intergovernmental organizations that have a fixed vertical, structured agenda. They have a set of procedures for interacting with their home office, and when the Minister comes for a major meeting, they facilitate. At ICANN though or some of the private multistakeholder kinds of entities that are engaged in Internet Governance, there isn't that kind of process in many cases. It is not the simple sort of one Minister for one issue kind of thing. It is a much more diffuse set of processes with a diffuse set of actors. It is more complex, and there isn't often on the ground a real clear process for organizing and engaging.

So I've talked to people in the context, for example, of ICANN meetings where they told me: 'Yeah, well, had to come on my own money. The Government doesn't support this. We've got nothing going on back home. In fact, I'm not sure the Minister knows I'm here.' these kinds of situations. And you say well, what about other people? Do you have a delegation? Are there people from your private sector, your technical community or your Civil Society? No, there's just the one person. We don't have any kind of discussion about that. I think if you look across a lot of these areas, technical standards, security, and so on, where the work is being done in these kinds of bodies, it is not clear to me that many countries really have all the machinery in place to be able to engage effectively. So it strikes me that one of the areas that from a development standpoint we could be doing something useful is trying to help with that, trying to identify ways of getting organized. How do you get the right people to the right kinds of meetings with the right kind of mandate, who then bring back the information and the knowledge on the issues to the home country to have it incorporated into the national policy framework? There's a whole set of complicated issues there I think that merit further consideration going forward, because it is clear that much of the real work that's going on around IG particularly at the global level is not going to be in those strict intergovernmental bodies, with the traditional hierarchical agendas. So we have to figure out how do we really do this? ISOC, ICANN, others have programs in place to bring people but I think much more needs to be done there.

Olivier Crepin-Leblond:

We've had a few comments which came from Grace Mutung'u, from Kenya who is an ISOC ambassador in the audience. She made a few comments, one was to do with the new gTLD programme which we spoke about a while ago and she mentioned that the

competition would be good for Kenya. It is a diverse country and Internet is a good platform for expression. It is kind of decreasing competition. Which relates to what we're speaking about right now, which is effectively the Government-led initiatives for leading digital villages, and she mentioned that there is a universal access fund charging licensees in Kenya and there are also many private sector led initiatives which are led by corporations that are developing the network. It is a mix of the two,   not only Government but also private led.

Nitin Desai:

The fourth question we have on our agenda is that how do we take this agenda forward? We talked about many things but we need to now make some more specific suggestions on how we take this agenda forward in the IGF and elsewhere.

Raúl Echeberria:

We will continue discussing the same things in the same forums. I think that the agenda is on the table as we are discussing it. I think that's what would be very interesting, from my side, is to have some kind of evaluation of the different initiatives from the point of view of the impact in development. In a funny way we need a development meter. I think that it could be very interesting to have a certain view of how different proposals and different initiatives impact development because many times proposals are based on specific interests of the people that make the proposals or political interests, depending on who is promoting each thing. So I think it could be very interesting to bring objectivity. I also think that it is in the line of what was said before; that it could also be interesting to have an evaluation of different organizations. What are they doing in terms of development and how do they work in part in development.

Anriette Esterhuysen:

I think participation is essential and not just more participation from developing country Governments; but also civil society. We need Governments here as well and business and then also find ways of bringing in the voices of people who are not yet connected to the Internet, but who are impacted on as a result of that. Then we also need more participation from development practitioners, people working in development, other sectors such as health and education. Secondly, I think we need a human rights oriented approach. I think there's nothing that's going to be more effective in pulling out the human social, economic and sustainable development impacts than having a rights-oriented approach to how we discuss Internet Governance. Thirdly, I do think we need to tackle the issue of defining what we mean by development. A narrow definition which only talks about developing the Internet industry is not going to give us what we are looking for in terms of IG and development. Fourthly I think capacity building remains very important, at different levels similar to the way its being done at regional IGFs and also at LACNIC. And informational capacity building, what we see the regional IGFs do is they create a space where developing country stakeholders can come together and discuss their particular concerns and begin to formulate common

positions and priorities to bring to the IGF, but the challenges of development and the development agenda exists at the regional IGFs as well. Even if there they are not catered in a developing country. It doesn't mean necessarily that they are addressing broader development issues. Then the final point I'd like to make in terms of improvement, I do think it would be valuable for developing country participants if they felt that the outcomes of the IGF that are of relevance to development are communicated or followed up on in a more tangible way. We need to address that as well because what is the point of more dialogue on development at the IGF if we are also not more effective in following up on the outcomes of that dialogue in one way or another?

William Drake:

The first point I would make is that clearly the tradition of making development a cross-cutting issue that's kind of submerged into other sessions and the main session doesn't really ally for enough focused attention to it. I would suggest consideration of perhaps institutionalizing a development day as a regular part of the IGF programme. The secretary general in his paper about renewal of the IGF talks about a lot of the need for more attention to development and engagement of developing countries. I think having a day like that might signal appropriately that we do take this seriously and will be a focal point of activity. One might consider designating a special track of workshops focused on IG for D and directing some direct linkage into the main sessions, encouraging organizers of developing forums and other kinds of meetings to build in development components and say what they're doing as appropriate. Probably the main point I suggested, which I'm sure would be controversial, was that it would be important to establish some sort of multistakeholder group. I know we can't say working group in the IGF, because people associate it with a very bureaucrat particular UN and intergovernmental model, but some sort of open multistakeholder group that has a mandate that is recognized, not a loose dynamic coalition that doesn't get any support. An actual group that tries to sit down and gather the information and assess on a cross-cutting basis, looking at the range of instruments and trying to sort through the issues and trying to identify which ones are important, which ones merit further consideration. If the group were to come out with some messages, the messages would be from the group. There would be messages from the IGF, not of the IGF, but maybe that would inform the main session activity and so on. If we don't do this you're not really going to advance this agenda very much. My concern will be the major developing countries will continue to think that IGF is not concerned with our issues and will look to other institutions that they believe are more focused on it.

Zahid Jamil:

I think that the Internet to me as a slightly younger person means a very different changed society compared to what it was earlier. It has turned the paradigm upside down. It is a democratizing tool. The openness, the values that the Internet brought, the change internationally that has been brought, that is what needs to continue to develop. So how do we go forward? What we do is we make sure that those values

of the Internet being a game-changer continue. In that of course we must include people from developing countries and make sure that their voice is heard. Now, as a key point there, who do we include? If we're going to include Governments, of course they should be there. Let's not forget though that Governments in many countries of the world don't necessarily represent the will of the people in those countries. If you were to speak to people in my country and you spoke to my Government first, they would say yeah, of course, we want to block all content that has anything to do with politics, shut it down, because it is very unsafe. Who is it unsafe for? For the politicians who come to power. If you speak to the people, they want to see those articles, see the blogs and read those blogs. We need to make sure that we keep the ethos and values of what the Internet means and make sure that that development does not become regressive because of anything that we do. So the identification of the right people would be important. The next is outreach, actual positive outreach. ICANN has a fellowship programme and The Council of Europe convention on cybercrime has an octopus programme. Very good, but I think those outreach programs need to go into national areas. I agree also with the point made about messaging, that the outcomes of the IGF have to go through that outreach, go down to the national level from those international structures, using the people who participate as ambassadors.

There needs to be more sensitivity to developing country needs at all IG platforms. I have seen in many areas there is some attempt in trying to understand it but it hasn't really matured to that level. I think that needs to be done. At the same time, while we talked about all of this, it is very important that development as I tried to define it in a broader capacity earlier also allows in the ethos and values of innovation, creativity so that they can lead to investment, because if you don't have investment, you don't create an enabling environment. You won't have the undersea cables coming to certain countries or the infrastructure investment coming to certain countries because you don't have that enabling environment. Therefore you will not see those societies and developing countries benefiting from the development

Everton Frask Lucero:

On the question of enabling environment I believe it is an important aspect to be considered indeed, but I don't think it is enough, because it doesn't explain many of the aspects. For instance, why is it that some countries cost to access is 100, 200, 300 times more expensive than in more central countries? Only an enabling environment is not enough to explain that. You have to go a little deeper too. On the question of getting more actors involved, I believe that there's no other way to get more people involved in this than through education. In this since I have to admit that there are many initiatives that are doing already a wonderful job in trying to reach out in capacity building and in developing countries like the South School of Internet Governance, the DiploFoundation and the people who participate now at the IGF and they're making differences in their own communities and at the national level. So this is something that we need to recognize as a value added to our work. On outreach by those decision-making bodies, yes, it is also very important, provided that it is not

limited to capacity building because if it is a decision-making body, what developing countries want is decision-making power as well. It has to come.

Now, on the question about where do we go from now, I think that there is still a question that needs answering and perhaps it may provide guidance for us. It is: are the current structures and institutions open, transparent, and inclusive enough? Are they taking into account in their policy plans the development perspective, and how? For instance, it strikes us that many participants of this forum and in others are able to make wonderful speeches praising the policy of transparency and openness, but they are also able to go behind doors to negotiate a treaty that will affect the way Internet is governed worldwide. So that is a problem. That goes against all that we have been discussing here. And that will affect indeed the spaces for development if we are really serious about that. We need perhaps reports. We need perhaps indicators from those IG mechanisms. Everybody, every action is related in the end to development and may have an effect on how people in the very end of our globe, how they relate to and are affected by the Internet. So all Internet Governance mechanisms in fora, and institutions should be invited to come here and then report on specifically what they are doing. If there is one conclusion that I think we could take from this environment here and this debate is that that is a wrong assumption. That actually what they do is relevant to development, yes. And they should therefore be engaged in this process positively. Not with a way of trying to find why it is not working but together trying to find solutions that will improve the decision-making mechanism, to include time for those whose voices are not heard.

Ndeye Diop-Diagne:

We have to think about more participation from developing countries, specifically the Governments from developing countries. And for that they need support but also content. I think in the case of Africa we need also to invite additional economic communities and also the AU commission to be part of the consultation process initiated by CSTD.

Nitin Desai:

What we have heard here is a result of the fact that the Internet is a highly complex infrastructure. It is extremely simple to use, you don't need to have any sort of technical abilities or computer knowledge. That's an issue. So the people who are using the Internet for development, they have no interest in the governance issue because it is so easy to use. Nor do you need to do anything much about how the thing functions in order to be able to use it well. Therefore the more you tell me to bring people who are using it for development and ask them what is a problem that they face because of this or that, other than costs of access, you will not get any other reply because it is so easy, it is simple to use. So I think we have to ask ourselves the question, are there things which we could have done differently in the management of the Internet? Take the whole net neutrality issue which has been raised. This is something which will never come up if you were to talk just to the user but it come up when we talk to the

people who are involved in the management of the Internet. There is this tension between the technicians who are driven by the desire to make this system work better and better, by the commercial interests who want to use it for a certain purpose, and by the civil society groups which are very focused on issues of openness, access and transparency. This is the great advantage of a forum like this because it brings the people together. That's precisely why the issue of Internet Governance and Governance has surfaced here rather than somewhere else in the process. I think the future of IGF is to continuously use development in the Internet as it takes place because you have people here who do bring all of these different cultures together in the space of forum, the technical culture, the commercial culture, the culture which is focused on openness, transparency, access and that class of issue.

Vyatautas Grubliauskas:

This discussion that has just finished has shown us that Internet Governance for Development is a serious and especially important process that requires constant attention. When we are talking about any governance, we sometimes allow ourselves to joke that there's a short distance between strict dictatorship and uncontrollable anarchy. Our agreed governance model could help us avoid these extremes. When we talk about Internet and when we're looking for the most optimal solutions we can, we should talk about a global governance process of global Internet. Lithuania is taking that position as well. We understand the importance of this process. I hope that our next meeting will continue fruitful, relevant discussions in which we took part this year in Lithuania.

INTERNET GOVERNANCE FOR DEVELOPMENT

Reports of the Workshops and Other Events

WS 49. Internet Governance and the Wider World: Building Relationships between the Internet Governance and Other Domains

WS 75. Preparing Asian youth for the digital age

WS 165. A Development Agenda Approach to Internet Names and Numbers

WS 174. Internet governance viewed through different lenses, with emphasis upon the lens of economic and social development

WS 49. INTERNET GOVERNANCE AND THE WIDER WORLD: BUILDING RELATIONSHIPS BETWEEN THE INTERNET GOVERNANCE AND OTHER DOMAINS

Report by: Ben Akoh

List of panellists and/or participants:

Moderator: Heather Creech, Director, Global Connectivity, IISD 1. David Souter, Managing Director, ICT Development Associates ltd, Visiting Professor in Communications Management, Business School, University of Strathclyde and Associate of the International Institute for Sustainable Development, Ellen Blackler, Executive Director, Regulatory Planning & Policy, AT&T, Georg Neumann, Senior Communications Coordinator, Transparency International, Arvind Ganesan, Executive Director, Business and human Rights Program, Human Rights Watch, Fatimata Seye Sylla, National Coordinator, USAID Project/EDB, Senegal, Kaidi Tingas, Project Manager/Public Participation Expert, Regional Environment Centre for Central and Eastern Europe

A brief substantive summary and the main events that were raised:

- Participation: The need for more dialogue between the Internet professional community (participant at the IGF) and the Internet interested community and the wider world (other organizations and stakeholders not usually present at the IGF) who are experiencing the impact of the Internet at a social, economic, cultural, and political level. Participation at the IGF is mostly attended by the technical community. Few organizations like IISD are absent. It is unusual for this kind of international policy domain.

- Representation: The IGF recognizes the under representation of developing country Governments. But Governments present are usually by those within them who are concerned with the supply of the Internet rather than those concerned with the use of the Internet. For instance, no health or education ministries are present. This same issue is carried through to the IGF from the World Summit.

Similarly, there is quite good representation from the private sector that supplies the Internet, but there's very little representation of the private sector that makes use of it. Also the financial services industry, which is very dependent today on the Internet, is not present in the debate. Organizations and individuals who are concerned with the Internet are present but there are little or no development agencies, environment agencies, trades unions, and so on, of the kind one would expect to find in other international fora.

- Expanding the defining of Development to Sustainable Development: Sustainability is about the nexus of relationships between economic, social, and environmental issues that enable us to advance the thinking that surround the present conception of development from one that is based on growth alone to one that is based on growth that can be sustained and that have lasting impact. The Internet likewise needs to be looking at a relationship with the rest of the world that uses fewer of the earth's resources, leaves more behind, and contributes more to economic, social, and environmental sustainability.

- The Sustainability of the Internet Itself: The Internet itself needs to be concerned with its own sustainability. The Internet's contribution to greenhouse gas emissions is growing faster than that of any other economic sector as a result of increased access to the Internet and an increased use of ICT devices. That growth of emissions as a result of increased access and use of Internet is a challenge to Government, industry, Internet professionals, and to users. The Internet can be made more sustainable if, for example, environmental impact assessment is included as part of standard setting, as part of network design and deployment, in the way in which people use the devices that they have. Equally, the Internet can be used in ways that reduce greenhouse gas emissions; by dematerialization, through more efficient management of transport and power generation networks, and so forth. There are very substantial gains that can be made but this will happen only if governance and regulatory structures for the power sector, for the transport sector, for the communication sector incentivize the use of the Internet in ways that achieve that reduction. Finally, there are long-term changes in society which result from the way in which the Internet has become central to much that happens. For example, globalization of economic production and globalization of culture; changes in the production and consumption patterns for certain goods and services; new ways of working for people and the companies for which they work; social networking and the way that has changed individual communications, notably in changing relationships with families; and access to content, might be news and rumor, might be entertainment, political comment, and pornography, all of which change the way society relates to these. The fundamental issue is that society is changing in ways that require us to reinterpret our understanding of development and of sustainable – of sustainable development. It is not just a matter of the Internet community understanding a sustainability concept here

and incorporating it, but also that sustainable development community needs to rethink the way in which sustainability interacts with society, economy, and culture as a result of the impact that the Internet is having.

Conclusions and further comments:

- Internet policy and other domains: The Internet community needs to discuss the impact of the Internet on other issues - development, the environment, health, education and others - in spaces which belong to those other issues rather than to the Internet itself. The Internet community needs to listen and learn from those policy domains, and then review what is happening with the Internet in light of their priorities - recognizing that the Internet is not a solution for the challenges in those domains but changes and may make a contribution to addressing them.
- Invitation of others policy stakeholders into the Internet Policy fora: To encourage an IGF going forward that is a convener of a number of these other stakeholders, a proactive convener of a number of these stakeholders. Bringing into the Internet policy fora discussions from these missing stakeholders especially those acutely missing; (i) Governments and not just Government departments that manage the ICT sector, rather those that make use of it. Developing country Governments are also under-represented; (ii) Private sector participations and not just private sector and businesses that supply ICTs, rather those that use them to run their businesses or provide goods and services. Highly dependent sectors such as financial services presently have very little input to the Internet policy fora; and (iii) Civil society participation to include the mainstream civil society organizations such as development, environment agencies, rights groups, women's organizations, trade unions, faith groups, etc. These play a large part in other policy debates but do so less in the Internet policy fora.
- The relevance of the next five years: The growing importance of the Internet to our society, economy, culture and environment calls for an urgent need for the IGF to address the challenges of multistakeholder participation. The relevance of the next five years of IGF activity will be determined by its success in this regard

WS 75. Preparing Asian youth for the digital age

Report by: NetMission ambassadors and YIGF participants

List of panellists and/or participants:

Edmon Chung, DotAsia Organization Matthew Hui, NetMission ambassador and Youth IGF camp organizer Bianca Ho, NetMission ambassador and Youth IGF camp organizer Desiree Ho, NetMission ambassador Heiki Tsang, Youth IGF participant Ken Kuan, Youth IGF participant Flora Leung, Youth IGF participant Clemence Cam, Youth IGF

participant Robert Guerra, Director, Internet Freedom Project, Freedom House Oliver Blogie Robillo, blogger, Freedom House program participant Philippa Green, Childnet YIGF organizer Hong Xue, Director of Institute for the Internet Policy & Law (IIPL), Beijing Normal University Rafik Dammak, Youth Coalition on Internet Governance active member Ross LaJeunesse, Head of Public Policy and Government Affairs for Google Amelia Andorsetta, Lisbon parliamentarian for Piratpartiet, Sweden in the European Parliament

The workshop began with presentations by both organizers and participants of the programs, then opening the discussion to the floor.

NETMISSION AMBASSADOR - NetMission ambassador program is based in Hong Kong (SAR), an initiative aiming to bring together network of dedicated young volunteers devoted towards promoting and contributing towards digital inclusion, Internet governance and building a harmonious and respectable Internet environment. Their success is based on the autonomous working environment, and the opportunity to attend international conferences. These two characteristics spark youth's interest in Internet, and also empowers youth by giving them the flexibility in conducting community projects.

YOUTH Internet Governance Forum - The Youth Internet Governance Forum (YIGF) camp was an initiative by NetMission ambassadors after attending IGF in Egypt. They developed a new model for youth which makes it easier for youth to participate in Internet governance. The new model adopts a role-play approach where youth are assigned roles, i.e. Government, NGO etc., and participate in active discussion of 3 designated topics of specific relevance to Hong Kong (SAR). This allows them to understand the multistakeholder approach. YIGF aims to spark students' interest in Internet Governance, and to provide a platform where they can easily voice out. Suggest having a strong moderator to direct the discussion when the topic is too broad. More background information of the 3 topics will also give them a better context of the discussion.

SUMMER SCHOOL ON Internet GOVERNANCE (SSIG) - The Summer School on Internet Governance is an advanced academic training program with certificate and credits transferable across Europe academic institutions. They organized a roundtable discussion, and then followed by tutorial for communication between the students and faculty to exchange their views. The students first learned about the theoretical background of Internet governance, then proceed to talk about technical and practical application of the knowledge. They believed that educating young people and training them to be involved in Internet governance is a key way of getting them involved in the Internet itself.

CHILDNET – Youth IGF Camp - Childnet International aims to work in partnership with others around the world to help make the Internet a great and safe place for children. Due to the lack of Internet governance understanding in UK, Childnet organized a YIGF camp in London in August. They had participants from different

areas in the UK. After talks by experts, youth then discussed the various issues around Internet governance. Privacy is one of the major focuses of the camp. Afterwards, youth had established a Statement of Belief about their views of Internet.

Conclusions and further comments:

1. Young people should have a stronger say and be more involved in Internet governance today
2. Policy makers should take youth interest into consideration, and ensure direct youth participation in policy development and decision making process
3. Encourage active youth participation in IGF, they will acquire insight in how policy is being made and amended.
4. Having Internet governance programs are good ways to create funding such that youth from different countries can be bought together.

WS 165. A Development Agenda Approach to Internet Names and Numbers

Report by: Mr. William Drake

List of panellists and/or participants:

William J. Drake[moderator], Senior Associate, Centre for International Governance, Graduate Institute of International and Development Studies, Geneva, Switzerland; Rafik Dammak, Research Student in Interdisciplinary Information Studies, the University of Tokyo; Tunisia; Milton Mueller, Professor, Syracuse University, USA; Alice Munyua, Convenor, East African IGF and Kenya ICT Action Network, Communications Commission, Government of Kenya; Mike Silber, General Manager: Regulatory, Neotel; Management Committee member, South African Internet Service Providers' Association; South Africa; Jean-Jacques Subrenat, Member of the Board of Directors, ICANN; France

A development agenda can be defined as a holistic program of analysis and action intended to mainstream development considerations into the procedures and policy outputs of global governance mechanisms. While there have been concerted efforts to pursue such agendas in the multilateral institutions dealing with issues like international trade and intellectual property, there has been no corresponding initiative with respect to global Internet governance. Hence, a series of interrelated workshops was organized at the Rio, Hyderabad and Sharm el Sheikh IGF meetings to help foster dialogue on the possible establishment of such an initiative. Over the course of these events, participants considered the potential value-added of a development agenda; fleshed out its broad institutional and substantive contours; identified some particularly important linkages between internet governance and development that merit further consideration; and in light of the WSIS principles, agreed that the IGF is the most appropriate venue in which to devise an approach to mainstreaming development

within Internet governance institutions, as applicable. Building on these foundations, the next step in the process was to test the general model in a specific issue-area and institutional context in order to identify possible refinements.

Accordingly, the Vilnius workshop applied the development agenda approach to the field of Internet names and numbers, with particular attention being devoted to the ICANN nexus. In addition to advancing IG4D efforts within the IGF, the workshop provided food for thought to interested participants in ICANN on how to better address development concerns. The three main elements of a development agenda considered included: a) capacity building partnerships to enable the effective participation of governmental and nongovernmental actors in technical dialogues and decision making processes; b) institutional measures---e.g. with respect to information overload, working methods and culture, and possibly development-oriented focal points---that could facilitate increased engagement; and c) identification of the substantive policy issues that may raise distinctive developmental considerations and to which a developmental orientation could usefully be brought to bear.

Summary:

To set the stage, the moderator led off the session by reviewing the highlights of the three previous development agenda workshops and their possible relevance to Internet names and numbers. In particular, he drew attention to some procedural/institutional aspects of ICANN---organizational culture, meeting agendas, information architecture and the like---that could unintentionally pose barriers to effective participation by some developing country stakeholders, but which could be overcome with a little effort. He then suggested a brief menu of substantive issues that could merit further consideration from a development-oriented standpoint, e.g. registry/registrar industry market structure and competitive entry; the New gTLD Program's approaches to issues like pricing and applicant support, and the choice between "morality and public order" and international law-based objections to strings; internationalized domain names (IDNs) and the fast track mechanism; ccTLD (re)delegation and management; vulnerabilities to security & stability threats; citizen/consumer protection issues like WHOIS and registrant rights; IPv4 exhaustion and the IPv6 transition; and so on.

In their presentations, the panelists elaborated on some of these items and added others to the menu. The first speaker focused on the high cost of applying to run a new gTLD and maintained that this is an impediment to developing country participation in the global domain name space. He then outlined some of the approaches to ameliorating this problem that have been under consideration in a working group that is preparing a report to the ICANN Board of Directors. The second speaker noted that while many of the institutions and processes native to the Internet environment are formally open to all, their work programs and operating styles are rather technical in nature. This can be an informal barrier to the engagement of many stakeholders from developing countries, so enhanced capacity building efforts and greater awareness of the problem among all parties will be necessary going forward.

The third speaker focused on the development implications of the looming exhaustion of IPv4, and (controversially) suggested that it will take many years to achieve widespread adoption of IPv6, if we get there at all. Accordingly, it will be necessary to introduce competition into the Regional Internet Registries' management of names in order to promote a more efficient and equitable allocation of available IPv4 resources. Broadening the focus, the fourth speaker considered the development nexus as a whole from an African regional perspective. He emphasized that while institutional improvements are always desirable; developing countries should not be looking for "handouts," and should instead organize their national policy processes in a way that will allow them to take full advantage of the opportunities to participate in ICANN's work.

The fifth speaker took an even broader view by placing the need to promote development in the historical context of the changing global distributions of wealth, power, and Internet activity. The rise of Asia, globalization, the changing relationship between sovereign states and markets, and related factors require a forward looking program of outreach and engagement to ensure that all relevant voices are integrated into the policy development process. Finally, the last speaker argued that global cultural and linguistic diversity must be integral to the development agenda. In this context, it in increasingly important to advance IDNs, including with single characters, which is of particular relevance to Asia.

Conclusions and further comments:

The subsequent discussion with the multistakeholder audience of over fifty attendees raised a number of additional points. Among these were suggestions to: use parliaments as an avenue to draw African citizens into Internet governance discussions; apply lessons from the development agenda workshops within the Generic Names Supporting Organization's (GNSO) improvements process with an eye to promoting greater developing country engagement in ICANN policymaking; give priority to expanding the participation of developing country government representatives in ICANN; establish locally-aware business models and funding strategies to help expand the use of available tools and diversify participation in the global domain name industry; focus on moving to IPv6 rather than creating markets for IPv4; establish new gTLDs in order to expand choice in the developing world; and link ICANN and UN bodies in development agenda discussions.

WS 174. Internet governance viewed through different lenses, with emphasis upon the lens of economic and social development

Report by: George Sadowsky

List of Panellists and/or Participants: William Drake, Graduate Institute of International and Development Studies, Patrik Faltstrom, Cisco Systems, Inc., Everton Lucero,

Government of Brazil, Milton Mueller, Syracuse University, George Sadowsky, Chair, Theresa Swinehart, Verizon Communications

Brief substantive summary and main events:

As anticipated, the view through each of the lenses discussed differed significantly, with some complementarity of views and some dissonance. From the point of view of international organizations, the priority of goals came from their specific mandates given to them by their member nations. The national government perspective stressed the importance of sovereignty and the maintenance of security and safety of citizens, according to the rules of law of the country. In this connection, the increasing level of activity of cyber criminality of various kinds has elevated national concerns about cybersecurity relative to other priorities, including reactions to the possible extension of such behavior to a state level, implying possible cyber war.

Looking through a civil society lens, individual freedom and civil liberties appear as the highest priority item. One danger is that special interests, well organized and having power, try to erode the rights of the individual, who is generally not adequately represented in the policy process. Such erosions include the blocking of Internet content, violations of confidentiality in network transmissions, and invasion of human rights in the name of security. This view includes a belief that there is a strong correlation between freedom and development, and that liberalization of citizen rights are an empowering level for more rapid economic and social development.

The technical view focuses on adding value to the technical environment and making possible the creation of more web sites to hold more knowledge and more effective communications paths to obtain more information. Therefore the freedom to innovate and to create is paramount in importance. From a business perspective, the ability to provide goods and services that customers want, without interference from government, is the most important overall consideration. The sector understands the need for some degree of regulation, but it should interfere as little as possible with business' ability to be innovative and creative in its commercial offerings. Business wants to exploit the rapid advances in technology and use them to fashion goods and services that help in development, while at the same time making a profit.

The development lens has to focus both on international and national public policy and governance issues. Among the policy issues that exist with respect to exploiting ICT for development, it's crucial to separate those issues that can be addressed at the national level from those that truly require international attention and cooperation in order to find acceptable solutions. The IGF has been quite helpful in this regard in delineating these issues and helping to achieve mutual understanding among participants from different sectors. In this context, the issue of sovereignty matters to the extent that governments are committed to ensuring the kind of freedoms prized by civil society, to supporting an innovative technical community and to allowing business to exploit those technical advances in a manner that aides development.

Conclusions and further comments:

The various threads that emerged in the workshop discussions were woven into an interesting fabric, indicating different views and different priorities. In general, the different views were complementary and additive, but there was evidence of some tension among priorities. The IGF was seen as a venue in which such tensions could be explored by all sides without the necessity to converge, thus concentrating upon exploration and understanding of points of view rather than upon having to converge on minimal common ground.

EMERGING ISSUES: CLOUD COMPUTING

17 September 2010

Chairman:

- Prof. Algimantas Juozapavičius, Vice Dean for Information Technologies, Faculty of Mathematics and Computer Science, Vilnius University, Vilnius

Co-Moderators:

- Patrik Fältström, Distinguished Consulting Engineer, Office of the CTO, Cisco; Member Swedish Government IT Advisory Board, Lovestad
- Katitza Rodriguez, International Rights Director, Electronic Frontier Foundation, San Francisco, CA

Panellists:

- Susana Sargento, Assistant Professor, Department of Electonics, Telecommunciations and Informatics, University of Aveiro; Researcher, Institute of Telecommunications, Aveiro
- Frank Osafo-Charles, Founder, Vericloud/Executive Vice President; Chief Technology Officer, Patrina Corporation, Accra/New York
- Luis Magalhães, President of the Knowledge Society Agency (UMIC), Ministry of Science, Technology and Higher Education; Professor, "Instituto Superior Tecnico", Technical University of Lisbon, Lisbon
- Kristina Irion, Advisory Board, Privacy International and Electronic Privacy Information Center; Assistant Professor, Department of Public Policy, Center for Media and Communications Studies (CMCS) Central European University, Budapest
- Robert Pepper, Government Affairs, Cisco, Washington D.C.

Remote Moderation:

- Sandra Hoferichter, Architect/Project manager Medienstadt; Management and Communication, EuroDIG, Leipzig

Algimantas Juozapavicius:

Cloud Computing; imagine a world with technology on tap where people can access computing services on demand from any location without worrying about how these services are delivered and where they are hosted. We expect this vision is now becoming a reality. Cloud Computing is suspected to be a revolutionary Internet based technology which enables especially small and medium businesses to enter the market without up front costs and operate entirely without a large I.T. Department. Nevertheless, the issues for clouds are really much more complicated, and cover broader context. So as an emerging issue, clouds have a lot of challenges to resolve. Cloud capabilities have not been developed to meet all potential opportunities of usage. There are technical and non-technical gaps. The vision of clouds used anytime anywhere depends on advances in the design computer system, especially in distributed computer systems. Transferring data from customers into clouds now is expensive and time consuming and legal boundaries have not been established yet for cloud operations and critical services. Socioeconomic implications have not been fully understood yet either.

Cloud systems are related also to grid computing systems, service oriented architectures. So we have to have enhanced cloud security and privacy mechanisms.

Therefore, clouds are expected to be an essential and core component for development, for developing regions, for developing countries and for developing companies.

Frank-Charles Osafo:

Cloud Computing is a very important subject, as evidenced by the attendance in the workshops and the interest it has generated. To some people, cloud is a new computing paradigm. Some believe it is more of the same old same old. To some people, Yahoo!, Hotmail, Gmail and others like them are Cloud Computing services. Others vehemently disagree. No matter where you stand, though, hopefully the following may help your understanding. In simple terms, in Cloud Computing, information technology, resources and services are abstracted from the underlying infrastructure and provided on demand at scale. With the cloud, the whole I.T. infrastructure is programmable. This is really what is different about Cloud Computing. It is a continuation of what we have had in the past, but with our Internet and other technologies we are able not only to programme software but to programme the whole infrastructure and provide that as a service. We're not interested in what many others have been concentrating on: Where is the data? What's inside the box? That is not what the cloud is. The cloud is operating; a good cloud should operate almost like a black box. It should work. For the consumer, your position is just to make sure that you are getting what is intended. When talking about the Cloud Computing, it is very important, in my opinion, in any discussion involving Cloud Computing, to separate the actors, consumers from producers, individual consumers and corporate consumers. Producers create and provide the services, and consumers acquire and use the services. Also, most of the

press reports are focused exclusively on consumer services, made possible by public clouds. In actuality, most of the money being made from cloud services is from services provided to corporate customers. I will look forward to the rest of the discussions and we will explore some of these issues further.

Luis Magalhães:

I will address Cloud Computing from the point of view of public policy in this panel. My aim basically is to introduce a few threads for the discussion that we'll have later on, along 3 lines: First, benefits, second, big challenges and third, enabling framework. First, on benefits, the Cloud Computing facilitates Information Technology support to start-up companies which can start their businesses without having to invest large sums on an initial I.T. infrastructure and its management. Sustainability of this infrastructure is also a cost that frequently is difficult in market, and of course, the need for creating human resources with adequate competencies is also very difficult sometimes. In this way, Cloud Computing decreases the barriers to entry for new businesses. It can contribute to speed up innovation, and to enable innovative enterprise in locations where there is insufficient supply of human resources with the necessary qualifications, provided, and this is a big "provided", there is sufficient and reliable Broadband. For mature organisations, businesses, NGOs, Governments, public universities and hospitals, etc., the promises of Cloud Computing are a reduction of I.T. costs and a rationalization of certain supporting services by economies of scale, such as reliable security of I.T. resources and more efficient data centre share of costs.

Let me now go to the line on big challenges. Here I would like to use the form of posing questions. I leave the questions unanswered, because I think they could be picked up in the debate, and I think my contribution here should remain like that, even though I have some answers for the questions I'm posing. Is there a risk of market dominance by the most powerful I.T. companies? Can it be a global dominance may further amplify inequalities of wealth distribution in the world? Will Cloud Computing contribute to the generic nature of the Internet which together with the computer was responsible for incredibly dynamic user driven innovation in the past 30 years, or will it actually reduce Internet activity? What are the facts about Cloud Computing regarding digital divide questions? As Cloud Computing services require Broadband of considerable speed, will we exist to a situation where the main factor of digital divide will become the lack of high speed Broadband infrastructure? What would be the consequences for developing countries and other deprived regions? What policies could mitigate the negative effects? Usually the introduction of powerful communication technologies reinforce the competitive advantages of attraction of precisely the most already strong centres and the best policy to compensate this is to foster the very same technologies in the more deprived regions. So the question is: What should be the policies to foster Broadband infrastructure and Cloud Computing capacity in developing countries and the most deprived regions?

Like any enabling technology, this one brings new problems, and in this case, with a considerable complexity due to the Internet global nature, some of them require

new enabling frameworks. Like the need for appropriate policy and security legal frameworks, requirements of data and applications portability between different providers and the consumer needs in case of bankruptcy or other reasons for the business to stop providing services, assurance of confidentiality and secrecy and the associated needs of encryption, the capacity of control over data by its owners, including transfer and deletion of data and finally, the one thing without which none of the above could be assured: efficient, independent auditing systems.

Susana Sargento:

First of all, what is the mobile world? It is the access to the Internet, applications and communication through mobile terminals, such as Smartphone's and iPads, which recently and strongly entered the market and have a tremendous adoption by the end users, as all of you know. In these mobile environments, Cloud Computing is even more important. Why is it so important? These devices have very, very limited storage, they have very limited power, and they have an extremely high penetration in the market. These are reasons for placing the core services of the devices on the clouds. For this device it is much more important to have the clouds out there. This is what is usually referred to as mobile Cloud Computing, which stands for anywhere, anytime, secured data access, applications, and service access. Users do not need technical hardware to run applications since these computing operations are then within the clouds. And moreover, there are a significant number of people that have more than one mobile phone. They have two, three, or even more in some cases and so in this case these users would be able to access the services from one of the mobile phones without problems, because the service is no more in the terminal itself, but it is in the cloud. This kind of transparency is something that can be increased.

Kristina Irion:

Cloud Computing is a disruptive technology and it will change the way we process information, and that will consequently also challenge existing regulatory paradigms. User records stored in the clouds require adequate, effective and enforceable protection in order to generate the confidence for users to take up these services. Cloud service providers have to be transparent and accountable for their services, including modification requirements and independent data security audits. Regulation or no regulation, this has been very much controversial. The answer to this question is doing something, as a minimum about security, privacy, interoperability, openness and competition. An important security concern relates to the lower threshold of protection for undisclosed personal data in the cloud against, for example, access by law enforcement, which pervades in a number of European countries and in the United States. It is important to change this paradigm because that on the cloud should be protected by the same safe guards against public and private interference as is data today on our desks or on our hard drive.

Another major concern is that future business models may rely on the use of personal data of consumers of cloud services, for advertisement or behavior targeting. It is

problematic when consumers consent to the secondary use of their personal data is almost automatically generated when they are signing up for such services. And cloud services or remote hosting of files is not available on a stand-alone basis without committing to share the data. Indeed regulation and common standards for these important issues will be needed in addition to working through these issues with all stakeholders, which may take longer but its need is compelling. I'm looking forward to our discussion about public policy pertaining to cloud services and the consumer protection issues herein.

Robert Pepper:

There are many definitions of the cloud. If we think about it as a shared resource, as a result of that shared resource how can the cloud be used by Government users to address real issues that they have? Governments want to expand services for their citizens, but they also need to control IT costs and operating costs. They want to share information across agencies so that the Government itself becomes more efficient. They also want to drive interagency interoperability but a lot of Government IT systems are siloed. Many Governments, including the U.S. Government, had multiple incompatible e-mail systems. Government agencies, even within a Government, have difficulty talking to each other. They need interoperability, Government wants to hire top people, and retain them. They also have to manage budget pressures so they have to do more, with fewer but better employees and people. We want open access to information for citizens for better governance and transparency but we also need to ensure security and privacy. Cloud services or shared data centre services can actually help Governments balance their needs and do it more efficiently, being smarter about using information technology resources. There are huge benefits. There are other benefits also like having more computing power for small business and individuals without having to have constant upgrades of your own computing at your desktop. For Governments, in a cloud environment you can increase capacity in minutes because you already have access through contracts to the computing power, or have your own data centre, and can dial up capacity and add new people instantaneously.

The cloud also lowers per-user energy costs. There's a lot of debate about data centres increasing energy costs because data centres use a lot of electricity. They have to be cooled and all of that is true, but on a per-user basis when you have efficiencies in the data centre, the per-user cost of not just the money but the energy consumption declines. One of the things that we've been talking about this week is how do we add the next billion and billion after that globally to Broadband services. It is a goal of everybody in this room. It is a good thing that we have billions of people connecting but there are costs to do that, including energy costs. Cloud Computing and access to services through data centres and cloud access can significantly reduce the per-user energy consumption cost. This is very important to understand. There are trade-offs, of course, because there will be costs in terms of energy for the data centres, but if we're going to add the billions of people we want to be added to the net, we need to do it in a smart and very efficient way.

So what is the challenge? One of the challenges is that data centres are seen as the next generation entry into the IT business and investment by every country, province and city. Everybody wants to attract their own data centre. The problem is if you do that, you fragment the data and you don't get the efficiencies. You increase the monetary cost and you increase the energy cost without getting the per-user decline in benefit. It is very difficult. So how do we balance these benefits and costs? We need scale and we need the efficiency, but we also still want diversity and competition, we want the distribution of these new resources globally so that they close the digital divide, not expand it. These are difficult questions. It is not either/or, it has to be a balance and we have to do this in a very smart way.

Michael Katundu:

I'm here to present our report of a workshop conducted by ICC BASIS and the Government of Kenya on implications of Cloud Computing. It was discussed that Cloud Computing is basically a new and emerging technology in computing where an organisation leases or outsources software applications from another company, either within the country or outside the country. Cloud computing also offers services on demand. Cloud Computing denotes something new but actually it has its origins dating back to the early 1960s. It is not a technology revolution, but the revolutionary element is its availability to individuals, extending use and sharing of applications and facilitating consumer-to-consumer interaction in new ways. It was also noted that identifying providers and evaluating them would be a difficult issue of Cloud Computing adoption. Using Cloud Computing requires basically a paradigm shift on the part of the IT experts as well as on the part of the IT services users. There are more benefits to using Cloud Computing than in providing the cloud itself. Some of the identified benefits of using the cloud include inexpensive hardware, software, and applications and inexpensive labour. For developing countries it was noted that e-waste is becoming an increasing concern basically due to necessary policies and laws. Cloud Computing would be a solution because this requires the developing countries not to invest heavily on hardware and application, but instead use minimal IT treatments like mobile and software.

Some of the identified challenges in the utilization of Cloud Computing were: limited awareness on the benefits of Cloud Computing; inadequate policy, laws, and regulatory frameworks to support Cloud Computing, data protection laws and software. Some concerns were with to handle sensitive data. For example, what happens when one loses data in the cloud, where do you go? Do you go to your local laws or international laws for litigation? How do you choose a Cloud Computing provider? How do you change from one cloud to another? In conclusion, it was felt that there's a need for continuous sharing of best practices on Cloud Computing issues, and the IGF is very good for this.

Arthur Mickoleit:

In our workshop for leaner and greener Governments, we discussed first of all why is cloud on the rise with Governments? And it is basically because it helps Governments and citizens to deliver many of the services that they need to deliver. Now, what does this mean for the environment? Data centre energy use around the world is one percent of global electricity consumption. Maybe one percent doesn't sound like too much but it will be 2 percent soon. That is something that needs to be dealt with.

We need to look at this issue holistically, looking at the direct impacts such as energy use or trunk waste. How do we reduce the environmental impact of data centres? It was mentioned that the cloud is a very powerful strategy to reduce machines and increase the number of users connected. That's also because of the devices, and the mobile devices were mentioned. This is something very important to keep in mind but we also need wider systemic thinking to tackle the absolute growing energy use.

Something that we all need to think about in the coming years as the cloud rises in its importance for everybody and especially in developing countries are the incentives to reduce the environmental impact of today's cloud infrastructure and also of tomorrow's cloud infrastructure, which of course includes the many emerging economies and connected devices that connect billions of users. What are the incentives that are needed to create data centres, how can we power the data centres and power the cloud to renewable energies? How can policy makers help with this?

Wilfred Gromen:

I will report on a workshop which examined the trust in the cloud and how this impact Cloud Computing adoption in the developing world. One core theme we covered was the big promise that Cloud Computing could enable the creation of a truly single market for digital services, on a global basis or within a specific geopolitical area.

We found immediately that there are regulatory issues to cope with and the biggest one is solving the sovereignty discussion around Cloud Computing, which jurisdiction will rule in cases of dispute or digital crime? We'll need strong deterrents through civil enforcement with meaningful penalties and remedies and a legal framework which really pushes information sharing between public and private sectors. To do that it was obvious that there must be some consistent rules governing access to and jurisdiction over user data and data which may be conflicting from nation to nation.

Regarding some specific comments out of Africa, our colleague from Senegal raised the possibility of convening a multistakeholder workshop study for the African countries interested in Cloud Computing to address their unique challenges, because they have really a question about understanding and also the confidence to embrace this technology. A colleague from Nigeria was insisting upon security infrastructure standards and assessments by third parties.

From a user's perspective, there was a call for transparency, security and privacy. Privacy and security practices of cloud providers often are not transparent. We need to ensure that users get better information from the cloud providers regarding how their data will be stored, processed and made available. Cloud providers should engage with other relevant stakeholders such as consumer groups and data protection regulators to discuss how to educate best the users on privacy and security. Two final thoughts and conclusions: Can Governments show the necessary political will to reach these international agreements? Will Governments allow their sensitive data to be stored outside their countries?

Pranesh Prakash:

We shouldn't over specify when it comes to cloud related standards, to ensure that they are flexible enough and that the capacity to innovate on top of standards is maintained. Open standards ensure that they are developed through a participatory process and that they're openly available to everyone without discrimination to implement. Cloud platforms should thus offer developers choice in software development tools, languages, and run times. This is what we must move towards, but such standards start as protocols from the ground up, and that's a reality we must face, and before we move towards standards, we still need to work our way through many difficult issues. For instance, standards to ensure controls of our online identity are still are developed. This role of standards in ensuring interoperability is core in allowing consumers to choose between different devices to access the cloud, to choose between different software clients, and shifting between one service and another. This would include moving information from one cloud to another. Clouds should be able to talk to one another. This is a place where open standards become crucial. We of course cannot understand these issues in isolation.

Regarding control of data on social networking websites, one has to also deal with questions about what this data really is. While my own profile information and status are clearly my data, what about the data about my friends that I have been granted access to? We have to keep in mind, while clouds allow for distributed storage and computing, we have software now that allows for peer to peer distribution of the storage and computing as well. Having standards encourages such ideas which are aimed at increasing user and developer control over their own data. In this regard, there were comparisons with the freedoms that the free software movement seeks to guarantee, and how in present day cloud models they are, to a large extent, not guaranteed at all. Also important are issues of how privacy and encryption standards are built into cloud standards themselves. With Government employing cloud infrastructure, how should they take into consideration these issues, such that they are reflected in the policies such as e -Government interoperability frameworks that many Governments have come up with. This is especially crucial in developing countries. And the last point, fundamentally, we have to address questions of distributed computing and the need for redundancy and the continuity of societal memory in a sense, without compromising on privacy and end user control. That is the challenge that we currently face.

Parminder Singh:

What is the connection between Cloud Computing and the issue of network neutrality? More and more data which flows on the networks is data which is connected to or affiliated to this these large companies which are involved with Cloud Computing, so how do those issues go together? If there is certain innovatability as I hear from many of the speeches about a lot of our computing moving into Cloud Computing, does it not then make it more imperative that the Cloud Computing or network environment is more regulated from a competition policy viewpoint and absent of critical integration?

Frank-Charles Osafo:

Regarding network neutrality, one of the things I was saying before was that when it comes to business, when we describe the characteristics of Cloud Computing, we think strength of Cloud Computing is that services are shared across multiple organisations, allowing the same underlying systems and applications to meet the demands of a variety of interests simultaneously and securely. So a very good architectured Cloud computing model will have multitenancy, meaning that multiple people can reside on the network. There will be data transparency. There will be no data commingling. There's no reason why data will be commingled so that data neutrality, network neutrality is ensured in the cloud environment. I don't think it is a characteristic and I don't see that as an issue, because today, we are actually implementing that for corporations who deal with more sensitive information than any individual consumer.

Robert Pepper:

Addressing the specific question about the relationship between networks and access to the cloud, the basic principle that I think everybody agrees on and currently networks globally operate under is the open Internet, which basically is about the ability to have access to any content that you want including your own content or maybe especially your own content that's sitting in a cloud. That's something that obviously you have to have access to but I don't think anybody disagrees with that. Do we need though new and separate regulation because of the cloud? I think that it is essentially the same framework, and I'm not sure that it raises new issues other than the basic principle of having access to any information that's over the net, and you have access to that content. Should there be new competition regulation limiting the vertical integration of who provides and builds data centres and cloud services? I think at this point that would be extremely counterproductive because we really today don't know what the eventual model will be for cloud and data centres. To me, more important is the question about the networks themselves, and there is a need to have managed networks, because different cloud services are going to require different network characteristics. If I'm having an enterprise or a large data centre where I have universities machine to machine talking at very high data rates, real-time symmetric, I need a different network accessing configuration than if I'm accessing content that's already been processed and I want to bring it back, so the need to have differentially

managed network capacity and capabilities to match the needs of what's going on in the data centres I think is extremely important.

Bertrand De La Chapelle:

I'm the special envoy for the information society in the French Ministry. I didn't know really the challenges related to Cloud computing, and even the real definition before, and this is really highlighting the different dimensions of the issue. I would rather understand it as the clouds in the plural, rather than the cloud. The expression "the cloud" reminds me too much of the grid that we were talking about in the past and actually what we're talking about is on demand computing power from shared data centre service providers. It is about a multiplication of Cloud Computing platforms. We are moving in a qualitative change that has been produced by a quantitative evolution which is making this accessible to individual users. The next thing is, I see a distinction between the Cloud Computing platforms that are serving one single user like Facebook having 40,000 computers, and service providers for a third party. In this respect, I see a tension between the distributed capacity and the need for centralization for optimizing. Am I correct in guessing that the topology of the system will be in a power load distribution like a few very large ones and a lot of very small ones distributed? Finally, I see this as an evolution in the next stage. We had the Internet and we had the web and this is a third generation with virtual territories.

Sandra Hoferichter:

A comment from Michael Nelson: Over the last two years, I have been to at least 15 meetings on Cloud Computing. Surprisingly, there has been little discussion of how cloud will enable the Internet of things. In a few years we could have 12 million devices attached to the net. A truly global and corporate cloud would make it much easier to use simple devices, so there's a question then, how can we design the cloud in order to maximize the growth and utility of the Internet of things?

Susana Sargento:

About the question where we have clouds in the plural and not the cloud itself, actually this is what happens nowadays. So a user accesses an application in a cloud. It does not know where it is and if it is only a cloud or an interaction between different clouds. What happens and what will happen in the future is that we'll have different stakeholders that will have these agreements between them and each one of these stakeholders is providing parts of the services. We can think about this cloud as being plural, of clouds between different stakeholders with all these agreements.

Jonathan Zuck:

It seems like it is worth just being a little provocative and suggesting that defining the cloud is a fool's errand. It may not be something that's even worth doing because we don't actually know what it is going to be in the future. We don't know what

the connection is going to be between desktop computers in the cloud or mobile computing in the cloud. We don't know how much processing is going to happen on servers versus client applications. We don't know that there's actually going to be an increased demand for Broadband as a result of Cloud Computing because it could be, particularly in the mobile space, that distributing processing between client and server applications is going to be designed specifically to minimize the amount of traffic that takes place over the wires or the wireless network itself. It is the pairing of data with processing power on servers that is really the critical aspect of these discussions. It is the storage of this data and the distributed storage of that data that raises nearly all of the public policy questions surrounding Cloud Computing. Cloud Computing is a marketing term, but technically speaking the real issue from a public policy standpoint stands from the storage of personal and corporate encrypted data.

Susana Sargento:

Regarding the uncertainty of the future and what we will need from the future, what is happening today was not predicted before. When we see all these interactions on social networks and this massive localization of users, this is something that was not predicted. We know that at this stage and looking towards the future, the cloud will be of major importance and we will need to come up with the requirements for it from today's society. From my knowledge, there are already architectures and standards being defined. We have now several stakeholders that would like to enter in the world of cloud computing and that are trying to enter the world of cloud computing. This means that the incorporation of new stakeholders for different parts and requirements of the cloud is something that is being studied and is something that is being researched. The standard for interaction between these different stakeholders is really important and is being thought about currently.

Frank-Charles Osafo:

We need to be very clear when we're talking about cloud infrastructures and topologies. We need to again separate the consumers from the producers. The requirements for consumers of the cloud are very, very simple. You need Broadband access to the Internet, and you need a device that has the client software that's accessible to the application. When we talk about the bulk of the topological and architectural designs, that falls under the realm of the producers. The producers have to build these data centres, they have to build the virtualization system and they have to create the constructs of delivering the service. So in my mind when we're asking these questions it has to be addressed simply. Are we talking about the requirements of the consumer? The person who needs to consume and use the cloud resources? Or the producer, the creator who needs to create the services?

Kristina Irion:

From a non-technical perspective, we have to pay attention and ensure that standardization efforts are meeting the minimum criteria of interoperability and

also openness. We know that standards and the architecture of the clouds can have an important impact. They can be used to lock in consumers and can be used to strengthen a dominant position or fend off market interest of newcomers. Therefore the standardization issues are not just about technology, it is also about policy and it is important that Governments and other stakeholders are taking part in such efforts to ensure that in the long run we're creating standards that will be keep the markets open and competitive.

Patrik Fältström:

Does cloud create any special need for SMEs compared to other players? Or are there other players who have specific needs regarding the infrastructure and more green environmental issues?

Luis Magalhães:

The use of the cloud by SMEs would require developing competencies in these companies for the procurement process and for monitoring quality of service so they can actually deal with the suppliers.

Robert Pepper:

To your question about the environmental impact as it relates to small medium enterprises, I actually think of the small medium enterprise as the user not a producer here. In fact what they are consciously trying to do is get out of the producer business. When they have to buy computers, they have to have their own I.T. people. They have to put these systems in place. If something crashes they have to figure out how to reboot it, they have to do the software upgrades and they have to worry about security on each device, they're producers. Unless they're in the computer business or the I.T. business that's not their comparative advantage or where they want to spend their time and money, so they want to become a user of computing power processes. Then they can actually shift towards and focus on what they're really in business for. There are; however, the environmental benefits to them doing this, but I do not believe that that is the driver of why most of them will do it. What would those benefits be? If they have fewer electronics, they don't have to have their own servers. They don't need as much back office or power supplies. For example, the e-waste is dramatically reduced for them. Their power consumption on site is dramatically reduced. So there are potentially significant benefits environmentally but I don't think this will be the primary reason for doing this. They do it because they want to get out of the business of being in the I.T. business and actually do the business they're in, and therefore become a consumer of I.T. computer processing and those services and that's what cloud actually gives them.

Sandra Hoferichter:

From Michael R. Nelson from Georgetown University: If only 50% of citizens can connect in the cloud, will companies be able to build their company on cloud? Is 90% enough? How much connectivity is necessary if companies are going to migrate to the cloud?

Frank-Charles Osafo:

Welcome to the world of the cloud. In the future, you'll have no choice because the cloud, like application development, is in the hands of the application developers. If the application is one of a kind and is only developed and delivered through the cloud environment, you will have to find a way to connect to the cloud. So the application developers will be the drivers of what goes to the cloud because if you don't have access to this service you have two choices: You either don't use it or if you want the application, you have to get access to it.

Robert Pepper:

This is why we need ubiquitous Broadband because without that, you won't have access and you're not going to be able to participate.

Felix Samakande:

After following the Cloud Computing debates and coming from a developing country perspective, my first concern is cost, the long term costs which include recurring costs, emerging costs, and especially hidden costs. Developing countries are often caught off guard by such costs, resulting in white elephants instead of projects. What do the panellists perceive to be factors that will cause spikes in the future cost metrics of Cloud Computing? The factors that seem to have this potential include the cost of greening the cloud, the cost of security given the global security threat matrix, the cost of transmission given the private ownership of Broadband undersea cables, and nanotechnology given the potential it has to make some new technologies today redundant tomorrow.

Robert Pepper:

We tend to think of these costs largely as being I.T. costs, computers and processing, but when you're putting these together you have to worry about things like the energy cost, the air conditioning, the security, the civil engineering costs, the maintenance costs, the Broadband connectivity costs in the long term and there's the potential obsolescence. There's a significant cost curve reduction in the technology, in processors that are more powerful and require less energy, which means they require less cooling,

so that new data centres are much more environmentally efficient than old data centres. It is a moving target and I think you do have to be concerned that if you make investments today, it is not stopped or locked in time. You can't look at a single point in time, because the technologies are improving, and the costs are shifting dramatically, and rapidly, and they're all in the favor of better energy use and being more environmentally friendly and higher powered, but it also means that there are going to be increasingly economies of scale, so that if you make investments in small data centres you may not be as efficient and it will be more difficult to compete.

Cynthia Waddell:

I am from the International Centre for Disability Resources on the Internet. I have a quick comment about the future and benefits of Cloud Computing. One, we're active in the IGF Dynamic Coalition on Accessibility and Disability, and our members are very excited about the possibilities that Cloud Computing can bring to persons with disabilities, both in the developing world and the developed world. We want to ensure that interoperability continues so that we can sustain capacity building and allow older adults and persons with disabilities to benefit from what Cloud Computing can bring.

Arthur Micholeit:

I am from the OECD. The cloud we're talking about, Cloud Computing, is not only provided by Cloud Computing operators in the more developed world, we're talking also about long term trends of connectivity and data centres in developing countries. How can this then be combined with the global challenge that is out there, which is climate change? We talked about increasing efficiency of service and data centres but we also need to keep in mind that the absolute amounts are growing still. How can we create incentives for all stakeholders to make these data centre operations in the long term more sustainable?

Frank-Charles Osafo:

If you go to places like Africa, one thing they don't like is today's design of data centres where they have servers using a lot of power. Somebody said on our panel that the cloud is disruptive. The disruption lies in the fact it will change the way of current I.T. infrastructures. Through the cloud, if we can eliminate a lot of the little data centres all over the world so that for instance, there is one cloud provider for West Africa, that eliminates all the other little data centres. So I think the cloud actually in the long run will actually help in reducing the proliferation of data centres today.

Mohamed Jemni:

I am from the Association of Human Technology and Human Resources in Tunisia. I want to come back to the question about what Cloud Computing can bring to disabled people. I think Cloud Computing can bring many things to disabled people, especially they can allow communities to make services available for disabled people

and allow people to share efforts and to share platforms to contribute in a global way to make services available. For example, to improve sign language, a platform of communication with sign languages, and services for the blind, there are many tools and many applications that need global and shared efforts, and Cloud Computing can do a lot for disabled people.

Kristina Irion:

I would like to get back to the favorable conditions that a regulatory framework can create for countries to set up server farms. I even believe there are some factors playing an important role that we have not thought about before. Since it is a security sensitive area, such server farms will require stable political conditions and positive regulatory competition. What the companies would probably look for is not just the least regulatory burden but something that gives also confidence to their customers. A regulatory level that is stable, reliable, and places an appropriate burden on the cloud service provider in terms of security can play a role here. Countries that are doing these things might have a competitive advantage in the end.

Susana Sargento:

How can incentives be created to make data centres more sustainable? Business models need to be in place but one important thing that can help is the existence of these different stakeholders and the interactions between these stakeholders.

Bertrand De La Chapelle:

On the question of jurisdiction, one very important notion that I see emerging is virtualization. What I do sense here is the emergence of the notion of virtual territories. What is happening is that if you are a cloud service provider, you actually have data centres in very different places, and what I just want to explore is if we try to address the problem of transported data flows from the territorial base, we have a problem. If we go at it the other way around and start with the operator of the cloud, then it becomes a virtual territory and you define the framework in this way. The notion that a good and intense but balanced regulatory framework regarding privacy and security is actually a competitive advantage is a remarkable comment and a great relief.

Sandra Hoferichter:

Michael R. Nelson is stating: There's a fundamental unsolved issue that needs to be addressed soon. When I store my data on a hard drive in my home I know the police must have a warrant to access it. If I store my data in the cloud, I don't know who can access it and what permissions they need. So the question he's raising is: If my data is replicated in two data centres in two different countries, can organisations like the FBI and NSA wiretap all my data? How can we assure cloud users that their private data will be properly protected? Can we trust the global cloud? If we fail to address this question will many people and companies be unwilling to migrate to the cloud?

Andrea Saks:

I want to just talk about persons with disabilities' profiles. As we now know, we can take our own mobile phones with us when we move to another provider. The same thing I think must also apply; I'm not worried about making it accessible. If I'm around, it will become so. The thing is, once we get there, and we have users who have their profiles and settings saved, and they want to move, they should be able to own that, take it with them, and be able to use it in other areas or other providers.

Kristina Irion:

There are different thresholds of protection depending on where the data is stored. If the data is stored here on my laptop the police would need a warrant to access it. If it is in the cloud they could do it without a warrant. If the trend is that consumers and businesses will use the cloud extensively to store their data, then we need of course the same level of protection because we cannot make a step back, the original purpose is to ensure due process against search and seizure by Governmental agencies, and this due process requires that there is a judicial review which legitimizes this kind of interference with my personal rights. That is one issue. The other issue is that we will probably get back to a discussion we had already in the past that is under the heading of key escrow where local authorities will try to have easier access to such stored information by having a chance to get to the encryption key, by having a general key that would allow them to decrypt such data, and of course, also this discussion will float back due to the internationality of Cloud Computing. If the data is stored in another jurisdiction, then what can law enforcement do? They can either try to collaborate through formal means with these jurisdictions or they have a way to have access to the key and access the data as if they were the user remotely. Both of these are unresolved and at the moment if the Governments are not willing to give in, then we end up with lower protection than we had before with the data on our hard drive.

Karmen Turk:

My question concerns the accountability of the Cloud service providers. What would be the position for the cloud operators and their liability for illegal material in the cloud? Would they be obliged to remove it or disable access to it in case of knowledge of its existence?

Robert Pepper:

On a number of these liability issues, there is tension between sovereignty and interoperability and conformity. It actually becomes even more complicated when you realise that within a Government, a single Government, there may be competing and conflicting requirements. What we need to be doing is thinking about how to have more coordination and uniformity across and even within countries for not just technical interoperability but legal interoperability. There's an existing framework that does not necessarily map to a world where things are online. That's the challenge. It

may not be that we need something radically new, but we just need to be aware of where the differences are and then try to make these more consistent.

Kristina Irion:

Another situation that we have to keep in mind when talking about privacy, integrity and confidence is that a cloud service provider will essentially become an intermediary actor. Now, imagine the cloud service provider with all this nice data. Of course there will be some sort of incentive for Governments and law enforcement agencies to find ways to use this cloud service provider as a vehicle to take either preventive measures or to use it for investigation. Sometimes without having a clear case, but simply as a pre-emptive measure, to look at whether there is information on child pornographic content, whether there is information on missing children or whether there is information about terrorist activities. That will all come.

Mwende Njiraini:

Listening to the panellists, I have discovered that possibly developing countries do have an opportunity with regards to Cloud Computing. The developing countries have limited finances and technical skills to run Cloud Computing services, but developing countries have an excellent opportunity to have Cloud Computing used for development. They could possibly offer opportunities for Cloud Computing providers, they have large access to renewable energy as well as large tracts of land where there's limited provision of physical locations. There's a need to strengthen policies and legislative provisions in privacy and data protection, with regards to providing a residence for Cloud Computing providers in developing countries.

Frank-Charles Osafo:

Personally, coming from Africa, I have a deep interest in what we do there. Cloud Computing is something we should be embracing, unfortunately, the driver for cloud is really broadband. If Governments would spend the efforts and use their power to make sure that they build the infrastructures in terms of fibre connectivity and high speed connections, then all these things become almost a no-brainer because again, we obviously will tend to be more so consumers than producers.

Luis Magalhães:

On improvements of connectivity, concentrated IT thrives on the improvement of CPU power and these things change along time and to a certain extent, they are not absolutely predictable in terms of the future. We see now an opportunity with Cloud Computing because we have seen drastic improvements in connectivity that brings that possibility. In terms of competitive opportunity to enter that sort of service and market, it is extremely important of course to be able to compete on connectivity as well. That's not just to have Broadband; it is a bit more than that. Developing countries will have to participate either as users or suppliers on this type of computing. This

has a lot to do with the capability that can be achieved in terms of available high speed, low cost broadband, constantly ready without interruption. Finally, low cost is of course extremely important as well here. So I think these factors are very important to consider.

Omar Monieb:

I'm from the Egyptian Ministry of foreign affairs. I would like to raise the question of clouds from the law enforcement point of view. As consumers, we are all concerned about our privacy. I personally wouldn't want to put data on the cloud and then know that someone is checking the data, whether it is the Government or someone else. From a law enforcement point of view though, how do you make sure that data or information stored on the cloud is not used in illegal activities and by criminal groups or terrorist organizations? Who is responsible for providing security for that? Is it the Government that is storing this critical information on the cloud? Is it the cloud provider? If this information or if this data is attacked or violated in a way, what is to be done after the damage is done? I think that's a question that needs to be considered.

Kristina Irion:

Governments will probably have to classify their files according to whether Government records can be stored in a sort of public cloud or have to be put in a private cloud because they are confidential or highly sensitive and need to also stay within the boundaries of a given country. It is certainly not likely that many Governments of the world would be happy and agree that sensitive data of the Government activities and also of their citizens are stored abroad. That is obviously a little bit in contradiction with the whole notion of a global cloud. Security concerns and the concerns about how you can later hold a cloud service provider accountable and how you can ensure that certain standards are adhered to might lead to a situation where sensitive Government records will not go abroad.

Susana Sargento:

I'd just like to answer these and some other questions from the technology point of view. There are several questions on privacy. What happens if my data is accessed by the criminal organizations? We can also have different levels of encryptions if we consider technological point of view. It depends on which data we are talking about and how sensitive the data is. So these different level encryptions can be applied. What needs to be thought through also is what the compromise is between the complexity of doing this and the actual level of sensitivity of the information. So this is just to make sure that you are aware that these solutions exist. It is just a matter of how complex they are and which kind of solutions should exist for the different kinds of data.

Robert Pepper:

Not only do these solutions exist, they're being used. The healthcare example I think is a very good one. Governments today have electronic records that they are storing on data centres that they can share with other agencies like, for example, the Veterans Administration in the United States. They are already storing medical records in data centres in what we could call a cloud. It is a private cloud. It can be accessed by any doctor or any nurse who is authorized in any of the hospitals. They're doing it today and they are doing it with levels of security. These are not new questions. The questions become more complicated when we're talking about resources that are shared publicly. It becomes more complicated when the resource, the data centre, through virtualization, has some private clouds, private space and then partition for more public spaces. That becomes more complicated to make sure that the configuration or the way it is implemented maintains the security at the level that is set and intended.

In terms of storing potentially bad content, again, this is not new. There already are existing law enforcement mechanisms to acquire, for example, access to information in a country that is illegal information. The more complicated questions involve the trans-jurisdictional. What happens if there is content that is being sent to Egypt that's illegal in Egypt but it is residing from a data centre in another country? It just becomes more complex.

Katitza Rodriguez:

One comment from remote moderator: The digital process coalition in the United States is trying to reform the electronic communication privacy act in order to bring back to the 20th century this law. They are trying to give the data that is stored in the cloud the same level of protection that the data that is stored in your home or in your office receives, which means that they need a court-approved order and reasonable grounds to access it. This is to avoid abuse of power from law enforcement agencies.

Algimantas Juozapavicius:

It follows from the discussion that Cloud Computing is really an important issue. In many ways we are set on clouds and it looks like more words will be said on this subject in the future on effective actions for customers, for companies and for countries. We have identified some risks, like the danger of big companies dominating the market for clouds; and also its social issue, that it could potentially increase the digital divide if we are not careful. Certainly procedures are needed. It looks like in some cases we need applications, and in many cases we need new business models for clouds and new public policies. SMEs can benefit from clouds as they hopefully can enable them to enter the market in new ways. As for infrastructure, we need an environment that will set architecture standards and interoperability standards for Cloud Computing. We

also need increased connectivity to successfully migrate to clouds. Security and privacy issues were raised, and attention to security is getting even higher and efforts to secure our data and computing procedures, it looks like, are getting more complicated. From a social point of view also I see that there are some Governments which are moving quite rapidly to cloud infrastructure, and some Governments that are not. I see much value coming from our discussion; I see that participants of this forum will answer the call for more rapid development of clouds, especially for academics, for public sector, and for businesses.

Sandra Hoferichter:

The session was a great success in terms of remote participation. We had seven hubs participating from all over the world, beginning in Toulouse, Jakarta, Philippines, West Africa and Cameroon, among others. The chat rooms were following the discussion and had their own active discussions in their respective countries about their respective topics. This was great progress for the remote participation itself.

EMERGING ISSUES – CLOUD COMPUTING

Reports of the Workshops and Other Events

WS 58. Implications of Cloud Computing

WS 105. The Role of Internet Intermediaries in Advancing Public Policy Objectives

WS 106. Cloud Computing for leaner and greener IT infrastructures in Governments (and businesses)

WS 136. Engendering Confidence in the Cloud – Addressing Questions of Security and Privacy in Developed and Developing Countries

WS 58. IMPLICATIONS OF CLOUD COMPUTING

Report by: Elizabeth Thomas-Raynaud

List of panellists and/or participants:

MODERATOR Herbert Heitmann, Executive Vice President, External Communications, Royal Dutch Shell; Chair, ICC EBITT Commission PANELLISTS Joseph Alhadeff, Vice President for Global Public Policy and Chief Privacy Officer, Oracle Corporation; Vice-Chair, ICC EBITT Commission Michael Kamuti Katundu, Assistant Director, Information Technology Communication Commission, Kenya Christiaan van der Valk, Chief Executive Officer, TrustWeaver; Co-Chair, ICC Task Force on Security and Authentication Vikram Kumar, Chief Executive, InternetNZ Pablo Molina, CIO, AVP and Professor, Georgetown University; Board Member, EPIC

Herbert Heitmann, Executive Vice President, External Communications, Royal Dutch Shell; Chair, ICC EBITT Commission, welcomed participants and then put forward questions to the panelists. The panel responded to these questions freely and did not make individual presentations. Some of the questions and discussions are highlighted below:

What is it that's actually new or novel about the cloud?

Joseph Alhadeff, Vice President for Global Public Policy and Chief Privacy Officer, Oracle Corporation; Vice-Chair, ICC EBITT Commission said that while the term Cloud Computing denotes something new, it has its origins dating back to the early 1960. So not a technology revolution but the revolutionary element is in its availability to individuals – extending use and sharing of applications and facilitating consumer to consumer interaction in new ways. Among the positive implications for consumers and businesses he noted that identifying providers and evaluating them could be difficult.

What challenges does Africa face to deploy Cloud Computing?

Michael Kamuti Katundu, Assistant Director, Information Technology Communications Commission of Kenya described the opportunity and challenge from a developing country perspective. He discussed the factors in deliberating whether to build and host data servers in the country, or to use those offered in the cloud by providers in other countries. In addition to noting the need to evaluate new infrastructure and technical requirements of Cloud Computing he noted the need to consider whether the existing legal framework can accommodate Cloud Computing particularly with regard to privacy and security but also to the question of jurisdiction of applicable law.

Mr. Katundu raised the challenge and was echoed by some inquiries from remote participants on how developing countries could benefit from using cloud services or consider offering them when core requirements such as bandwidth and power supply are not in sufficient supply to support the demands for these.

The question of what legal issues surround Cloud Computing was discussed by the set of panelists:

Vikram Kumar, Chief Executive, InternetNZ shared his view that while the long term evolution of Cloud Computing was likely underestimated and that it would allow people to do things unheard of before, its short term potential was overestimated. He felt it was not ready for critical functions or the storage of sensitive data given laws of the country where the data center resides, data subject and HQ of provider could conflict quite badly. One participant offered a novel idea for resolving this concern by proposing that countries interested in the cloud services of others negotiate bilateral memorandums of understanding to protect the data center from 'foreign laws' along the principle applied to embassies.

Christiaan van der Valk, Chief Executive Officer, TrustWeaver; Co-Chair, ICC Task Force on Security and Authentication spoke about the extraordinary opportunities for innovation and reduction of cost barriers to entry opened up by the provision of cloud services, using the example of his company's experience in sales to other businesses. With regard to regulation he urged lawmakers not to presume the need for new laws because 'cloud' is a new phrase. He stressed that existing laws are in place and must first be considered in terms of their application and that help untangling the contradicting legal requirements would be a useful first step.

Pablo Molina, CIO, AVP and Professor, Georgetown University; Board Member, EPIC offered similar advice to regulators qualifying that while existing guidelines in both hard and soft laws are not adequate to manage regulators should not rush to write new legislation but should look first at existing laws. He described the cost benefits cloud offerings were having in reducing costs for universities and noted the paradigm shift in the technology practice services are acquired and used. When discussing how to manage privacy questions in the cloud, Mr. Alhadeff responded to a question about

future EU regulations by emphasizing the importance of laws that were harmonized and focused on accountability rather than burdensome administrative processes that did not affect outcomes. He pointed to binding corporate rules and the APEC cross border transfers framework as examples of options offering less complexity and greater global application. On the question of security, Mr. Alhadeff described the need for the application of a layered approach to security and that corporations needed to have a culture of understanding of privacy and security to maximize this effort.

Mr. Molina described how cloud helps maximize economic models by allowing companies to locate operations in different parts of the world according to the particular benefits, be it in cold Nordic climates that offer natural means to keep data centers cool or in countries with legal frameworks, technologically trained personnel and other enabling factors that create the most attractive choice.

Conclusions and further comments:

Mr. Heitmann concluded the session highlighting the following points:

The short term potential of the cloud may be overestimated while its long term implications are underestimated. An explosion of cloud use and services is to be expected. There is a call to harmonize what is existing – in terms of regulations – then consider adjustments. It was noted that opportunities are more seen in using and contributing to the cloud than providing the cloud. Mr. Heitmann added that the discussions in this session served to highlight the value of multistakeholder exchanges on these topics and the potential for them to enrich decision making and stimulate innovative ideas.

WS 105. THE ROLE OF INTERNET INTERMEDIARIES IN ADVANCING PUBLIC POLICY OBJECTIVES

Report by: Karine Perset

List of panellists and/or participants:

- Karine Perset, Economist/Policy Analyst, Information and Communications Policy Division, OECD Secretariat - Lilian Edwards, Professor of Internet Law, University of Sheffield - Marc Berejka Senior Policy Advisor, Office of the Secretary, US Department of Commerce - Kurt Opsahl, Senior Staff Attorney, Electronic Frontier Foundation - Pedro Less Andrade, Senior Policy Counsel – Latin America, Google Inc. - Brenton Thomas, Assistant Secretary, Spectrum and Wireless Services/Networks Policy and Regulation, Australia - Mark MacCarthy, Professor, Georgetown University (remote participant) - Anne-Lena Straumdal, Senior Adviser, Ministry of Government Administration, Reform and Church Affairs, Norway - Joseph Alhadeff, Vice President for Global Public Policy and Chief Privacy Officer, Oracle Corporation (BIAC) - Gwen Hinze, International Director, Electronic Frontier Foundation. Representative of the Civil Society Information Society Advisory Council (CSISAC) to the OECD ICCP Committee (remote participant)

Karine Perset, Economist/Policy Analyst, Information and Communications Policy Division, OECD Secretariat, chaired the workshop. She introduced the OECD''s project on Internet intermediaries, of which the goal is to obtain a comprehensive view of Internet intermediaries, including their economic and social functions, benefits and costs, and potential roles or responsibilities. She proposed a working definition of Internet intermediaries that give access to, host, transmit and index content originated by third parties, or provide Internet service to third parties. She identified six main categories of Internet intermediaries: Internet service providers, hosting providers, search engines, e-commerce platforms, payment providers and participative network platforms. She noted that the project essentially deals with the critical balancing act between protecting intermediary functions that are socially, economically or politically valuable, while at the same time taking into account other and potentially competing policy goals, such as protecting security, privacy, intellectual property rights or consumers.

Lilian Edwards, Professor of Internet Law at Sheffield University, provided a broad overview of the legal frameworks applying to Internet intermediaries, especially in Europe and the United States, by describing the EC Directive on e-commerce in Europe (ECD) and the Digital Millennium Copyright Act (USA), the latter complemented by the Communications Decency Act. She said that, despite the overall success of the notice and take-down paradigm of the year 2000, content industries now tended to view these regimes as less appropriate than before. She also stressed that other content issues such as child pornography and hate speech have raised issues concerning filtering and deep-packet inspection, and that cyber-security concerns have further raised the pressure to consider potential liability on ISPs. She pointed out changes she perceived: *i)* in the Web 2.0 era, that the distinction between hosts and content providers was less clear; *ii)* that intermediaries are starting to develop the technical and practical ability to inspect and remove certain types of content (*e.g.,* Google's Content ID), and; *iii)* ISPs are no longer an emergent business. She raised the following questions: *i)* whether a regime of special immunities for intermediaries is still needed, *ii)* which rules should be attached to *ex-ante* methods, if adopted, to ensure human rights, transparency and due process; *iii)* whether a „one-size-fits-all" approach such as the ECD was still desirable, and; *iv)* whether new rules for intermediaries that have emerged since 2000 are needed (*e.g.,* search engines, online auction sites).

Marc Berejka, Senior Policy Advisor, Office of the Secretary, U.S. Department of Commerce, spoke about the creation of section 230 of the Communications Decency Act. He said that a policy choice had been made in 1995 to apply the strong liability limitations that had traditionally protected common carriers" to Internet intermediaries („interactive computer services"). He expressed the view that such liability limitations had contributed to the economic success of the Internet industry. He noted that this system, however, was under strong pressure globally, in particular from the content community, and that the preferred approach in the United States was that of negotiations between private parties. He further noted that pressure from other jurisdictions on US-based Internet intermediaries has a greater impact than before,

reinforcing the case for some form of international harmonization of approaches. He concluded his remarks by mentioning the Internet policy task force formed at the U.S Commerce Department to help develop leading thoughts around Internet policy.

Joseph Alhadeff, Vice President for Global Public Policy and Chief Privacy Officer for Oracle Corporation, emphasized the need to consider the entire ecosystem rather than just Internet intermediaries. He warned that exerting all the control through the choke points may not be appropriate and that only part of this responsibility should be placed on Internet intermediaries. He noted the different interests at stake and the need to consider the different sizes of companies and their different business models when thinking about good practices and the way they are applied. He also stressed the need to define the concept of "intermediary" more specifically.

Anne-Lena Straumdal, senior adviser at the Department for ICT policy and public sector reform in the Norwegian Ministry of Government Administration and Reform, stressed the importance of cross-Ministry co-operation and of a whole-of-Government approach in considering the role of intermediaries in advancing content-related public policy objectives on the Internet. She pointed out the need for Governments to fully understand the role that Internet intermediaries play in the Internet economy, for informed policy-making. She stressed the following ICT goals that are important to Norway and to other OECD countries: *i)* ensuring security and trust; *ii)* keeping a resilient infrastructure in place; *iii)* promoting democratic engagement, and involvement, particularly freedom of speech; *iv)* ensuring that the Internet remains an open and non-discriminatory platform for all types of content distribution; and *v)* stimulating innovation and creativity. She warned that businesses are struggling to find business models, and noted the importance of helping them to perform their activities. She mentioned a Government initiative to handle requests from individuals whose private information has been violated online (*e.g.,* false Facebook profiles).

Pedro Less Andrade, Senior Policy Counsel – Latin America, Google Inc., described Google's Content ID service that helps to meet consumer expectations while also enabling copyright holders to decide if and how their content is used on YouTube's video sharing platform –*e.g.* shared, blocked, or monetized with advertisement–. He noted the complementary nature of the copyright and Internet industries, as exemplified by the VCR and its role in helping the content industry to flourish despite initial fears of illegal copying of television programming. He pointed out that, despite the hypothetical ability of intermediaries to filter content, providing liability immunities to intermediaries continued to be critical to enable them to develop new collaborative technologies, including technologies to help the content industry. He stressed that liability limitation encourages investment in devices and new technologies. Pedro Less Andrade highlighted Chile's first copyright reform, which takes the Internet into account. He explained that this reform implements a method of forwarding of notices and judicial take-down, whereby a copyright holder may send a notice to an ISP about copyright infringement. The ISP"s only obligation is to forward notices received to the user. The user then has the choice between abiding by the notice, ignoring it, or

replying to the copyright holder directly to provide an explanation. If the user ignores the warning, the copyright holder may decide to take legal action.

Brenton Thomas, Assistant Secretary of the Spectrum and Wireless Services Branch of the Australian Government Department of Broadband, Communications and the Digital Economy, described the Australian Internet security initiative (AISI), mentioning that it started as a project to monitor traffic flows in order to detect malicious software or botnet behavior. This information is now gathered in reports and sent to ISPs who can if they wish to use it to help their customers become aware of security issues or take action to clean their computers. ISPs use the AISI reports to notify their customers if their computers have a security problem. He emphasized that this initiative is one of many examples of how Governments and industry - Internet intermediaries in particular - can work together to get a good outcome. Brenton Thomas described the development of a voluntary ISP cyber-security code of practice, to ensure consistency between cyber-security messages provided by different ISPs to their customers. This code contains four elements: *i)* notification and management system for compromised computers; *ii)* standardized information resource for end users; *iii)* a comprehensive resource for ISPs to access the latest threat information, and; *iv)* a reporting mechanism, in cases of extreme threat, to facilitate a national high level view of an attack status.

Mark MacCarthy, Professor, Georgetown University, noted that Internet intermediaries are often in a good position to control online behavior. He proposed, however, that Governments should use a cost-benefit test showing that imposing intermediary liability would have net social benefits and that the enforcement efforts were proportional to the harm avoided. He also warned that relying on Internet intermediaries to make subjective determinations of the legality of actions, is placing a burden on them that they are not well-equipped to handle. He noted, as an example, the difficulty for Internet intermediaries to know whether the content they host contains defamatory content or not. He stated that Government determinations should be responsible for stating the legality of activities.

Kurt Opsahl, Senior Staff Attorney, Electronic Frontier Foundation, started his remarks by stating that good practices must consider the overall social cost and externalities, especially the costs to users, to their freedom of expression, to their privacy, and the cost to innovation. He mentioned that Internet intermediaries are not positioned to both externalize negative things caused by users and also permit positive social outcomes. He noted that despite the fact that the Internet is not an emerging market anymore, innovating models are still rising every day and there is a need to foster this continuous innovation. He warned that automated solutions and systems are ineffective in a wide variety of potential online problems (*e.g.,* defamation, privacy). The Chair, Karine Perset, launched the discussion by inviting participants to comment a list of draft good practices developed based on research at OECD, on discussions with relevant stakeholders, and on the Experts Workshop on Internet Intermediaries, held on 16 June 2010 in Paris, France. Joe Alhadeff mentioned that not all practices are applicable to all situations, but they create a superset of concepts to consider and a solid basis for conversation going forward. Lilian Edwards highlighted the economic side and the

cross-border nature of the guidelines and mentioned that they are a step in the right direction.

Following a question from the audience about *non-professional Internet intermediaries* (*e.g.*, bloggers), Lilian Edwards stressed the importance of considering the different sizes of intermediaries. Kurt Opsahl also reacted to this question stating that even individuals can be intermediaries and thus, are included in Section 230 of the Communications Decency Act. The *issue of public interest* was raised by a member of the audience, who noted the need to prioritize the implementation of human rights on the Internet, and stated that this was a common duty shared by Government, industry and civil society. Karine Perset and Brenton Thomas agreed that the public interest is a fundamental priority and that all relevant stakeholders should be involved in pursuing this goal. Karine Perset responded to a member of the audience who inquired about the methodology used to determine who is considered a relevant intermediary and who is not, stating that this issue has to be determined on a case-by-case basis and depending on the issues involved. Pedro Less Andrade highlighted the importance of considering as many stakeholders as possible, even individual users. A member of the audience inquired about possible international solutions for cases like Governments blocking content from an intermediary, mentioning the case of YouTube being blocked in some countries following Government decisions. Pedro Less Andrade noted that Internet intermediaries face significant pressure from Governments and are required to comply with their decisions. He further noted that excessive pressure over the intermediaries could affect freedom of speech.

WS 106. Cloud Computing for leaner and greener IT infrastructures in Governments (and businesses)

Report by: Arthur Mickoleit, OECD

List of panellists and/or participants:

The workshop was moderated by Arthur Mickoleit, Policy Analyst, OECD. Distinguished panel speakers were: • Ms. Cristina Bueti, Policy Analyst, International Telecommunication Union (ITU) • Ms. Heather Creech, Global Connectivity Director, International Institute for Sustainable Development (IISD), Canada • Ms. Laura Dzelzyte, Climate Change Advisor to the Minister of Environment of Lithuania • Mr. Dr. Govind, Head of e-Infrastructures Department, Ministry of Communication and Information Technology, Government of India • Mr. Tracy Hackshaw, Chief Solution Architect, National Information and Communication Technology Company (iGovTT), Trinidad & Tobago • Mr. Deepak Maheshwari, Director, Legal Affairs, Microsoft India • Mr. Robert Pepper, Vice President, Global Technology Policy, Cisco Systems • Mr. Christian Reimsbach Kounatze, Policy Analyst, OECD

Arthur Mickoleit opened the workshop by welcoming the audience and introducing the distinguished panelists. He alluded to Cloud Computing as a technology with double potential – economic and environmental. Governments in OECD countries such as

the United States (apps.gov), United Kingdom (G-cloud) or Japan (Kasumigaseki cloud) have embraced the concept of Cloud Computing to rationalize the costs related to creating and maintaining "in-house" IT applications and infrastructures. This workshop would aim to provide complementary views from non-OECD countries such as India or Trinidad & Tobago. At the same time, environmental opportunities arise from the more efficient operation of IT infrastructures. Improved efficiencies can impact electricity use and potentially lower greenhouse gas emissions from Government IT activities. Arthur invited speakers to comment on this double potential of Cloud Computing and to indicate potential pitfalls and policy implications.

DR Govind provided an overview of the Indian Government's plans to use Cloud Computing for the delivery of e-Government services to citizens. India plans to provide over 90% of public services using Cloud Computing services instead of applications running on "in-house" IT infrastructures. To provide an order of magnitude of this plan, DR Govind alluded to India's continued impressive economic and social development. The growth of the population and the economy poses unprecedented challenges in improving healthcare, education, skills development, national security and the environment. Innovative IT and Broadband applications, e.g. in the area of Cloud Computing, are important to tackle these challenges. Moreover, he highlighted how Government cloud initiatives positively impact domestic IT firms, including small and medium-sized firms around cloud services.

Robert Pepper defined Cloud Computing, highlighting that public, private and hybrid clouds refer to the same technology, albeit with different governance rules. For Governments, the main advantages of Cloud Computing are the facilitation of procurement and purchase processes – hardware purchase, maintenance and amortization costs are largely replaced by service costs – and the possibilities to scale on demand. Users of cloud-enabled Government services can access these services with a variety of devices and via many channels. Access devices can be low-cost, which has important implications for the reach of e-Government services in developing courtiers. Finally, Robert underlined that Cloud Computing services are becoming increasingly efficient with reduced electricity consumption per user.

Arthur Mickoleit used Robert's final remarks to point to the importance of assessing absolute increases in electricity use and greenhouse gas emissions from Internet activities such as Cloud Computing. Arthur informed the audience on the OECD framework for ICTs and environmental challenges. Cloud Computing touches upon the environment on all levels of the framework: direct impacts from electricity use, enabling effects through the use of "smart" ICT applications such as tele-work, and systemic impacts such as shifting dispersed data centers to consolidated data centers via Cloud Computing.

Heather Creech presented the results of a study on using carbon credits to "green" data centers. This research, undertaken with CANARIE, aims to leverage national fiber-optic networks to relocate data centers of universities and/or share their computing

resources using a "community cloud" configuration. Three options that were studied: i) building new data centers in proximity of renewable energy sources but far away from urban zones; ii) building new data centers closer to urban centers, but in provinces that have a higher share of renewable energy in electricity generation; iii) modifying existing assets to make better use of excess heat generation for district heating. None of these options were found to be economically viable solely based on carbon credits. A fourth option put forward by the study is that of a "green community cloud" shared by individual universities, which would help optimize utilization of IT assets and provide shared repositories for information from publicly-funded research. Heather highlighted that policy to support such community clouds must be validated and implemented across jurisdictions, i.e. across national or other administrative borders.

Laura Dzelzyte provided the view of an international climate change negotiator on the role of ICTs and the prospects of carbon financing for "greener" data centers. She assured the audience that there is both interest and need for empirical evidence about the role of ICTs for international climate change negotiations. Laura conceded that appropriate financing solutions are key to the success of projects such as the Canadian one on "green" data centers. But she also noted that carbon trading is unlikely to be a solution in the short run because of the complexity of the issue and the lengthiness of international negotiations in this area. She suggested financing options for environmentally beneficial ICT projects might exist with the international financing institutions, e.g. World Bank or EBRD.

Robert Pepper agreed that financing from carbon credits might not be viable in the short term. But with reference to Helen's remarks he highlighted the great potential for tackling underutilization of data centers through shared cloud resources. Cloud Computing enables services provision by every level of Government – national, federal, local – without having a data center at each level and the environmental impacts that go with.

Cristina Bueti outlined the activities of the ITU in the context of international climate change negotiations. It works with other international organizations, e.g. OECD and WIPO, to inform policy-makers about the potential contributions ICT applications in the context of climate change monitoring, mitigation and adaptation. The ITU develops messages about the double potential of the ICTs: providing ways to drastically reduce environmental impacts in different industry sectors while also lowering the sector's own environmental footprint.

Deepak Maheshwari accentuated the importance of Cloud Computing for business growth in emerging economies, notably India. He provided the example of an export-oriented textile industry cluster that used relatively little IT to manage and share resources. Microsoft, in collaboration with the local industry association, developed a "community cloud" that helped spur IT uptake and use among the textile sector firms. The data center was hosted at the association in order to guarantee security and confidentiality of competitors' data. Access to cloud services was provided via mobile

phones in order to cater for the specific needs of the users. Deepak said this model of lean IT infrastructures can also be applied to provide Governments easy and affordable access to ICT services and applications.

Tracy Hackshaw discussed how a Small-Island developing state views the opportunities of Cloud Computing. The impacts of climate change are most tangible in countries such as Trinidad & Tobago. He said that Cloud Computing might be beneficial from an environmental point of view, but it is certainly necessary in small states from a resources point of view. Skills needs and maintenance costs for individual data centers are high. So instead of having one data center per small-state Government, Cloud Computing could allow for pooling resources across states in the Caribbean region. He pointed to connectivity issues that would need to be resolved.

Christian Reimsbach Kounatze gave an overview of "Green ICT" policy priorities of OECD countries. Most Governments have R&D and more general innovation programs in this area. And they are using internal Cloud Computing projects to demonstrate the technology opportunities. However, he highlighted that most Governments formulate policies regarding the energy use of ICTs, neglecting somewhat environmental impacts categories such as land and water use that are important in the context of data centers. He also indicated that there is potential for further cross-sector policies of using ICTs, e.g. in transport or energy. He concluded by saying that e-Government programs increasingly focus also on the interactions with Broadband and Cloud Computing developments.

WS 136. ENGENDERING CONFIDENCE IN THE CLOUD – ADDRESSING QUESTIONS OF SECURITY AND PRIVACY IN DEVELOPED AND DEVELOPING COUNTRIES

List of Panelists and/or Participants:

Mr. Jeff Breugemann, Vice President for Public Policy, AT&T; Mr. Wilfried Grommen, General Manager and Regional Technology Officer for Central and Eastern Europe, Microsoft; Mr. Waudo Siganga, National Chairman of the Computer Society of Kenya; Ms Coura Fall, Senegalese Information Technology Association; Mr. John Morris, General Counsel and the Director of the "Internet Standards, Technology and Policy Project, Center for Democracy and Technology; Mr. Lu Jianfeng, Vice President, Qihoo

The discussion started with an understanding of the definition of cloud computing and quickly moved to the risks (data protection; privacy of data; law enforcement requests and risk to free speech) and rewards (save money; shorter time to market; increase reliability; greater innovation and competition) of cloud computing for both users and providers.

The panel focused a good deal of attention on the big "promise" that cloud computing could enable the creation of a truly single market for digital services on a global base or in specific geopolitical areas.

The second major issue addressed in the workshop was the sovereignty discussion around cloud computing. Which jurisdiction will rule in cases of dispute, or digital crime?

Despite the diversity in background of the panel, there was significant agreement on these issues. Namely, that a good strategy to combat digital crime requires strong deterrence through criminal and civil enforcement; a legal framework that encourages cooperation and information-sharing between the public and private sectors; and the ability for law enforcement in different jurisdictions to team up and exchange information globally

To address the challenge of online crime, there needs to be consistent rules governing access to and jurisdiction over user content and data which currently can be conflicting from nation to nation; a multilateral framework to address this situation.

The panel discussed many different options here including a new international trade agreement; a treaty of some sort; or focusing on just trying to address cloud computing without trying to resolve the larger issue of harmonizing ALL data protection and privacy concerns. Panelists saw a role for the IGF is facilitating this framework.

Coura Fall, from Senegal, raised the possibility of convening a multistakeholder workshop/study for African countries interested in cloud computing to address the unique challenges of developing the necessary understanding and confidence to embrace this technology.

Lu Jianfeng, from China, provided the workshop with a clear example of the technology currently being used there to address some of the risk issues for cloud users. He also shared statistics which suggested that a remarkable 88% of Chinese computer users could be using cloud computing within 2 years – up from 45% now.

From a user's perspective, there was the clear call for transparency on security and privacy issues. This discussion focused on: privacy and security practices of cloud providers often are not transparent to the user; ensuring users receive more & better information from cloud providers about how their data will be stored, processed and made available; and cloud providers should engage with other relevant stakeholders, such as consumer groups and data protection regulators, on how best to educate users on privacy and security matters.

On this last point of engaging stakeholders, it was suggested that this could be a self-regulatory process, facilitated by IGF.

Most questions from the audience focused on the next steps needed to provide the level of confidence and assurance users need to take full advantage of the opportunity that cloud computing provides. Issues raised included:

• Include the protection of IP as a focal point, as software from small SME's will be deployed on these platforms. What are their IP rights and the protection of it;

- What happens in case of bankruptcy of cloud providers;
- Security and privacy compared to what? It often means the actual "privacy and security" measurements are less up-to-date for on premises software than for cloud providers;
- Can governments show the necessary political will to reach an international agreement on sovereignty and data protection;
- Will governments allow their sensitive data to be stored outside the country? Or are private government clouds going to be the de facto deployment model?

As a feedback into the IGF process, the debate within the panel and with the audience seemed to arrive at three suggested "take-aways" for the IGF:

1. IGF should be analyzing the best instrument to deal with a multilateral framework governing access to and jurisdiction over user content and data;
2. IGF should do a specific workgroup or study to analyze the feasibility of cloud deployment within Africa; and
3. IGF could enable, contribute to create a set of agreed "Transparency in Cloud Computing" principles – principles designed to ensure that users are able to make informed decisions when selecting their service provider.

The GIIC was joined by the Internet Society of China and World Information Technology Services Alliance (WITSA) in hosting this workshop.

TAKING STOCK OF INTERNET GOVERNANCE AND THE WAY FORWARD

17 September 2010

Chairman:

- Henrikas Juškevičius, Advisor to the Director-General of UNESCO on Communication, Information and Administration Issues, Vilnius

Moderator:

- Jonathan Charles, World News Presenter, British Broadcasting Corporation (BBC), London

Remote Moderation:

- Rafid A. Fatani, Ph.D researcher, University of Exeter; UK IGF

Henrikas Juskevicius:

This final session of IGF is to review the IGF itself and the impact the Forum has had over the past five years. As we come to the end of the IGF five year mandate, this session will serve as a check on how well we have done. Here we achieve the goals set for the Forum by the Tunis Agenda. How well have those goals been achieved? We have covered a broad range of issues this week. The discussions in the main sessions and many parallel events have been very informative. In preparing for the meeting, we were asked to consider five questions: Are the main themes of 2005 still relevant today? Are there new themes that are being overlooked in Internet Governance discussions? From Athens to Vilnius: Has the context of the discussions changed, and if so, how? Has Internet Governance globally advanced over the five years of the IGF? Capacity building: Where were we five years ago and where are we now?

Alun Michael:

I think the IGF process has been extremely successful. The only criticism I would make is the fact that inevitably, as we are human beings, we can't keep up with the pace of development. So I think it is developed probably as well and better than we might have expected, and no small thanks to the sensitive way in which the Secretariat has enabled the process to develop. I want to underline the word "process" because I think there's no doubt that the Internet Governance Forum is not an event one week a year. It is the process that happens throughout the year and the things that go into and go out of the week as we have here in Vilnius that is important. Many things have impressed me in the way that they have developed and I don't think they were predicted. The development of national Internet Governance Forums or fora, certainly that was not something we envisaged in the U.K. when the original proposition was there in Tunis but I think it is been a successful development. We've learned about the need to have a debate within our own country involving Government and industry, and involving parliamentarians and Civil Society in that process. I underline that fact because I think there's a tendency sometimes to talk about self-regulation when it comes to dealing with difficult and criminal activities, and I don't think its self-regulation that's needed. It is a cooperative model of regulation, where the industry leads because that's where the developments are taking place. They're the people at the cutting edge. It is important to design in things like safety for young people and of course Government has to be involved, but you can't leave it just to industry and Government alone. There needs to be transparency and openness, and that's where the engagement of parliamentarians and Civil Society is absolutely vital. The other things that I think have been particularly exciting are things like the development of regional processes in a number of parts of the world. I was privileged last year to visit the East African IGF and I pay tribute to the way that the countries involved there, and again very often the leadership of NGOs, has created a very positive model. It is

different from region to region as we were hearing in a discussion that took place this morning, but to hear in south Asia and other parts of the world, and in America, the development of an IGF process I think is very encouraging.

It is different in different parts of the world. In Europe, we see two overlapping models developing, one following the larger number of countries involved in the Council of Europe and the other the development involving the European Parliament and Parliamentarians from national Parliaments as well working across the European Union element. That's not a bad thing. The fact that there are different models developing I think is extremely encouraging. I also think that the development of a Commonwealth Internet Forum is particularly exciting because of course that stretches from developed countries to developing countries and across several continents, a grouping that's used to debating many issues. Climate change was one that was very much developed as a debate within the Commonwealth and the fact that the Internet issues are being developed I think is very positive. The engagement of Parliamentarians is crucial because there's a tendency when there is a problem to legislate for it and in many ways what we need to do is avoid legislation and regulation that is specific or just for the Internet. Its people that are the subject of the need for legislation, very often, and laws rarely prevent what they forbid. So if we want that approach, the engagement of Parliamentary is crucial.

I would say that greater engagement of industry at that national and perhaps regional levels, and certainly in the IGF, is crucial. Industry must realise that if there are major concerns emerging from Parliaments and from Civil Society, unless they are part of designing solutions that suit industry, then they should not be surprised if the legislative and bureaucratic approach develops, and that will not be a good thing because it will be impossible to keep up in the age of the Internet. Finally I think the engagement of young people is one of the most positive developments. We've seen the engagement of young people, their attendance at the IGF here in Vilnius, and a very positive contribution made by them. I think we will see the development of the engagement of young people at the more local and national levels, and we, as a process, need to be open to the voices of young people. After all, they've grown up with the Internet. It is not something new for them, and very often, their approach is quite different from that of older people. I hope that we will see the direct voices of young people increasingly into every part of the IGF process, including the events in future years, which I sincerely hope we'll see taking place I believe in Kenya next year.

Jonathan Charles:

We should always remember as we're having this discussion that we're at this crucial moment. We've had five IGFs now. We're coming to the end of the fifth IGF, and to steal a phrase from Winston Churchill, it is obviously not the beginning of the end; it is in fact probably the end of the beginning. This process, even though it was only a visage for five years is probably just starting in its way.

Vince Cerf:

I am Google's Chief Internet Evangelist, and I'd like to respond to several of the questions raised by the Chairman. First of all, with regard to young people, perhaps we should have a T shirt next year that reads: 'Don't look back, there's a 13 year old gaining on you.' Let me respond to how the Internet has changed in the last five years. First of all, we're soon to run out of IPv4 address space and it is time to get IPv6 implemented. Second, there have been some significant improvements in Internet resilience, specifically, the domain name Security Extensions, and the routing RPKI mechanism which is still in its early stages, the use of IP SEC on an end to end basis, otherwise known as HTTPS, and the introduction of internationalized domain names in the Top Level Domain name system, those are all rather important and recent changes to the Internet. I'd like to suggest that we consider in a year's time, assuming that we will convene again in Kenya, several specific actions. With regard to the meeting there, I, for one, would be very grateful to hear from our colleagues there at AfriNOG and AfriNIC about how progress is being made in the proliferation of Internet and Internet access. I'm sure there are other institutions besides those two who could be prepared to present their results. I would also like very much to hear from them about barriers and problems that they're encountering.

Second I think as a matter of practice, the Internet Governance Forum, which is intended as a place where we discuss and raise issues, but we don't necessarily achieve either consensus or action, that we undertake in this Forum to identify the location and venue in which those problems might be addressed, and that we seriously take that as a matter of responsibility. Then in the following year, ask ourselves: How much progress have we made in pursuing a particular goal? Let me give you a simple example. There are Brazilian colleagues who presented a list of 10 things earlier this week. These are principles I think could be widely and generally accepted. In fact, I would go so far as to suggest we should be interested in an international proliferation treaty, not a non-proliferation treaty, to promulgate not only those principles but the Internet that goes with them and we might ask ourselves, in what venue could such a treaty or agreement be made? And second, can we measure progress? I want to mention just one other thing as a concrete idea emerging out of this week's discussion: There has been a great deal of concern as all of you know with regard to safety and security in the Internet environment. We all recognize that there are various kinds of threats that interfere with the use of the net by citizens and by Governments and others. Sometimes this discussion is lodged in a crime based framework, and I have suggested in one of our workshops that we might think about attacks against the network in the same way we would think about a fire in a building. What you typically do when a fire is burning in a building is to call the Fire Department, not the Police Department. After the Fire Department has put out the fire, there are questions about arson and there are questions about how the fire started. Indeed, there may be need for legal investigation. When the Fire Department looks to find out if this was a fire that was started on purpose, evidence of that needs to be captured and now we get into legal questions like: What are the rules of evidence? How do we establish chain of custody of information that's

relevant to a legal proceeding? In the case of a cyberfire, similar kinds of concerns would apply, but the first objective is to put the fire out. The people whose cybersystems are on fire may not be prepared to respond themselves. They may need help, and having a place to turn to, or places to turn to, for that kind of help strikes me as an interesting proposition. The question again is: In what venue might we pursue the creation of or experiment with such a cyberfire department idea? I leave that as some concrete suggestions for consideration in the remainder of this session.

Joonas Makinen:

The statement has been created by members of the Youth Coalition on Internet Governance. We're pleased that many more young people are participating in the IGF this year to share our input and opinions on how the Internet should be governed and we urge the U.N. to give the new five year term for this unique opportunity to share ideas and collaborate on action. Although progress has been made towards the full inclusion of young people, there remains a recurring problem that in many sessions the voices of children, young people, and young adults have not always been invited or listened to. It is a great shame that sessions discuss youth issues solely from an adult point of view, instead of youth discussing the future of the Internet as equal stakeholders with all other participants. Firstly, young people have a unique experience on the issues as early adopters of new technologies. Hence we have the first hand information and knowledge on what needs to be done to make the Internet a better place for all of us. Already, youth around the world are taking part in the process of Internet Governance. For example, the youth IGF project in the U.K., and the youth IGF camp in Hong Kong (SAR), have contributed key insights and action points on issues of censorship, privacy and digital divide.

Their statements, statements from young people at EuroDIG 2010 and from the youth Dynamic Coalition meeting at Sharm el Sheikh, contain considerable depth which has been lacking from dialogues where youth voices are absent or where adults have not taken time to listen. Secondly, youth reinforce the multistakeholder approach of the IGF by bringing new ideas and skills. In fact, in many cases, young people are the experts. We can help improve the IGF. After all, we are the decision makers and entrepreneurs of the future, not just in the future. We are citizens of the net today.

And thirdly, we bring energy and skills to resolve core Internet Governance challenges. We're more than willing to collaborate with workshop leaders and IGF stakeholders to support a greater diversity of voices to be involved. Youth need to be seen as stakeholders and as an asset, not as a problem. We believe that the Internet Governance dialogue is made richer by focusing on the opportunities, and addressing the times when they're not realised rather than using fear based arguments to restrict Internet freedoms. It is better to focus on fighting ignorance and building digital literacy than applying safety strategies based on restriction. We have established a coalition not to compete with or replace many youth groups who have come to play a role in the regional and international IGF process over recent years. Instead, we want to bring together the message from many different groups. There is not a single voice of youth,

but there are many important youth perspectives on the Internet Governance debate. Let us not waste time talking about the youth, but let the youth talk. Young people are major users of technology and Internet services. We could all benefit from the knowledge the youth has. It is not enough that young people are simply showcased, allowed to express their concern for a few minutes and then ignored. As we hope will not happen right now. All youth, children, young people, and young adults from all genders, backgrounds and cultures, should already be discussing the Internet, instead of stakeholders only discussing the need of their participation.

Jonathan Charles:

On the question of whether or not Internet Governance is keeping up with the pace of change in the Internet, perhaps we should devote some of our speaking time at future IGFs to the idea of looking further ahead, because we spend a lot of time looking at the current issues, when actually, the Internet is moving faster than we are sometimes. Maybe there is a case for sometimes throwing our perspective 10 or 15 years ahead and have some very specific broader blue skies thinking on that.

Katia Bodard:

I'm representing ICC BASIS and I'd like to respond to the questions raised by the Chair at the opening of this session. Concerning the main themes of 2005, the business representation believes they're still very much relevant today. Of course, we have seen that the interconnection between the issues themselves have been evolved in the discussion, but this in itself also shows that the discussions will continue to evolve in the future. The flexible and multistakeholder nature of the IGF enables it to be timely each year and address emerging issues of the day. Each year, we see a new main session topic and emerging issues session which both bring new issues into the discussion. We do not believe that there are specific Internet Governance issues which are overlooked. We do encourage continued evolution of the broader topics and consistent integration of new IGF policy issues which are on the horizon. The context of the discussion has changed to address evolving issues of today, which is quite productive. The discussion of Security, Openness and Privacy is actually a good example of how the main session discussions have changed. Indeed, it was recognized that the emerging policy challenges were about balancing three elements appropriately which led again to a new focus for the discussions. The workshops have also become increasingly more balanced in terms of the viewpoints which have been expressed, and in cooperating audience participation. Participants are getting more familiar and also more comfortable with the interactive discussion formed and again this makes the exchange more substantive. ICC BASIS also believes that Internet Governance has advanced over the five years of the IGF. We watch an ever increasing number of national and regional IGF initiatives, which is really a testament to these advancements.

During the workshops this week, you could also notice that the fact that these regional and national IGFs exist are helping also to raise awareness of Internet Governance as a concept. The range of workshop and open Forum events as well as increased participation

from stakeholders from developing countries, in particular, is also a demonstration of how the discussions have evolved. national and regional IGF initiatives are really a testament to the increased human and institutional capacity building, and indeed of the involvement of all relevant stakeholders in Internet Governance discussions at all levels. It is perhaps difficult to measure capacity building, but there is an increase in the stakeholders who have engaged in the IGF, and are now involved in ICANN and other processes, and we as business representatives believe strongly that the IGF should be continued in the future.

Maria Hall:

On behalf of Sweden, it has been a great pleasure to be here again at yet another Internet Governance Forum. Many things have evolved since the first one. Discussions are more mature, current new and interesting subjects are brought up, as well as the still relevant themes of Critical Internet Resources, access, diversity and openness and security. Things are discussed in a relaxed way and experiences are shared in a true multistakeholder environment. Another thematic area which should be further explored is the Internet and its function as a Democratic arena where Human Rights including freedom of expression and freedom of information are important principles. We welcome with appreciation that IGF deals much more profoundly with Human Rights issues now than in the past. This process should continue and Sweden believes that a Human Rights approach should be applied to all areas of Internet Governance. The IGF is well suited to promote such discussions, and we encourage more Governments to take an active role in this process. The issue of net neutrality would benefit from more analysis from a Human Rights perspective. Internet use has increased and also awareness of Internet Governance. The numbers of participants from Government, Private sector, Civil Society as well as the technical community has therefore increased. That's one of the many positive outcomes of the IGF process, and these will for sure also continue to evolve.

Another positive outcome is the development of regional and national Internet Governance processes, which increase international inclusiveness, as well as local and regional multistakeholder dialogue and capacity building. As Sweden said before, we support a continuation of the IGF with its multistakeholder, non-binding principles and present structures intact. The wonderful thing with IGF is that it has continued to develop since the start five years ago, and this will continue within the IGF process. This self-development process and capacity building is something remarkable and something to be proud of. We want to see a Working Group follow this and take this into consideration in their discussions of the development of the IGF. Sweden also wants to support a structure and forming of the present Geneva based IGF Secretariat. The Secretariat funding and functioning models should be reviewed in the CSTD Working Group. The IGF process continues to evolve every year within this fantastic multistakeholder environment. Let's keep it this way. Let's invite and stimulate more ways to participate and let our own engagement continue to be the driving force of this process of development of the IGF for many years to come. This is the true IGF spirit.

Valeria Betancourt:

I am speaking on behalf of the Association for Progressive Communications, APC. APC is committed to the continuation of the IGF and to the strengthening of global, regional and national IGFs. We believe in and have experienced the IGFs contribution to the development of Internet governance practice by informing the way and enriching our understanding of Internet public policy issues, actors, spaces and challenges. By offering a platform for open dialogue, including the exchange of ideas among different stakeholders and institutions, we have built relationships and alliances that support us in our work. An international space for open exchanges on matters of public policy affecting the Internet must continue to thrive in conjunction with regional and national processes which are evolving according to local particularities and priorities. If the IGF is to continue, APC would like to see us find ways to make IGF outcomes more visible and even tangible without compromising the nonbinding and nondecision making nature of our deliberations.

Emily Taylor:

I'd like to reflect on some of the tangible achievements that the IGF has made in capacity-building. Back in 2006 one of the greatest barriers to developing countries was the cost of interconnection. Thanks to contacts built within the IGF, there are now a growing number of Internet exchange points in Africa and these directly reduce the cost of interconnection. Secondly, as a stakeholder group the technical community understands the importance of sharing experiences and best practices, and thus build up human capacity through the exchange of ideas, processes, and knowledge of what didn't work as well as what did. Best practices have taken place within the IGF from the beginning. Now the IGF has published a collection of those best practice reports to stand as a capacity-building resource for colleagues around the world. The Tunis Agenda called for the creation of processes at the national and regional level, and the last five years has seen the burgeoning of regional IGFs as many speakers have already mentioned. Now, these processes identify local issues and bring together those who may be unable to travel to the international meetings. They build capacity through dialogue on Internet Governance issues and extend the multistakeholder model of governance throughout the world. Finally, the IGF has used the power of the Internet to enable many to join these meetings through remote participation. I believe there are more than 30 regional hubs participating in this meeting, and many workshops have had presentations via remote participation. Each main session has had a remote moderator. The IGF Secretariat has exploited online social networking and other media to extend participation and awareness of the IGF throughout the year. In all, the IGF is a vibrant process, growing in confidence and strength. Its flexible, informal structure enables it to adapt and change rapidly without outside intervention.

Mitsuo Tanabe:

I am from the Ministry of Internet Affairs and Communications in Japan. The importance of the main themes such as openness, security, diversity, and access is now

still growing. The former has proven to be of a nature to all concerned, and I think this tradition will continue. The main themes of 2005 are still important today. I also think that the workshops are very effective and that there are no themes that are being overlooked in the Internet Governance discussions. The development of the Internet is so rapid that what is mainstream today is going to be old fashioned in the future. In Japan, study groups were held to discuss network neutrality, the fair utilization of networks and IPv6 development. We tried to push for joint efforts by the Government and the private sector to promote IPv6 farther. These are examples of how we discuss and consider how to deal with the various topics of Internet Governance in Japan. In light of our experiences, I believe the IGF is a good place to discuss various topics. Various multistakeholders gather at the IGF from across the world and many topics of Internet Governance are discussed. As a result we can say that Internet Governance has globally advanced over the last five years and I think that the IGF is an ideal forum for the multistakeholders to air through views and to work towards fulfilling the needs of the people all over the world for responsible Internet Governance. In conclusion, I would like to say I will support the continuation of the IGF.

Chris Disspain:

The context provided by IGF has made a real difference to the dialogue. From Athens to here in Vilnius, the issue of critical resources was the source of acrimony around the World Summit on the Internet Society. Successive discussions of the non-threatening environment of the IGF have helped. We may not agree about the best way forward but at least we have a better understanding of the reasons why we disagree. The implements of the IGF can be seen in changes to the ccTLD and ICANN environments over the past five years. The IGF meetings in previous countries highlighted the importance of internationalized domain names in bringing the Internet to those who are not served by Latin scripts and in the critical resources session we heard from the Russian ccTLD which has introduced its ccTLD. The multistakeholder environment enables policy discussions to be informed by real world examples from the technical community, industry, and civil society. Again, in that session we heard from the German Government, from venders and Internet service providers as well as a number of resource allocators about their experience of introducing IPv6. We also heard how the Haitian ccTLD kept going through the worst national disaster of that country through a cooperation of off-shore service and cooperation within the technical community. AuDA looks forward to participating in the work of the CSTD in helping to identify potential improvements to the IGF.

Our studies of the consultation responses on the IGF show that 87 percent of respondents want the IGF to continue as is or with some minor changes, which can be achieved without major structural reform. Throughout its five-year mandate, the IGF through a combination of its flexible structure and the leadership of Nitin Desai and Markus Kummer has been able to adapt in response to feedback. Last year people felt there was not enough of a link between the workshops and the main sessions. This year, by designating feeder workshops, that link was made, and it created a different

type of dialogue in the main sessions. The discussions were actually illustrated by many examples of what is really happening on the ground. Finally, auDA recognizes the contribution made by the technical community during all of the IGFs. The technical community has been generous with funding, in-kind donations and expertise. We hope that the technical community will be recognized as a stakeholder group in its own right during the upcoming discussions on the IGF.

Nurani Nimpuno:

I work for NETNOD, which is based in Sweden. I'd like to start by thanking Nitin Desai and Markus Kummer and the IGF Secretariat. I have seen how they work behind the scenes to make each IGF a success and I believe that without them the IGF wouldn't have grown to what it is today. I believe that continuing to have an independent and committed Secretariat is vital for the future of the IGF. I remember attending the first IGF in Athens five years ago, rather confused about what this forum was actually about. It was significantly different to the technical meetings I was used to attending. The IGF we see today is of a very different nature, not only towards the dress code I might say but in terms of maturity. We've seen the IGF evolve each year, changing as the Internet evolves. It has allowed more people to participate through remote participation and through its inclusive nature, strengthening new partnerships. We've also seen discussions mature as the IGF has grown. From the early days with discussions centred more on abstract political matters we have seen a move towards more concrete and constructive discussions with more tangible outcomes, both in workshops as well as in the main sessions. For us as a technical organisation, the IGF has provided new channels and partnerships which have enabled us to further contribute to the strengthening of Internet infrastructure in other parts of the world. The unique multistakeholder environment where Governments, civil society, private sector and the technical community come together has proven to be the key to the IGF success. It is not fruitful to discuss capacity-building without the presence of the technical people who have the relevant technical clue present, just as one cannot discuss national policies without the presence of governance. The national and regional IGFs are not only one of the great outcomes of the IGF but it has also shown that the open, inclusive multistakeholder model is a model to be inspired by in other forums as well. The open exchange of ideas a forum like this allows for is something that would not have been possible had it not been for the open, nonbinding multistakeholder model that the IGF has enjoyed. I strongly hope the IGF will continue in this spirit in Nairobi, and beyond.

Malcolm Hutty:

I'd like to speak a bit about the practical benefits that I have obtained through participation in the Internet Governance Forum. LINX is one of the largest Internet exchange points in the world and therefore has a particular interest in building understanding of the contribution that Internet exchange points can make to capacity building and to developing infrastructure around the world. This year I particularly benefitted from renewing the contact that we've had over many years with Internet

exchanges in Africa. I first met the founder of the Kenyan Internet exchange, the admirable Michuki Mwangi, and we continued information exchange at IGF and in between meetings ever since. The Kenyan Internet exchange now goes from strengths to strength and is a shining successful example in Africa. He now provides his experience and expertise through the Internet society to help develop other IXPs around Africa. Many of these IXPs have been founded over the last five years in large part as a result of the growth and understanding of the benefit of Internet exchanges that the IGF has supported. I would offer this as one small but valuable and concrete example of the contribution that the Internet technical community has both brought to the IGF and taken from it. I would therefore call on the CSTD as it considers how to advise the UN on how the IGF might evolve and hopefully renewed mandate, to ensure that the Internet technical community is fully included within their deliberations and decision making according to the multistakeholder principle that has served the IGF so well. Finally, may I say that the IGF has already proven its ability to improve itself. Two years ago I spoke in the stock checking section and I called for a step change in the level of facilities available for remote participation. With video services and automatic transliteration available not only in the main conference session but also in every workshop room, our Lithuanian hosts have risen commendably to this challenge, and I would like to commend them.

Parminder Singh:

In the first few sentences I would like to say what I think has been changing about the Internet in the last five years and what has been changing about Internet governance. I think I would say too big things have changed about the Internet. One is about its extent and scope. There are many more people using the Internet today, and therefore many different kinds of people using the Internet today than five to ten years back. Internet is involved in much wider range of social activity than it was involved in then as well. Which is all very good news, but that brings up a political issue. When different kinds of people use Internet for a variety of different kinds of acts, differential interests come in. It becomes more of a political question than it was earlier when there were more or less users of the same kind with similar interests and similar backgrounds, using the Internet for a small range of functions. Now we are confronted with more political questions. Internet has changed in a manner which requires now more political issues to be addressed and greater political governance of Internet. The second thing is about the architecture of the Internet and here the news is rather worse. Issues like network neutrality, Cloud Computing and wireless Internet are changing the Internet in a manner that there's a consolidation of power and a loss of diversity on the Internet. This consolidation of power needs a political response for the people, for the common people to reduce that consolidation, to democratize power on the Internet. The two big changes which I identified about the Internet both have one thing in common, which is they require a more political response.

Then you come to the question of how Internet Governance has changed, has it been able to give that political response to the needs that have arisen? The good news first, what has changed positively about Internet governance is that national Governments

are more aware about the kind of issues which are involved. They're able to take care of national issues much better than they could do a couple years back. At the global level as well, more people are talking to each other, they know each other's perspectives better. If we were to ask though one direct question, has Internet governance at the global level changed? Improved? I'm not very sure. The requirements and the needs have become many fold, they have changed many fold. The political response at the global level though has more or less not changed. That's my opinion. Where there are themes that have evolved, they need to change. I think the themes have been good, they still serve the purpose, but we need more tangible outcomes and we need to start addressing more specific questions. We should be able to make progress on clear questions of social media, network neutrality and interconnection charges. Choose a couple of questions and let's try to make progress on that. Has the participation increased? It has increased in one manner. We see more developing country people here. They know more about the issues. I'm not very sure though, because we keep on talking about the marginalized people. And that's the moral conscious which governs all our discussions. If you had asked me the question directly has the participation of the marginalized people increased, I don't see many signs of it. Marginalized people would have to participate through representation, through Governments, through NGOs, through societies groups or community-based groups. Their participation has to increase before we can say the participation has really increased and on this I think still we have a long way to go. The IGF is increasing participation and its increasing awareness. The next step is to channel the kind of work we have done at the IGF into real global policy making, and that's the next challenge.

Vittorio Bertola:

I'm from the European Council of Society and I would like to make an informal personal statement as a long time participant in Internet policies, addressing the question of what has changed in the last five years. There are two issues that five years ago were just starting to appear and that now I think are really pressing. One is the emergence of discriminatory behavior by Internet service providers on content. The issue of network neutrality and the attempts by Internet service providers and content providers to form alliances and to bring consolidation into the market. The other one is social networks, which I find an unfortunate way of even defining this concept because it is not really a network, it is actually a database. A network is something which connects information starting in different places while here what we have is a concentration of a huge amount of personal information in a single point and in the hands of a single entity, which is the exact opposite of what the Internet is about. The basic principles of the architecture of the Internet are that information is to be distributed and control has to be at the edges. There must not be any centre controlling point. What we see with the violations of network neutrality is the emergence of controlling points and the push towards consolidation, which really changes the Internet fundamentally. We are actually at risk of not having the Internet anymore, as has happened in the past with other media, because when independent television networks were introduced at the beginning, there were hundreds of them. They were

independent. There were a lot of different views and different content. In the end though, in most countries we ended up with one or two, a total consolidation and control of the flow of information. I think that the IGF as a community has to think of whether it wants to address these questions which are really pressing. It is nice to come here to have discussions and it is important and it helps to raise awareness, but then at a certain point in time we have to provoke some change. Maybe the question for everyone that I would like to leave is how do we actually address these questions and get something changed?

Andrew Miller:

I'm a member of the British Parliament and the Science Select Committee, and for many years throughout my adult life, I've been struggling with some of the impacts of technologies on society, and it is an area I concentrate on a lot. I just want to reflect on the pace of change, just in my relatively short life. When I was a child, I lived in Malta and flying from the U.K. to Malta the plane used to have to refuel at Nice. Now you can fly 3/4 of the way around the world much, much faster and with such ease. Predecessors in the BBC could provide us with one channel, and one channel only, and that came through pipes. It was the prediffusion world service, and in this hall thanks to the wonders of the technology applied by our Lithuanian hosts, I read the BBC news on my Blackberry yesterday faster than I can read it at home. That's the pace of change that we're facing. The Internet is moving faster than us. The more I've wrestled with the challenges of these problems, the more I've come to the conclusion that Governments alone cannot provide the solutions, and I am a very strong supporter of the partnerships that have been created within networks like this, bringing together industry, academia, Civil Society, all the key players that can deal with some of the issues.

One of the reasons why it is worked is because of the independence of the Secretariat, and more than that, because of the caliber of the two people in particular, Nitin Desai and Markus Kummer. We should thank them for the work they've done. We were asked if we should be looking forward and the answer is yes. We need to be horizon scanning in a way that is not looking back to 20 years ago because that's crazy. Things are moving so fast. If you just look back to the programme of the IGF, where was Cloud Computing at the beginning of this process? Just as an example, and yet today I went to what I think was the best plenary session I've been to in the IGF and that was very well managed on Cloud Computing. There's a precise example of why this isn't Governments and treaties alone. The complexities of cloud challenge all of us. There's nobody in this room who can deal with the philosophical issues, the legal issues, the globalization issues, the technical issues, the challenges in cloud alone which technically are inevitable, they're going to be facing us big time and this cannot be left to Governments alone. Similarly, if you look at the workshop on disabilities, some of the technologies that were on display there were stunning. I think with technologies like that, we need to really do some horizon scanning and see where we can take those technologies, not just for the needs of the people with the particular disabilities they're being targeted at but because there are enormous potential markets there which

will drive down the cost of facilities like that for people with disabilities. One of the challenges is how do we answer that question about how do we reach out to the people who ought to be here, who ought to be part of this Forum, who are not yet engaged in their own countries? My plea to the media representatives that are here, if you take this event seriously, see what you can do within your community to help us develop the network to become even stronger than it is now.

Jeff Brueggeman:

I would like to draw a distinction between both assessing the progress of Internet Governance and then looking forward. In assessing the progress, one way to think about it is to consider how the IGF is adapting to the rapid change compared to other organisations and entities and I think in that context, the multistakeholder framework of the IGF has shown that it is very adept at adapting to the technological change both in terms of identifying issues, expanding a global perspective, and identifying more importantly, solutions. I think that the multistakeholder framework will show itself to be a framework that is best matched to the rapid structure and change of the Internet itself. Another way to think about and assess Internet Governance is to consider how would things be different if we didn't have the IGF? I think unquestionably, we are better off for having gone through this process for the past five years. I think the IGF has shown it has really developed, as others have noted, a culture and an opportunity for the various stakeholders to learn how to interact with each other, and again, work together to identify solutions. I also think that the local and regional IGFs are not only beneficial in and of themselves but are reflective of the desire to take the discussions that happened at the global IGF and continue them and expand the dialogue with even more people at the national and regional level.

In terms of the way forward, I think the foundational principle has to be maintaining this framework, this multistakeholder framework, in its existing model, which has shown itself to be flexible enough to accommodate the rapid change, and can accommodate the enhancements and other suggestions that we're hearing about today. In that vein I have a couple of specific suggestions myself. In terms of tangible outcomes I'd like to commend the Secretariat for the compilation of best practices released this year. I think that's a great example of the type of information assembling and distribution that can help to provide some more documentation of the outcomes of the IGF and that should be continued. I would also like to say that we should continue to look for other ways to strengthen the feedback loop between the global IGF and the national and regional IGFs so that they complement each other, and the discussion should flow in both directions, so that the global discussion is supporting and also being informed by those national and regional IGFs. Finally I'd like to comment on youth participation. I had the opportunity to participate in a digital citizenship workshop where we actually had some teenagers from the U.K., and they were not just there to listen to our opinions but in fact, to participate in the discussion and I think we all found that to be an extremely beneficial part of our experience. We should try and think about other ways to maybe populate youth throughout the workshops, not just targeting digital citizenship specifically but think about how we can include them in

the discussion on other issues as well. Finally I'd just like to say that AT&T strongly supports the continuation of the IGF. I think it is made an enormous amount of progress and I look forward to all the benefits we can have by continuing to work together.

Everton Lucero:

The Brazilian Government fully supports the IGF. Actually, we were honoured to host the second IGF in Rio de Janeiro in 2007. Now that we are at the very last day of this 5 year cycle that started in 2006 in Athens, it is more than appropriate that we engage in this exercise of taking stock and also preparing our way forward. I believe that it is important for us to get back a little bit to where we were when we started. We came here to the IGF from very different positions, different backgrounds, and different views of how to use and run the Internet. Some of us were very entrenched in our opinions and were not in a position of accepting or even listening to others' views; however, if there is one thing that is a result of the IGF during these five years is that we are now able to express our views freely and openly to everyone, and even more important, we are able to listen to each other and understand the other's perspectives, and after this five year cycle, I believe that we reached the point in which we know that we all, in spite of our differences, want to preserve and to advance this wonderful thing that is the Internet.

We've discussed many issues: Access, diversity, security, openness, and Critical Internet Resources. This year at the 5th IGF, we added the important dimension of development, which we truly believe has to be kept alive in the future agendas of this Forum. I believe that we've had enough material now to start a process of convergence, and start to see among all of those discussions what are those key core values and principles that are the common heritage for all stakeholders and all generations that participate at this Forum. My suggestion for the next IGF, as the main topic for one of the main sessions, is that we engage precisely in that discussion; what are the core values and principles of the Internet that we want to preserve? I believe that we should do that progressively, starting with national IGFs and regional IGFs, always in a multistakeholder environment, and we will come here and bring our conclusions and discuss, and then we don't need to agree on principles. We don't need to negotiate or get to treaty level at this Forum, because I understand this is not the place to do it, but once we discuss the principles and considering that the principles may also evolve together with the Internet, I believe this is an ongoing exercise, that once we start, we will always have material to discuss again at the next and next and the years to come. We should also be able to take note of our differences, and allow them to be expressed, without the intention of having the final word about anything. By saying that we are truly engaged in the discussion of principles and values, this will create and give a message to the rest of the world who are not here, that there are principles and values, and that they must be observed at any opportunity in which the Internet may be affected by decision makers around the world. I believe that we should take note also of the methodologies that are used to prepare and run this exercise for future similar endeavors by others.

Andrea Saks:

The Dynamic Coalition on Accessibility and Disability is a very unique and special group and it wouldn't exist without the IGF. We need assistive technology to be incorporated into everything we do from the beginning and use universal design. We have to listen to persons who have the difficulties so we know what we need to do.

Now, it seems logical, but if you don't have the experience, or you don't know someone who does, you might not think of everything. The fact that the Dynamic Coalition has people in it who not only have certain difficulties in managing to get online, or use some of the tools that we take for granted every day, they need to be listened to. It is because of groups like this that I really would love the IGF to continue.

Oliver Robillo:

I represent a group of Civil Society representatives from four Southeast Asia nations, namely, Malaysia, Thailand, Indonesia and the Philippines. As first time participants, we offer the following perspectives and recommendations for future IGF meetings. Firstly, openness is a key to a Democratic and open society. Restrictions on freedom of opinion and expression online such as state censorship and physical measures which block and threaten Internet intermediaries are one of the threats to open societies. Intimidation and state censorship facilitate self-censorship, as is happening in countries like Singapore, Thailand and Malaysia, stunting the growth of democracy and openness. Secondly on the matter of access, a higher priority must be placed on addressing not only the global digital divide but also regional and national ones. Countries like Burma and Cambodia rank the lowest of 200 countries in a World Bank study. Various factors contribute to this, from politics, economic and social development, poverty levels, and technological infrastructure. Thus, coordinated international efforts must be made to address domestic policies that contribute to the digital divide in Southeast Asia, and find solutions to bridge the gap. The digital divide is such that remote participation from those Southeast Asian countries is not possible such as for the people of Burma where Internet access and freedom are crucial to their freedoms. Thirdly on cybersecurity, the definition must include elements that address rights to privacy and civil and political freedom, recognizing that levels of democracy and rule of law differ in many states. An individual's right over his or her own privacy, including personal data and information, must not be sacrificed. Information Technology when used without transparent and accountable oversight could pose threats to individual rights. In this regard, any national security policy must not deviate from the Universal Declaration of Human Rights, and all international Human Rights covenants to which states are a party.

Our recommendations to the IGF: Immediately address, as an urgent global Internet governance issue, the increasing implementation of laws that suppress and restrict freedom of expression and access to information, especially within developing countries. Fully integrate the universal Human Rights agenda into IGF programmes, and engage systematically and regularly with the Human Rights bodies. Ensure

that the IGF policy proposals and recommendations are in line with international Human Rights principles and standards. Extend the mandate of IGF for another five years in its present form. Conduct wider outreach to Civil Society actors from the global south, in particular, Southeast Asia and the Asia Pacific region, and allocate or earmark financial resources to encourage and support their active participation. Ensure that participations from remote are really integrated into session discussions on site. Guarantee that technical discussions during IGFs fully accommodate new constituents and stakeholders and incorporate an assessment of policy implications on the rights of Internet users and society as a whole. Develop a plan of action in order to facilitate, follow up and monitor IGF outcomes.

Rafid Fatani:

From the Cameroon remote hub: We want to support the concept of Internet Governance capacity building programmes. We also want to highlight our support and highlight the importance of Internet Governance in schools. We'd like to state that there is still much that needs to be done regarding the multilingualism issue. Finally, we strongly support the continuation of the IGF and invite all stakeholders to support the Regional African IGF.

From the Burundi remote hub: We're glad to be part of the multistakeholder process. We're participating from Burundi in this Forum and we believe the Internet is important today, tomorrow and forever. Technologies which enable people to connect to the Internet are in widespread use in Burundi and are rapidly reaching the rural communities. We strongly suggest the continuation of the Internet Governance Forum to tackle online security issues we have today in Burundi. Taking part in this Forum remotely, we got inspired by some projects which we will be implementing locally for our community and these include computer emergency response team groups and an online capacity building programme for our regional Internet issues. Let the Internet IGF mandate be extended forever.

Bill Graham:

It is very clear at the end of this 5th session that the IGF has really evolved and changed. The levels of tension are much lower than they were, certainly anyone who was here for the first IGF will remember that there was a great deal of suspicion and mistrust. The maturity of the dialogue now, however, is much, much different. We can talk about what were the most controversial subjects back in 2005 without anyone being upset. We can explore new subjects in a very open way and I think learn a great deal from one another as we do that. I also would note that in my experience, at least, this evolving atmosphere in the IGF is reflected in how we interact with other stakeholder groups across a wide range of topics and organizations. So I think that is a very concrete contribution by the IGF.

This year's linkage of the workshops and main sessions has really been improved. The workshops have been the most vital and interesting part of the programme and the

ability to follow through tracks has been much better. I think we need to look at ways to make it even easier to do that; to help people to prepare for the main sessions, which then become more useful. The Internet society hopes to see the IGF renewed and continued after the general assembly debates in New York and it is important that that decision maintains the essential elements of the IGF which are that it be open very broadly, multistakeholder, nondecision-making, and supported by the independent Secretariat. We obviously still need to expand participation. Developing countries are still underrepresented. Youth should be here in greater numbers and more active in all of the sessions. So I think we need to make those improvements. The Internet technical community and the Internet Society itself contribute to that significantly through the fellowships and the programmes we offer like the IGF ambassador programme. I also understand that over 20 percent of the people in attendance this year are from the technical community and we have also contributed a great deal of expertise in funding. I would urge that we not revert to a 2005 definition of multistakeholderism as we consider how to improve the IGF. We really need to stay up with the experience and stay up with the times, using the broader definition that has evolved, recognizing the contribution of the Internet technical community and all of the stakeholders in this process.

Luis Magalhaes:

My first observation is to underline the outcomes of the IGF in the issue of expected movement, the creation of several national and regional IGFs across the world. This was already mentioned before, but I'd like to stress it on a slightly different line, because not only is this the most eloquent validation of the idea and the purpose of the IGF and of its real value, but also provided to it the robustness that only an open network based on grassroots can provide. I'd also like to commend the Secretariat and the rest of the organisation on the fantastic work that was done throughout time of assuring that transcripts and recordings of the sections were available almost instantaneously and available worldwide through the Internet. Also visible are the improvements on several aspects: on remote participation, on the consideration of development issues, on the connection between workshops and main sessions on the youth participation; and on the openness of participation of the organisation meetings of the IGF. Of course there is a need to continue evolve and actually to try to attract participation in the IGF groups that are still missing in terms of expression; but what is visible is that we went a long way since the very beginning and should be proud of it. Another point is that throughout these five years we've seen definitive progress in several of the Critical Internet Resources management issues. The cooperative mood that was established in IGF and the depth of understanding that was developed played an important role in allowing the enormous progress that has been achieved. From a more institutional standpoint, I'd like once again to state clearly the support of Portugal to the IGF movement and to its multistakeholder and open character. We believe we are initiating with Internet Governance a model that most probably should and will spill over to other policy areas as the global knowledge-based society, with its increasing complexity, continuous to progress.

David Wood:

We represent broadcasting unions and we've attended every IGF since the beginning. We've really learned an awful lot and a lot has been achieved. It must carry on, absolutely. As a suggestion I heard this morning in the cloud discussion this notion of having somewhere a universal cloud that translates between all languages. Now, that might not be something that we could do in the IGF, but maybe, going on to a second suggestion, it could be interesting for the IGF to somehow pass this work on and ask other groups if they could work on it, such as W3C or the Council of Europe. I do also support those ideas of having themes at the next meeting about core values and about the future of the Internet. Regarding what those core values might be, coming from the content business I would like to add one on that, which is to do with rights associated with content and they would have to do with the freedom of expression, the right to find out the truth, right not to be offended, and of course the right to have something that you create protected in some way.

Markus Kummer:

Many speakers have mentioned the significant developments over the last years, which were not planned by some central body in a top-down way. They just emerged as bottom-up initiatives. Last year it was a general wish to give more space to all these initiatives in our annual meeting and we did that this year. We had an opening curtain raising session on the first day with a panel of regional meeting organisers and each of them were given a slot where they could report on the meetings and discuss among themselves on how to move forward. Today we had a round table of all the regional meeting and national meetings and we discussed various aspects related to their relationships with the global IGF and looked at questions as each of the regional initiatives is somewhat different. We looked at whether there should be a common template for all of them, whether they should follow the global agenda or whether they should set their own agenda. There was a general agreement that we should be very flexible in this regard. They should be free to set their own agenda and to put issues on their agenda which are of particular interest to their region. Maybe most importantly, all the participants agreed that they should only be considered to be part of these initiatives if they follow the general IGF approach, that is that they're based on a multistakeholder approach and they are open, inclusive and transparent and include all stakeholders. We also agreed in practical terms that we would try to keep in touch inter-sessionally and that we will create a list for this and we will try and have, maybe before the next open consultation, a video conference among those who would like to engage in this type of discussion. There was a general feeling that it is beneficial for them to compare notes on how to go about fundraising and organising meetings and how to involve their respective Governments, and also that the interaction should not just be between the national and regional levels and the global levels, but also among themselves. There should be a cross focalization among the regions and among different regions.

Nariman Hajiyev:

I'm a representative of the Republic of Azerbaijan, from the Ministry of Communication and Information Technologies. Azerbaijan is a country at the crossroads of civilization, connecting east and west, north and south. Azerbaijan is recognized internationally as a major oil and gas producer; however, I can proudly state that the ICT sector is the second biggest priority for the country. It was declared by His Excellency, Mr. Ilham Aliyev, President of the Republic of Azerbaijan. We see ICT as tools for the democratization of society. The volume of income received from the ICT sector in Azerbaijan increased four over in the past six years. We expect approximately by the end of 2020, income from ICT and oil will be equal, after which it is quite possible that ICT will function as the locomotive of the economy of Azerbaijan. As you all may know, in 2006 the Government of Azerbaijan offered to host the IGF, alongside a bidding request from the Government of Lithuania. The Government of Azerbaijan has been a strong supporter of the IGF and we hope to see its extension at the next UN General Assembly in New York. The IGF is a unique opportunity to talk and discuss Internet issues under one roof. Distinguished participants, I think we can host the Internet Governance Forum in 2012 in our glorious capital, Baku, and we look forward to hold the next chapter of this great platform. The official position of the Republic of Azerbaijan will be delivered within the month to the IGF Secretariat. Azerbaijan is famous for its traditions of hospitality, and I can assure you that Azerbaijan will spare no effort to organise the IGF meeting at the highest international standards this distinguished forum duly deserves.

Bob Kahn:

I believe the IGF has been a very welcome addition to the ongoing Internet dialogue. It is made contributions in many dimensions. One has been the spawning of national and regional IGFs, which I believe would probably not have happened without the global IGF as a good model for how to proceed. Some of the changes that have taken place with regard to ICANN may very well have been influenced in a positive way by the discussions at the IGF over the past five years. I believe the field of multilingualism has been elevated to a point where it is now a first class topic of consideration for the Internet, going forward, whether we limit it to things like IDNs which are more technical, or to content in languages that are currently underrepresented on the Internet. I think that we will have clarified how things like the Internet of things, and identity management, fit within the current Internet framework. That will be a useful contribution going forward. I think we all recognize the importance of involving both new ideas and new participants into the discussions going forward, and particularly, that we be open to relevant aspects of new technologies and application services as they may apply to the Internet in the future.

I believe the most important contribution, or the most important aspects, of the IGF have been its commitment to open discussions for all of us and often the discussions that happen in the halls and behind the scenes are as influential as those that happen in the formal sessions. I believe the biggest challenge going forward will be how to

steadily improve the IGF, and to make it continue to be relevant to all of us in the future. Finally, I think it is particularly important, in my opinion, to single out the important contributions that Markus Kummer and Nitin Desai and the staff have made in shepherding the IGF from its inception as an idea five years ago to its current state as a Forum for discussion of global Internet issues and other matters of concern.

I think it was not a given, and by no means certain, that this IGF would be successful or anywhere near as successful as I believe it has been in stimulating these kinds of discussions. This is a unique contribution that Markus and Nitin have made to this progress going forward, and I hope they can continue to contribute in the future.

Fernando Botelho:

I am from F123.org and I think a core value is interoperability, which is so important for persons with disabilities, but also very important for everyone else. Innovations are wonderful but let's do it in a way that does not isolate but rather connects all of us.

Bertrand De La Chapelle:

I would suggest something that is co-existence. The challenge we have is to basically define the rules of engagement for a broader diversity of people with different values, with different moral, cultural, religious and political values, and how do we define the rules of engagement and the Governance protocol that allows us to stay in a common space and respect one another. Just want in this respect to pay tribute to the IGF staff for the tremendous job they've done in creating for us and with us this unique self-replicating format.

Alun Michael:

One core value reflects the last remark which is the independence of the Secretariat so that they can continue to reflect the atmosphere of the whole IGF process and the respect for all the participants. I think that's a very important core value for the future.

The second is a specific point about applying the principle of cooperation. It applies particularly to issues of regulation and legislation, which I think we'd all agree, should be kept to a minimum. It is not about self-regulation, but cooperative regulation, the essential principle is that where the primary role is with Government and industry, industry taking the practical lead, Government internationally or nationally having the legislative role, it is essential for the engagement of Parliamentarians across parties to provide accountability, along with Civil Society to provide transparency, as well as creative engagement. We've seen the number of Parliamentarians go up each year and the quality of the participation improve each year and I think that can only be good.

Steve Del Bianco:

I am from Net Choice. For our part in the online business, we have a core value that says: Innovation without permission is not innovation without responsibility. We've

become a lot faster and better at responding and changing our products and services to complaints and concerns that are raised by users, by critics and by advocates, and, in fact, Governments, and we're faster and better at that than any of us are at trying to design, promulgate and enforce new laws that never keep up with innovation on Internet time.

Bertrand De La Chapelle:

I would suggest two additional ones: Openness and self-organisation. I would like to support for next year the idea of taking the Brazilian list of principles for the core values of the Internet, as an input into the IGF. We talk about outcomes. We can take that as a base for discussion.

Philip Okundi:

We'd like to see maintained the current style and leadership which has allowed people from various parts of the industry, Government, operators and others to discuss freely. We've seen growth in the developing world into more participation in the IGF Forums, and this has been encouraged by the managers, and I think that core value is difficult to describe but it needs to be maintained and needs to be explored so that more and more of us will find IGF as a Forum where all countries, all leaders, all members of the industry can come and discuss items without restriction.

Katim Touray:

I am from Gambia and am with the Free Software and Open Source Foundation for Africa, FOSSFA, and a member of the Board of Directors of ICANN. I thought I would give help to my colleague from Kenya, when he said that the idea of trying to get as many people involved in the IGF is a bit difficult to describe. I call this inclusiveness. I think of myself really as picking up here on behalf of the many multitudes of millions of people in Africa and indeed all over the world who have no Internet access, who have no access to the mobile phone, and I think we'd be doing a great disservice to the world if the IGF doesn't strive to be as inclusive as it possibly can.

Henrikas Juskevicius:

I was listening very carefully to all interventions. Everybody was so positive. Everybody was so unanimous. There was very little criticism. We are living in very important and interesting time, because power is emigrating outside the institutions which have existed for centuries. Practically, power is emigrating even from the Governments. Power is emigrating to Internet. Power is emigrating to media. Power is emigrated to the infrastructures, which are interconnected. This meeting, of course, shows that there is a possibility of dialogue between developed, developing countries, and between intergovernmental organisations and Civil Society. What is lacking still is the voice of developing countries. The digital divide is not narrowing, regretfully. With

all this progress we have talked about, this divide is growing, and of course, we have to think about this.

The Forum will exist. There is no body which was created by the U.N. that has been abolished so you can be sure that the Forum will exist, and it is very good, because this Forum has to exist because it is about the most important questions. I would like to thank you for the attention. I thank you for participating and I would like to close this session and wish you a good and safe way home.

TAKING STOCK OF INTERNET GOVERNANCE AND THE WAY FORWARD

Reports of the Workshops and Other Events

WS 26. Teaching Internet Governance: The experience of the Schools on Internet Governance

WS 110. Applying a code of good practice on information, participation and transparency in Internet governance.

WS 26. Teaching Internet Governance: The experience of the Schools on Internet Governance

Report by: Olga Cavalli

List of panelists and/or participants:

Olga Cavalli - Professor Universidad de Buenos Aires - Regional Director South School on Internet Governance SSIG George Victor Salama - National Telecom Regulatory Authority (NTRA) – Egypt (to be confirmed) William J. Drake - Graduate Institute International and Development Studies , Geneva, Switzerland. Wolfgang Kleinwaechter - Professor University of Aharus, Dennmark. Avri Doria - Professor Lulea University Edmond Chung - DotAsia Adrian Carballo - South SSIG Institutional Relations Director Guenther Cyranek - UNESCO Regional MERCOSUR and Chile Office Adivisor Sandra Hoferichter - Euro SSIG - Panel Moderator Bertrand de la Chapelle - French Ministry of Foreign Affairs

Workshop description:

The workshop reviewed through presentations of the panelists the successful experience of the Schools on Internet Governance. Prof. Kleinwaechter and Sandra Hoferichter from the Euro SSIG explained the experience of four years of school organized in Meissen, Germany, the profile of the students; they showed pictures and a video of the experience. Then Prof. Olga Cavalli explained the Latin American Experience that had two schools already (Buenos Aires and Sao Paulo) and is organizing the next one in Mexico in 2011. The South SSIG rotates among countries and Ms. Cavalli showed several pictures and list of countries from where the students that participate are coming. Mr. Victor Salama explained the experience in Cairo for the Arab School that was organized previous to the IGF in Sharm el Sheik in 2009. Prof. Avri Doria and Prof. William Drake explained their experience as faculty members of all or most of the Schools that have been organized so far. Both agreed that there is a challenge in addressing a class to a very diverse audience and that many times they learn from the students.

A brief substantive summary and the main events that were raised:

The relevance of the capacity building and training in Internet Governance to attract especially young leaders from developing countries to the IGF process.

Conclusions and further comments:

The European and the Latin American Experiences will continue to be organized; today many of the students of both schools do already have relevant positions in ICANN and in other IG debate and participation spaces. This is the main purpose of the Schools, to train new leaders of opinion that become part of the Internet Governance Process.

WS 110. APPLYING A CODE OF GOOD PRACTICE ON INFORMATION, PARTICIPATION AND TRANSPARENCY IN INTERNET GOVERNANCE

Report by: Karen Banks

List of panelists and/or participants:

David Souter, Managing Director, ICT Development Associates ltd., Paul Wilson, APNIC, Michael Silber, Neotel South Africa, Natasha Primo, Association for Progressive Communications Michael Remmert, Council of Europe Karen Banks, APC

Workshop description:

This workshop was intended to take forward the tri-lateral initiative by CoE, UNECE and APC (Association for Progressive Communications), initiated in 2007 - to explore ways and means to apply the Code of Good Practice on information, participation and transparency in Internet Governance.

A brief substantive summary and the main events that were raised:

The objectives and content of the Code were reported back on developments since the workshop at the 2009 IGF. A number of suggestions as to its content and presentation were taken into account when Version 1.1 of the Code was finalized earlier this year. Following this presentation, brief reports were given from regional IGFs (East Africa and Latin America and Caribbean) where the progress/implementation of the Code was discussed in the interval since the last IGF. Using the example of the South African Broadband policy process, David Souter (consultant expert, UK) shared some ideas about how a tool such as the Code could positively impact on such consultation and policy-making processes. In reaction to this, South African MP Mr. Obed Babela welcomed the Code as a useful tool, all the while recalling that each policy making process is unique in its background, context and challenges and that for this reason a Code of Good Practice needs to be presented in such a way that it may be adapted

to the specificities of each process. In the debate, representatives of IG entities, in particular APNIC (the Regional Internet Registry that allocates IP and AS numbers in the Asia Pacific region) and NRO (Number Resource Organization, which represents the five Regional Internet Registries, RIRs), welcomed the initiative and suggested that this tool should better be referred to as a "reference model" so as to avoid any possible misunderstanding in the sense of this tool being imposed on or legally binding for those entities that consider to apply it in their work. They also declared their willingness to submit this tool for consideration and comments at forthcoming meetings of their organizations. Paul Rendeck of NRO reported back from IGF Workshop No. 88 'Enhancing Transparency in Internet Governance', organized by his organization, which looked into ways of fostering understanding by the public of the aims and processes of Internet Governance entities. There was agreement that the two workshops should have been merged – but this had been noticed too late by both workshop conveners in the run-up to this year's IGF. It was therefore agreed to seek close co-operation between the two initiatives in the future.

Conclusions and further comments:

Participants generally welcomed the Code in its current form but notes that it could be even more useful if it is seen to be adaptable to specific situations and if it is developed into a tool that is directly applicable in practice, allowing the assessment and comparison of IG processes, in international as well as in national IG processes. It could also serve as a capacity building tool. The sponsors of the Code welcomed in particular the pledge of APNIC and NRO to associate themselves with the further development and test applications of the Code. The next steps will be to: * add a section to the code on the policy development process, rename the 'Code' (as a reference model or guide), * create an 'RFP' of the code and share it with the IETF community * develop the 'Code' it into an adaptable and practically applicable checklist-type tool/reference model (as explained above) which would be applied to a small number of specific test cases.

CLOSING CEREMONY

17 September 2010

EXTRACTS FROM THE TRANSCRIPTS OF PROCEEDINGS

Nitin Desai:

It is a pleasure for me to be here at the end of a five-year cycle, the first mandate of the IGF. Many of you have pointed out what has been achieved in very concrete terms because of the IGF, and referred to the impact that IGF had on the whole issue of people with disabilities. We also know the role that IGF has played, for instance, in child protection issues. These are things which came very directly because of the work of IGF. I also believe, as was recognized in your earlier session, that the process that we have had here has played a role also in the changes which have taken place, for instance, in the nature of the U.S. Government's involvement in Internet Governance and the changes which have taken place in ICANN. I also believe a very big impact of the IGF was in changes at the national levels, reflected in the national and the regional IGFs. In that sense I believe that these five years of work are not just important because it gave us an opportunity to meet once a year, but I also do believe they have made a significant difference in making the Internet a much more friendly medium, a much more safe medium and a much more accessible medium for people in the world.

When we started five years ago, it wasn't clear that this is the way it would evolve. If you remember, there were some issues that were flagged at that time. The first issue was of flexibility. Normally the UN process agendas tend to become rigid. The same things get repeated year after year. The question was how would we manage this tendency? When we are talking about the Internet, which changes so rapidly, would we have the nimbleness to change with changing issues? I believe we have. We talked this year about Cloud Computing, last year about social networking. These were issues which were not even on the horizon when we met first five years ago in Athens, and yet we had the flexibility to be able to respond to these changing conditions in which the Internet operated. A second big problem that we had when we started the process was a cultural difference. Here was a multistakeholder forum which tried to bring together Governments whose diplomatic cultures have a certain discretion and politeness in the way in which we talk with one another, which was focused very strongly on practical results, the Internet community, which was very focused on the whole issue of the technical management of the Internet; and nongovernmental groups whose major concern was the user community and the impact that governance had on the user community. A problem was that there were cultural differences in the way in which these groups participated in meetings and I had flagged at that time the need for all of them to make some adjustments; for Governments to be more willing to have a free flow of discussion. For NGOs to be less aggressive than they usually would be in asserting their point of view. For business to accept the value of the general

discussions and for the Internet community to recognize that there are a whole set of policy concerns, which are not Internet technical management concerns, which are germane to the issue. I believe this has happened and I think one of the most important successes of the IGF has been that transformation of cultures, so that people have learned to talk with one another rather than at one another. This is true for all of the stakeholder groups who I think have adjusted their cultures so to speak to fit in with the requirements of others.

The people you really have to thank are yourselves because this cultural change is not something that we could have done. This cultural change has come from you and it is you who have to take the credit for the fact that the IGF functions. Without this culture change it would not have functioned. I hope none of you feels like a stranger here or an outsider here, that all of you feel in some ways that this is part of your space. This to me has been the most valuable achievement in these five years. I once again want to thank you for this fine experience that I have had in these five years and the very fine people that I have got to know in all these five years. I have to thank you all for allowing the UN to create this very vibrant and wonderful process.

Alain Aina:

Today I speak on behalf of the technical community. Those among us of the technical community are happy to see the maturing of the dialogue within the IGF over the past five years. The commitment of the technical community with other actors has made it possible to raise awareness of technical aspects among representatives of Government, business and civil society. This has enriched our debate. Let us ensure that dialogue on governance is not disconnected from technical Internet realities. The IGF is the major forum within the United Nations which has decided to adopt the multistakeholder approach, and we are happy that over the past five years this multistakeholder approach has prospered, producing a dynamic environment which moves beyond the week of the IGF each year. We hope that this multistakeholder approach recognized by Governments, business, and civil society, as well as the technical and academic circles will continue to be a fundamental element of the IGF. During this week's workshops we heard members of the technical community speaking about key aspects such as privacy, the importance of transparent practice by all stakeholders, and questions concerning the threats to Internet stability. The discussion also touched on one of the major challenges facing the national community, namely IPv6. It is encouraging to see that the discussion around IPv6 in the IGF has matured over the years so that today there is a relevant enthusiastic exchange of information on real examples of the use of IPv6 in developed and developing environments. An extreme example and an educational one was provided during Wednesday's session on Critical Internet Resources. We heard about Haiti and reconstruction of the technical infrastructure there following the earthquake with the integration of IPv6 compatibility. All stakeholders must play their part in ensuring that deployment of IPv6 at the global level continues to progress rapidly in the months and years to come.

The IGF continues to improve its capacity for remote participation. It has done so since the first meeting. The technical community welcomes these improvements which made it possible for more people than ever to contribute remotely. Naturally there is a process underway to broaden the scope of participation and we encourage the IGF to pursue its development as a forum from all points of view, particularly in regard to developing countries. With assistance through remote participation this is a great help. The technical community was an enthusiastic participator in IGF. It has been so since the beginning. There are considerable financial resources and competencies invested in this in increments every year. The IGF has been a pioneer in the process, bringing in all stakeholders and all points of view. With us, share responsibility in continuing to refine and broaden this multistakeholder process. The technical community welcomes the work in this connection, participating on an equal footing with the many stakeholders represented here, but it is essential that the technical and academic communities which play a unique role and contribute unique expertise are recognized as distinct and valuable actors. We fully support the IGF's efforts and look forward to further positive steps.

Jeremy Malcolm:

I'm going to begin my speech a little differently by looking back into history, not very far, just five years ago when the Internet Governance Forum was first proposed by an organization called the Working Group on Internet Governance, or WIGIG. It too was a multistakeholder body and had several open consultation meetings that anyone could attend. WIGIG identified a vacuum within the context of existing structures since there was no global multistakeholder forum to address Internet-related public policy issues. In response to WIGIG's recommendations to the World Summit on the Information Society, two measures were proposed to fill that vacuum. One was the IGF, which would be a new forum for multistakeholder dialogue. The second was a process towards enhanced cooperation which would facilitate the development of globally applicable principles on public policy issues by Governments in consultation with all stakeholders. By the combination of these two complementary measures, the public policy vacuum in Internet Governance could be filled.

Let's come back to 2010 and consider how well we've addressed the policy vacuum. It seems to me that our progress has been good but that something is still missing. The dialogue conducted at the IGF has produced many insights that could feed into decision-making processes elsewhere, but in many critical areas, that hasn't actually happened. Decision-makers have either been oblivious to or perhaps even deliberately disregarded the best practices shared at the IGF. The negotiations for an anti-counterfeiting trade agreement may be one example of the latter case. The United Nations Secretary General has noted this in his recent remarks on the renewal of the IGF, stating that the contribution of the forum to public policy-making is difficult to assess and appears to be weak. Why have we fallen short in this regard? There are two reasons. First, we still don't have a broader process of enhanced cooperation

through which we can participate in the development of globally applicable public policy principles. This July a resolution of ECOSOC called for that process to be pushed along this year, and civil society supports that call. The second reason that the IGF's influence in global policy making hasn't been as strong as it needs to be is that we have no short, simple, strong outputs that policy makers can use; notwithstanding that the IGF's mandate calls upon it to make recommendations where appropriate. The idea of a multistakeholder body producing recommendations worries some people, but don't forget that the IGF itself would not exist if not for the recommendations of another multistakeholder group, WIGIG. Our outputs don't always need to be as concrete as that. In fact, there was one issue on which WIGIG couldn't reach consensus. Rather than producing one recommendation, it gave four alternatives. We could do something like that, too, producing messages where recommendations are not appropriate. Another concern that some have about the IGF producing these sorts of outputs is that it could place its core characteristics at risk, perhaps turning it into another intergovernmental negotiation session. This fear doesn't give us any credit for our ability to develop innovative processes that could avoid that trap. One of the options for producing outputs that we produced in the past was through dynamic coalitions that were carried out between meetings and generate their own recommendations from the grassroots. This has succeeded in part, but the loose and informal structure of these groups has also limited the participation of Governments and therefore the weight that their outputs have. So it may be time for us to look at dynamic coalition's version two. These could take the form of thematic working groups with a more formal mandate from the IGF at large to address and report back on specific substandard issues with a view to producing documents that could be used in policy-making processes. The multistakeholder advisory group, or MAG, may also need to take an expanded role in finalizing these documents, and that in turn may need us to predetermine the MAG's legitimacy such as the black box process. These may be controversial issues, but that's why it is all the more important that we discuss them openly, fearlessly and together.

There are other improvements we should talk about too; such as continuing to expand inclusiveness of the forum, particularly to participants from the developing world and to ordinary Internet users who don't participate in policy decisions through speeches and meetings but through mailing lists and Web fora. The CSTD yesterday announced the working group it will be convening to look at a range of possible improvements to the IGF, and civil society looks forward to working closely with it in this process. In conclusion, the IGF was formed to address a vacuum in global governance for the Internet, to give civil society, along Government and the private sector, influence in the development of public policy for the Internet. We're halfway there. The discussions that we have at the IGF on issues such as Human Rights in the Internet, network neutrality, and the development intervention of Internet governance are insightful, relevant, and don't occur anywhere else in such a multistakeholder fashion. The next step for us is to focus those discussions, reduce them to a form that policy-makers can use, and make sure that they don't end here at the IGF.

Vaklas Sutkus:

For the fifth consecutive year, the IGF has successfully fostered an environment where Governments, business, Civil Society, technical experts, international and intergovernmental organizations can have frank and open exchanges across the spectrum of Internet Governance issues. This is a unique environment, and one that shouldn't be taken for granted. Nowhere else does such a range of stakeholders have the opportunity to share best practices, exchange ideas, and debate critical Internet issues on equal footing. For that reason, I speak for businesses around the world when I say the continuation of the IGF is of the utmost importance. Alongside its continuation, it is vital we maintain the spirit and format where substantive information exchange is prioritized over formal negotiations. By sharing business knowledge and experiences, we aim to provide policymakers and other stakeholders with greater insight to take practical actions in their own countries. Leading up to IGF 2011, we will build on improvements made over the last five years. We will seek new ways to increase participation of business and other stakeholders from around the world. We believe strengthening links between national and regional IGFs and the global forum offers a means to advance this. We will also focus on increasing representation of small and medium sized business, especially from the developing countries.

The closing of this year's IGF provides me with the opportunity to reflect on key discussion points and highlight progress made to date. Some people question the value the Forum brings in terms of tangible results. We would argue that point. The advancements of the issues, the style of our interactions, and the breadth of perspective gained by participants' result in better informed decision making beyond each IGF. Adding to the new understanding we all take away, we are also seeing practical tools and new developments emerge that are formed by the conversations we have here. The best practice document produced by the Secretariat this year is another useful resource that could not have happened without multistakeholder insight. This year, an increased number of remote participants joined the session from many regional hubs. Five years ago, this was not the case. We applaud this progress. We also note the fruitfulness of the national and regional IGFs that continue to spread the benefits of this type of exchange all over the world.

Not only do these Forums provide an opportunity to discuss Internet Governance issues from national and regional perspectives, they inform international level discussions. Experience shows us that each of these Forums is unique, providing attendees with the opportunity to discuss current issues and concerns that continue to evolve as growth of the Internet accelerates. There is no doubt that the Internet is an invention with profound impact on all of our lives and economies. It is an enabler of innovation, creativity, development, and an extraordinary tool for education and empowerment that continues to surpass our imagination; however, the risk of inadvertently cutting off this potential are great if we do not have well informed policy. We need all stakeholders contributing equally and constructively as we have come to do here at the IGF. The theme of this year's IGF summarizes a key aspiration beyond this Forum: Developing the future together requires an open, transparent, Democratic

and inclusive approach to Internet Governance. Embracing these values we can take a more informed policy approach, and have fair representation from a range of different stakeholders, across developed and developing countries, and from small, medium and large companies. That is why we wish the IGF to be continued in its unique format, and based on its founding principles.

Philip Okundi:

Over the last 4 days, we have exchanged perspectives, discussed best practices, and shared our thoughts on the best way forward. Furthermore, coming together has been a way to break down walls and to build bridges with others who share common goals. As we look ahead to the next IGF, we see the need to focus even more on the discussion of development aspects of Internet in all fields. As many existing partnerships demonstrate, pooling resources and expertise with other stakeholders can strengthen efforts and expedite progress. While some challenges may seem daunting, we must rise up together to meet them by remaining committed, creative, and cooperative. Yes, we have made progress in Internet Governance, but there's much more that still needs to be done ahead of us. The discussions this week have made one thing very clear; no single group can manage or resolve all the Internet Governance issues by itself. Therefore, it must continue to be a multistakeholder commitment where we all work together towards a common goal. The wisdom and experience gained so far and in the future to come will be of great value. I wish to take this opportunity on behalf of the Government of Kenya, the people of Kenya, to welcome you all to IGF in Nairobi next September, year 2011.

Esther Wanjau:

I'm from the Ministry of Communications, Kenya. The IGF continues to be instrumental in building bridges across stakeholder groups by enabling them to share views and experiences. The IGF has inspired many of us to continuously work on enhancing policy and technical frameworks pertaining to the Internet in our home countries, as well as at the regional level. This has been witnessed with increased emergence of the national and regional IGFs, IGF initiatives leading to increased human and institutional capacity building, and the involvement of all stakeholders in discussions at all levels. Kenya supports the continuation of the IGF in its current form and supports the proposal by CSTD to form a multistakeholder working group on the continuation of the IGF. We are ready to host the 6th IGF in 2011 if the mandate is extended, and we take this opportunity to welcome you all to Nairobi, Kenya, next year.

Rimvydas Vastakas:

I speak on behalf of the Minister of Transport and Communications who could not attend this closing session. During the last four days, we have had very fruitful discussions, and I would like to present some closing remarks. It has been Lithuania's honor to host the fifth Internet Governance Forum here in Vilnius. On behalf of the

people and Government of Lithuania, I express gratitude to all of you for coming to Lithuania, and for participating in the fifth meeting of the Internet Governance Forum. We've seen progress as we built our shared understanding and knowledge of Internet related issues. The meeting here in Vilnius has built on the experience of the previous four meetings and as in previous years, I hope that this IGF could be described as the best meeting so far. I'm very pleased with the substantive discussions that have characterized the Forum. The main focus of this IGF was: Developing the future together. We looked at how to give better access to the Internet, make better use of the Internet and how to prevent its abuse. We have seen two new major topics of Internet Governance for Development and Cloud Computing introduced to the Forum and we also discussed the traditional issues of Access and Diversity, Critical Internet Resources and Security, Openness, and Privacy. The Internet offers unprecedented opportunities but also creates new challenges. The IGF is here to help maximize the opportunities and to minimize the challenges. The discussions held in the IGF have made it clear once again that achieving these objectives is possible only by collaborative action by all stakeholders. This is maybe the most important feature of the IGF, all stakeholders engage in dialogue as equals. Dialogue is a two way process, and it means more than reading a prepared speech. It also means listening to what others have to say. The dialogue itself serves a very useful purpose, and it brings together diverse stakeholders who do not ordinarily meet under the same roof. This sustained interest in the meeting of the IGF in all regions of the world clearly shows that there is a need for this kind of multistakeholder dialogue. In our view, it is important to renew the IGF mandate as a multistakeholder platform for non-binding multistakeholder dialogue. In closing, I again want to thank you all for making this fifth meeting of the Internet Governance Forum such a memorable success. We should be proud that the multistakeholder collaboration the IGF embodies is also the foundation for its success and the stimulating and informative discussions we have endured over the last four days. I wish all the success in your further work. Thank you very much to all of you. I have to announce that this closes the 5th meeting of the Internet Governance Forum.

V. TAKING STOCK OF THE VILNIUS MEETING

TAKING STOCK OF THE VILNIUS MEETING

Summary of Open Consultations

22 November 2010, Geneva

Summary of Proceedings:

Mr. Markus Kummer, chairing his final meeting as Executive Coordinator of the IGF Secretariat, opened the meeting and approved the agenda. The morning session aimed to act as an open forum for participating stakeholders to take stock of the 2010 IGF meeting in Vilnius and to comment on how to improve, what worked well, what worked less well and what could be done to improve in the future.

A summary of points raised in this regard are listed below:

On Organization:

- Participants thanked and praised the Government of Lithuania for the job they did hosting the meeting. Participants also thanked and acknowledged the continued strong work of the IGF Secretariat.
- The advances made in Vilnius on extending outreach in the discussions to stakeholders in developing countries through remote participation was noted by many as being something that worked very well and something that should be continued and increased moving forward. The webcasts and remote moderators, and the live transcriptions, in particular, were noted as being very successful.
- There was; however, some criticism regarding the technical tools and connections for the remote participation, from participants both in Vilnius and those attempting to participate abroad. It was suggested that more resources and planning should be allocated towards this in the future.
- The planning process was noted as being very successful and transparent. In particular, the early call for workshop proposals was applauded and it was recommended that this process should continue in the future. There was some light criticism about the overlapping of workshops. In general though, the variety and depth of the workshop topics were praised. The inclusion of 'feeder' workshops was said to have made the link between the workshops and main sessions more tangible. Finally, the background reports on workshops and best practice forums were found to be very useful and informative for the discussions that took place.

On Participation:

- Participants drew attention to the increased participation of youth in Vilnius and recommended that the active participation of youth should continue to be encouraged moving forward. The inclusion of people with disabilities and the dialogue that occurred on this subject was also applauded by participants.
- It was recommended that the IGF could increase its outreach towards getting increased participation from the content industry, the media, parliamentarians and the academic and scientific communities.
- The rise of regional and national IGFs were mentioned many times as being one of the top successes of the IGF in general and their participation in the global meeting was seen as being a significant achievement and something that should be continued in the future. Participants felt that there should be increased linkages between the activities of the regional and national IGFs with the global IGF.

On Substance:

- The increased focus on development issues at the IGF was noted as being a significant achievement, as for the first time a main session was included in Vilnius on the topic of Internet Governance for Development. It was recommended by most that this trend should continue in the future. It was said that the inclusion of development as a main theme, together with increased participation from participants from developing countries was essential for the continued success of the IGF.
- Some issues in particular that were suggested to be given more attention in the future were net neutrality, social networking, mobile internet, sustainable development and environmental sustainability.
- The attention given and the discussions on human rights issues were praised for the most part. Some suggested that even more attention should be given to human rights issues in the future by inviting more human rights experts and professionals.
- Participants noted that the dialogue that occurred at both the main sessions and the workshops were, for the most part, very good and progressive in nature. Many people believed that the dialogues have progressed over the years in terms of the knowledge being shared and the openness between stakeholders in sharing their best practices and sometimes differing opinions. It was also acknowledged that the IGF meetings greatly stimulate international networking and the creation of partnerships around IGF issues.
- It was recommended by some that the IGF should aim to be more inclusive during these sessions by having less moderators and panellists involved. Some

participants believed that the dialogue was still not open enough, especially in the main sessions. It was felt that some participants may have held back from debating some key issues for various reasons.

- The emerging issues sessions were very well received and some participants felt that there should be more of these types of sessions to ensure that the IGF meeting is dealing with the most up to date topics of the time. In particular, the cloud computing session was mentioned as being very informative and stimulating.

The following is a summary of submitted written inputs to the IGF Secretariat on the subject of taking stock of the Vilnius Meeting:

A. What worked well

In general, stakeholders praised the Vilnius meeting as the best IGF meeting so far. One contribution found the meeting "highly illuminating and informative, and we left the IGF with deeper knowledge and understanding of a number of issues, and having forged new or better relationships with other stakeholders" The same contribution gave an overall assessment of the IGF and noted that "the greatest value of the IGF is that it fosters debate, dialogue, and the sharing of best practices, thus leading to shared understanding and development of solutions. Unlike other forums, it allows participants to address important questions of economic and social development in a non-threatening, non-operational environment, with far better global representation of stakeholders, thus better contributing to capacity building and enhanced cooperation.

The IGF successfully embodies the Tunis Agenda design. The objectives, format and structure of the IGF permit Internet operators, such as CIRA, to participate, learn from and directly influence valuable policy and governance discussions. The IGF's multistakeholder, de-centralized internet governance structure, void of decision making obligations, has not only been key to the development and innovation associated with the Internet but will also be key to its success in the future. The spreading of the IGF model to regional and national IGF processes is also a witness for its validity."

The majority of participants felt that the Programme had improved, compared to previous years. In particular it was appreciated that the workshops were better integrated into the schedule in Vilnius and that there were a number of innovative workshop formats and themes this year. The improved linkages with national and regional IGF type initiatives were appreciated. Also, the round table room setting in some of the meeting rooms was found to be conducive to facilitating the discussions.

As a major innovation, this year real-time transcription was provided from all the meetings. In conjunction with the live video and audio casting of all meetings this facilitated remote participation. There was much praise for the Vilnius remote participation, in particular the remote hubs, including the training of facilitators.

B. *What worked less well*

As in previous years, many participants felt that the programme was too dense. One contribution suggested incorporating more 'white space' into the schedule. This could "create room-spaces and opportunities for (continuing) meetings or generating new directions for discussion as they emerge on the ground; consolidating horizontal and vertical avenues for further collaboration".

While it was noted that remote participation was much improved, it was also suggested that there needed to be better coordination for starting up the remote facilitations for each of the day's workshops and for dealing with other technical problems. More comments related to organizational aspects such as the shuttle services, the availability of low cost food, the noise spill over from the workshop rooms as well as the quality of the real-time transcriptions from the workshops.

VI. APPENDICES

GLOSSARY OF INTERNET GOVERNANCE TERMS

AfriNIC	Regional Registry for Internet Number Resources for Africa (Member of NRO)
APC	Association for Progressive Communication
ASCII	American Standard Code for Information Interchange; seven-bit encoding of the Roman alphabet
ccTLD	Country code top-level domain, such as .gr (Greece), .br (Brazil) or .in (India)
CoE	Council of Europe
CSIRTs	Computer Security Incident Response Teams
CSTD	Commission on Science and Technology for Development
DCAD	Dynamic Coalition on Accessibility and Disability
DNS	Domain name system: translates domain names into IP addresses
DRM	Digital Rights Management
DOI	Digital Object Identifier
ECOSOC	Economic and Social Council
ETNO	European Telecommunications Networks Operators Association
F/OSS	Free and Open Source Software
GAC	Governmental Advisory Committee (to ICANN)
GNSO	Generic Names Supporting Organization
gTLD	Generic top-level domain, such as .com, .int, .net, .org, .info
IANA	Internet Assigned Numbers Authority
ICANN	Internet Corporation for Assigned Names and Numbers
ICC	International Chamber of Commerce
ICC/BASIS	ICC Business Action to Support the Information Society.
ICT	Information and communication technology

ICT4D	Information and communication technology for development
IDN	Internationalized domain names: Web addresses using a non-ASCII character set
IETF	Internet Engineering Task Force
IGF	Internet Governance Forum
IGOs	Intergovernmental organizations
IP	Internet Protocol
IP Address	Internet Protocol address: a unique identifier corresponding to each computer or device on an IP network. Currently there are two types of IP addresses in active use. IP version 4 (IPv4) and IP version 6 (IPv6). IPv4 (which uses 32 bit numbers) has been used since 1983 and is still the most commonly used version. Deployment of the IPv6 protocol began in 1999. IPv6 addresses are 128-bit numbers.
IPRs	Intellectual property rights
IPv4	Version 4 of the Internet Protocol
IPv6	Version 6 of the Internet Protocol
IRA	International Reference Alphabet
ISOC	Internet Society
ISP	Internet Service Provider
ITAA	Information Technology Association of America
ITU	International Telecommunication Union
IXPs	Internet exchange points
LACNIC	Latin American and Caribbean Internet Addresses Registry (Member of NRO)
MDGs	Millennium Development Goals
MoU	Memorandum of Understanding
NAPs	Network access points
NGN	Next generation network
NRO	Number Resource Organization, grouping all RIRs – see below

OECD	Organisation for Economic Co-operation and Development
Registrar	A body approved ('accredited') by a registry to sell/register domain names on its behalf.
Registry	A registry is a company or organization that maintains a centralized registry database for the TLDs or for IP address blocks (e.g. the RIRs — see below). Some registries operate without registrars at all and some operate with registrars but also allow direct registrations via the registry.
RIRs	Regional Internet registries. These not-for-profit organizations are responsible for distributing IP addresses on a regional level to Internet service providers and local registries.
Root servers	Servers that contain pointers to the authoritative name servers for all TLDs. In addition to the "original" 13 root servers carrying the IANA managed root zone file, there are now large number of Anycast servers that provide identical information and which have been deployed worldwide by some of the original 12 operators.
Root zone file	Master file containing pointers to name servers for all TLDs
SMEs	Small and medium-sized enterprises
TLD	Top-level domain (see also ccTLD and gTLD)
UNESCO	United Nations Educational, Scientific and Cultural Organization
WGIG	Working Group on Internet Governance
WHOIS	WHOIS is a transaction oriented query/response protocol that is widely used to provide information services to Internet users. While originally used by most (but not all) TLD Registry operators to provide "white pages" services and information about registered domain names, current deployments cover a much broader range of information services, including RIR WHOIS look-ups for IP address allocation information.
WSIS	World Summit on Information Society
WITSA	World Information Technology and Services Alliance
WTO	World Trade Organization

VILNIUS MEETING PARTICIPATION FIGURES

14-17 September 2010

Attendance and remote participation

Special efforts were made to facilitate remote participation, relying on two pillars: real-time transcription and video webcasts. Both were made available as live webcasts from all sessions, which is seven main sessions and 109 other official meetings such as workshops, open forums, and dynamic coalition meetings. All in all, there were more than 460 hours of live webcasts.

All transcripts and videos are available as archives on the IGF Web site. Remote participation relied on 32 remote hubs set up for the meeting, 27 of them were located in developing countries. Over 1300 people, representing all stakeholder groups, participated in these remote hubs set up for the meeting, in groups ranging from 20 to 40 people. (The number of remote participants refers exclusively to the participants in remote hubs and does not include the individual remote participants who may have watched parts of the meeting.)

More than 2000 people registered and 1451 participants were present in Vilnius. 36% among them were women, thus considerably improving the gender balance. Adding the number of remote participants to the physical participants brings up the overall figure of participants to over 2750, the largest participation figure of any IGF meeting. 1327 or 48.2% of these participants reside in developing countries. The participants came from 107 countries, where more than 95% of the world's Internet users are located.

The breakdown of participants shows that all the major stakeholder groups were represented almost equally, with 21% of participants coming from civil society, 23% from private sector and 24% government representatives and 22% technical and academic communities.

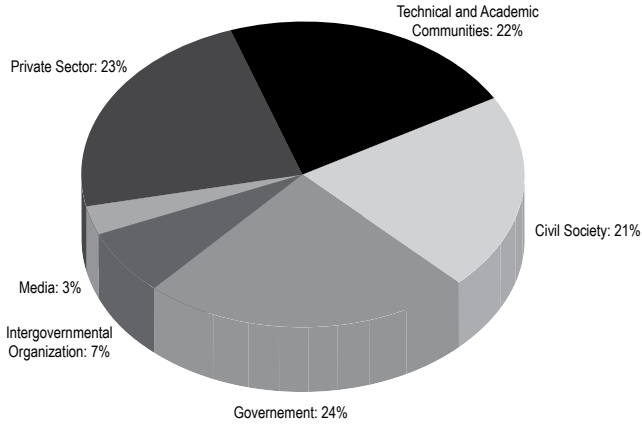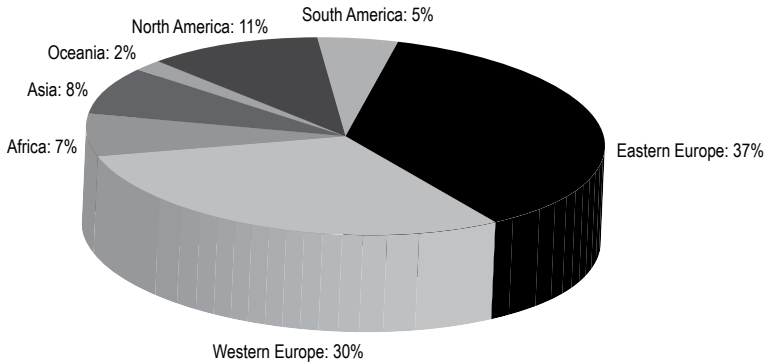*Figure 1: Vilnius meeting: participant breakdown by stakeholder group[13]*

Figure 2: Vilnius meeting: participant breakdown by region[14]

13 Based on badges issued at the Vilnius meeting
14 Based on badges issued at the Vilnius meeting

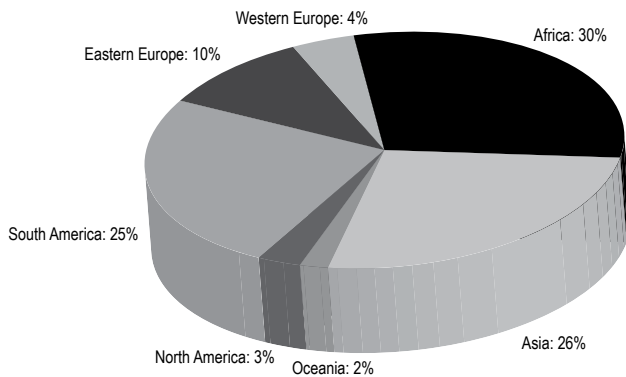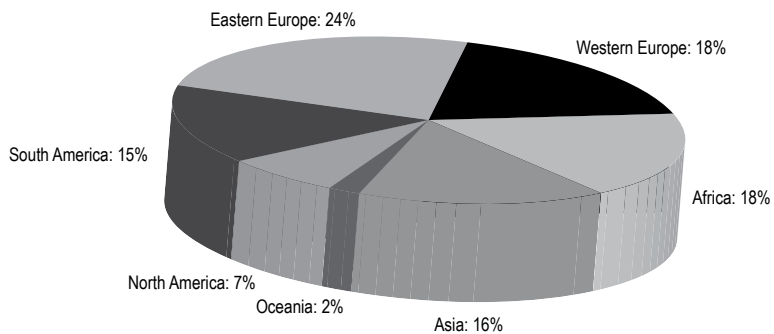*Figure 3: Vilnius meeting: remote participant breakdown by region*[15]

Figure 4: Vilnius meeting: overall breakdown by region[16]

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15 Based on Remote Hub figures
17 Based on remote hub proposals and badges issued at Vilnius meeting.

Overall Representation in Vilnius by Region

While a strong majority of physical participants were from Eastern and Western Europe (77%), the participation in remote hubs presented a strong presence from developing countries, with 81% of all remote participants coming from these countries.

Combining the figures of physical and remote attendance present a different geographical balance, with participants from Eastern Europe coming first with 24% of the total, followed by those from Africa and Western Europe with 18%, Asia with 16%, Latina America with 15% and North America with 7%.

Online collaboration

The IGF Web site was the portal into the preparatory process which relied to a large extent on online collaboration. As in previous years, throughout the preparatory process for the 2010 IGF meeting, all stakeholders were invited to submit contributions. Around 53 contributions by governments, private sector, civil society, the academic and technical communities as well as intergovernmental organizations were received. The increase in the Web site visits from the first to the fifth IGF meeting mirrored the increased interest in the IGF. The number of visited pages in 2010 has kept above the 200,000 margin, peaking on the dates of the annual meeting, with over 1390000 hits and over 448000 page views.

IGF Web site traffic 2010