



e-Inclusion Ministerial Debate

CENTRO CULTURAL DE BELÉM

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Towards an all-inclusive digital society

Technology is creating new opportunities for more than 60% of Europe's population, connecting us to better paid jobs, instant information, new forms of social interaction, community infrastructures, government services, consumer power and convenience. It plays an ever increasing role in our day to day lives – in how we communicate, how we carry out business, how we acquire information and how we enjoy ourselves. It touches our lives in ways which we are often unaware of or don't even think about.

Yet more than one in three Europeans are excluded from fully benefiting from these opportunities. The social and economic implications are huge and affect us all. In today's society, access to information is a right as well as a condition for prosperity. It is not morally acceptable, nor economically sustainable, to leave millions of people behind, unable to use Information and Communications Technologies to their advantage.

In June 2006, European Ministers met in Riga, Latvia and agreed on a series of actions and targets in their Ministerial Declaration on e-Inclusion¹. While many organisations and individuals are actively working towards an all inclusive digital society, progress is only half as fast as it should be.

That is why the European Commission has adopted a European initiative² on e-Inclusion setting out key actions like "*e-Inclusion, be part of it!*", an awareness and dissemination campaign for 2008 and the preparation of e-Accessibility legislation.

This Ministerial event, co-organised by the Portuguese Presidency of the Council of Ministers and the European Commission, is an opportunity to discuss this new policy, and the key steps to be taken by stakeholders to accelerate progress towards the Riga targets. Its exhibition will give delegates an opportunity to see at first hand how technology can help people enhance their lives, as well as personally experiencing some of the restrictions that being excluded can bring.

Addressing the e-Inclusion challenge is a key political priority for Europe today, and has never been more relevant. By including more people in our economy and society there is a triple win: better life for individuals, reduced costs for society and increased economic and business opportunities.

¹ http://ec.europa.eu/information_society/activities/einclusion/docs/brochures/riga_dec.pdf

² http://ec.europa.eu/information_society/activities/einclusion/policy/i2o1o_initiative/index_en.htm

Sunday 2nd December

13:30	Registration opens	
14:00	Living e-Inclusion exhibition opens	
16:00	Welcome	Almada Negreiros (S6)
16:00	Welcome and Opening Statement Minister José Mariano Gago, Minister of Science, Technology and Higher Education, Portugal	
16:15	The European e-Inclusion Initiative Commissioner Viviane Reding, European Commissioner for Information Society and Media	
16:45	Panel Debate and Audience Questions <i>facilitated by Margaret Doyle, Contributing Editor, Economist Conferences</i> Sustainable and Inclusive Design - What do people really think? Rodolfo Cattani, European Disability Forum e-Inclusion is Good Business, not just a social responsibility Veli Sundbäck, Executive Vice President, Corporate Relations and Responsibility, Nokia Corporation e-Accessibility legislation: help or hindrance? Mark McGann, Director General, EICTA The Fourth World economy: e-Inclusion for Social Change Luc Soete, Professor MERIT / UNU Maastricht	Almada Negreiros (S6)
18:00	Exhibition Tour and Exhibitor workshops	
20:00	Dinner	



Monday 3rd December

09:00	Parallel Sessions ICT & Disability	PS1	Almada Negreiros (S6)
	The challenges of ensuring that technology is designed for all including disabled people, and contributes to achieving greater independence, improving quality of life, empowerment and active involvement in society and the economy. <i>Chair: Professor Gerard Quinn, National University of Ireland</i>		
09:05	Mind the gap - disability and the digital divide Dan Pescod , International Campaigns Manager, Royal National Institute of Blind People		
09:15	Three educational strategies for Higher Education: Design for all education, assistive technology training and Rehabilitation Engineering Education Professor Francisco Godinho , Professor at the University of Trás-os-Montes and Alto Douro (UTAD), Engineering Department		
09:25	The Italian experience: key success factors for an eAccessibility Steven Sintini , eAccessibility expert, National Centre for Informatics in Public Administration (CNIPA)		
09:35	Accessibility of digital TV, or how can accessibility problems be solved by users and industry Tony Graziano , Director, EICTA		
09:45	Q&A		
10:30	Close		
	ICT in support of Active ageing and employment	PS2	Luis de Freitas Branco (S1)
	In a world with an ageing population, how ICT can help older people continue to work productively for longer and live more independent lives. <i>Chair: Susan Scott-Parker, Employers'Forum on Disability</i>		
09:05	Active Aging at work Kurt Vogler-Ludwig ; Director of Economix Research & Consulting, European Employment Observatory		
09:15	The added value of older workers Anne-Sophie Parent , Director, AGE - the European Older People's Platform		
09:25	Next Generation working practices Martin Curley , Director, IT Innovation at Intel Information Technology		
09:35	Better Work, Better Life Professor Christian Roßnagel , Professor of Organisational Behaviour, Jacobs Centre on Lifelong Learning, Jacobs University Bremen		
09:45	Q&A		
10:30	Close		
10:30	Coffee Break		

Monday 3rd December

11:00	Parallel Sessions Digital Literacy & Competencies	PS3	Almada Negreiros (S6)
	Challenges and steps to take for digital literacy and competences as core enablers for everyone to fully take part in the economy and have an active role in society. Chair: Valerie Frissen , Erasmus University, Rotterdam/TNO		
11:05	EC Digital Literacy Review Emilie Normann , Chief Consultant, Danish Technology Institute		
11:15	Social integration (via ICT) of immigrants and ethnical minorities Dr. Rui Marques , High Commissioner, High Commission for Integration and Inter-Cultural Dialogue		
11:25	Do partnerships work? The role of multi-stakeholder partnerships in delivering Digital literacy & competences Elena Bonfiglioli , Director Corporate Citizenship, Microsoft Europe Middle East and Africa		
11:35	The new Digital literacy: is the gap narrowing or broadening? Prof. Tapio Varis , University of Tampere Finland and Unesco Chair in global e-learning		
11:45	Q&A		
12:30	Close		



Monday 3rd December

	e-Inclusion for economic growth	PS4	Luis de Freitas Branco (S1)
	Identifying how an inclusive information society can be - and should be - a major contribution to the Lisbon agenda for growth and competitiveness. <i>Chair: Anabela Pedrosa, President, AMA</i>		
11:05	The long tail of e-Inclusion Loris Di Pietrantonio , Policy Officer, ICT addressing Societal Challenges, Information Society and Media, European Commission		
11:15	The economic value of e-Inclusion Cristiano Codagnone , University of Milan, Italy		
11:25	The economic potentials of broadband enabled services George Hall , Member of the Board of the Broadband Stakeholder Group (BSG), EU Public Affairs and Government Relations Consultant		
11:35	Regions: the necessary, logical and opportune territorial scale for making eInclusion work Hervé Le Guyadier , Vice President of the Board of eris@, the European Regional Information Society Association		
11:45	The social impact of e-inclusion Helen Milner , Managing Director, UK online centres		
11:55	Q&A		
12:30	Close		
12:40	Closing Plenary		Almada Negreiros (S6)
	e-Inclusion Initiative for Portugal Luis Magalhães , President, UMIC Knowledge Society Agency, Portugal		
	e-Inclusion 2008: Be a Part of it! Frans de Bruïne , Director, "ICT addressing Societal Challenges" Information Society and Media, European Commission		
	Keynote Address Cognitive Horizon - Are we including everyone? John D Kemp , Partner, Powers, Pyles, Sutter & Verville, PC		
	Conference Close Minister José Mariano Gago , Minister of Science, Technology and Higher Education, Portugal		
	Commissioner Viviane Reding , European Commissioner for Information Society and Media		
13:30	Close		



Minister José Mariano Gago, Minister of Science, Technology and Higher Education, Portugal

Minister of Science, Technology and Higher Education in Portugal (since March 2005), in charge of Science and Technology, Information Society and Higher Education.

Professor José Mariano Gago is an experimental high energy physicist and a Professor of Physics of IST. (Instituto Superior Técnico, Lisbon) He graduated as an electrical engineer by the Technical University of Lisbon and obtained a PhD in Physics by the École Polytechnique in Paris. He worked for many years as a researcher at the European Organisation for Nuclear Physics (CERN), Geneva, and in the Portugal's Laboratory for Particle Physics (LIP) that he chaired. Prof. Gago is member of the CERN Council. He was also President of the National Board for Science and Technology and President of the Institute for Prospective Studies in Portugal.

As Minister of Science and Technology during 1995-2002, he was responsible for science and technology and for information society policies. He launched the Ciencia Viva movement to promote S&T culture and S&T in society. During the Portuguese EU presidency (2000), he prepared, along with the European Commission, the Lisbon Strategy for the European Research Area and for the Information Society in Europe. He has also launched in 1998 the Eureka-Asia Initiative in Macao.

He chaired before taking office in 2005 the High Level Group on Human Resources for Science and Technology in Europe.

Prof.Gago is a former President of the International Risk Governance Council (IRGC) being currently a member of the Board. He is also a member of the Academia Europaea.



Viviane Reding, European Commissioner for Information Society and Media

Born in Esch-sur-Alzette, Luxembourg, Ms Reding has a Doctorate of human sciences from Sorbonne, Paris and is currently a member of the European Commission (Information Society and Media).

Ms Reding initially worked as a journalist before embarking on a political career in 1979. From 1979 to 1989, Ms Reding was an active member of the Luxembourg Parliament and was the President of the social committee, member of the Bureau of the “Chambre des Députés”, Member of the Benelux Parliament and also a member of the North Atlantic Assembly. Between 1981 and 1999, she also held the post of local councillor in the city of Esch-sur-Alzette and was the President of the Cultural Affairs Committee from 1992 – 1999.

In 1989, Ms Reding became a member of the European Parliament and held a number of senior posts, including: President of the Petitions Committee 1989 – 1992, Vice-president of Social Committee 1992 – 1994, Vice-president of Civil Liberties and Internal Affairs Committee 1997 – 1999, Head of Luxembourg delegation to European People's Party (EPP), Member of EPP Group Bureau.

In 1999, Ms Reding became a member of the European Commission (Education, Culture, Youth, Media and Sport) before taking up her current post in 2004.



Elena Bonfiglioli, Director Corporate Citizenship, Microsoft Europe Middle East and Africa

Elena Bonfiglioli is Director of Corporate Citizenship for Microsoft Europe Middle East and Africa. In this capacity Elena leads the Skills and Employability strategy as well as the entrepreneurship and accessibility program development for the company. She is currently the Chair of the European Alliance on Skills for Employability and the EICTA 2010 Lisbon group. Elena sits in the Board of CSR Europe, in the Council of AccountAbility, and the Board of the European Academy of Business in Society.

Before joining Microsoft over four years ago, Elena worked for CSR Europe as Programmes Director. In this position, she effected the strategic development of CSR in the field of Corporate reporting, Responsible Investment, Sustainable Entrepreneurship and Diversity. She worked closely with companies and stakeholder, and contributed to the development of the CSR agenda in Europe. Elena was one of the developers and founders of the European Academy of Business in Society and initially

served EABIS as interim Director for the first year and a half of activity of the organization.

Elena started her career working as a researcher for the Italian government and the University of Bologna in the field of fiscal economic reform. Elena holds a cum Laude degree in economics from the University of Modena, Italy, and a Master's degree in European studies from the College of Europe, in Belgium.



Rodolfo Cattani, European Disability Forum

EDUCATION

University degree in Philosophy of Science, Bologna University

CAREER

1966-1979 High school teacher

1979-1998 Managing Director of the Italian National Library for the Blind

1999 Retired – consultant on issues regarding visual impairment

Italian Union of the Blind and Partially Sighted – various positions since 1969. At present Member of the National Council

European Blind Union – various positions since 1984. At present Chairman of the Commission for Liaising with the EU

World Blind Union – various positions since 1984. European Disability Forum - Member of the Executive Committee since 2005, Board member since 1997, Chairman of Universal Access Committee 2000-2005, EDF representative on various European Union's consultative bodies.

Member of the “eAccessibility Expert Group (eEurope 2005)” of DG Employment and Social Affairs (European Commission), 2003-2005

Member of the expert group “eEurope Steering Group 2nd Section” of DG Information Society, 2004-2005
Chair of CEN / ISSS (CEN's Information Society Standardization System) workshop on web accessibility certification, 2005-2006.

Member of the Design for All Working Group of ANEC (European Association for the Co-ordination of Consumer Representation in Standardisation) since 2006

ANEC representative on CEN (European Committee for Standardization) TC 293 "Assistive products for people with disabilities" since 2006

EDF representative on European Commission Information Society and Media DG's e-Inclusion Partnership since 2006



Prof. Cristiano Codagnone, University of Milan, Italy

Prof. Codagnone graduated with an in economics from Bocconi University in 1988 (MA equivalent) and has a Ph.D. (1995) in sociology from New York University with specialisation in the social study of technology.

Currently he is tenured Assistant Professor at the Political Science Faculty of Milan State University where he teaches and carry out research in the field of public administration reform and modernisation, eGovernment, eInclusion, and eHealth.

He is also affiliated with MIP, the well know Business School of Milan Polytechnic University, for which he manages EU sponsored research projects in the area of

eInclusion, eGovernment, and eHealth.

Starting in January 2005 and up to the present he has managed, and participated, various studies and projects for DG Information Society of the European Commission, including among others:

- o the impact assessment for the forthcoming EU Communication on the e-Inclusion strategy, including an extensive analysis of the potential impacts of e-Inclusion on economic growth and sustainable development;
- o the “eGovernment Economics Project”, a study that produced a model of the economic impact of eGovernment on GDP, as well as an Impact Measurement Framework

Codagnone, before starting to carry out work for the EU Commission, has also had experience with United Nation: In 2003-2004 he took a leave of absence from his university position and served as Project Officer in the “eGovernment for Development” programme of the United Nations Department of Economic and Social Affairs (UNDESA).



Martin Curley, Director, IT Innovation at Intel Information Technology

Martin Curley is Senior Principal Engineer and Global Director of IT Innovation and Research at Intel Corporation managing a network of IT Innovation Centres catalysing IT Innovation.

Previously Martin held a number of IT Management positions for Intel including Director of IT Strategy and Technology based in Sacramento, California and Fab14 Automation Manager based in Dublin, Ireland.

Martin has also held IT engineering and management positions at General Electric in Ireland and Philips in the Netherlands. Martin has a degree in Electronic Engineering and a Masters in Business Studies from University College Dublin, Ireland.

Martin is author of “Managing Information Technology for Business Value” published by Intel Press, January 04. Martin is also an Adjunct Professor at the National University of Ireland, Maynooth and the National College of Ireland.



Frans de Bruijne, Director, “ICT addressing Societal Challenges” Information Society and Media, European Commission

Frans de Bruijne is the Director at the European Commission, responsible for “ICT addressing Societal Challenges” in the Information Society and Media Directorate General. Before starting a professional career with Shell International in 1968, he obtained a Masters degree in Physics at the Technological University of Delft (NL).

From 1975 to 1990, he rose to Managing Director of the Dutch Technology Agency at the Ministry of Economic Affairs (The Hague), before starting his career at the Commission in 1990.



Loris Di Pietrantonio, Policy Officer, ICT addressing Societal Challenges, Information Society and Media, European Commission

Loris Di Pietrantonio graduated in international and diplomatic studies from University of Trieste in 1997 and holds an MA in European Economic Studies from College of Europe (1998, Bruges, Belgium).

He is currently policy officer at the European Commission – DG Information Society and Media, in the area of ICT for Inclusion. He has been recently involved in the design of policies for digital inclusion and impact assessments for the Communications on the 2010 e-Inclusion Initiative and the Action Plan on ICT for

Ageing Well in the Information Society.

Before joining the Commission he has been involved in project coordination and research strategy in the area of transport technologies.

He is the author of publications on Industrial and Innovation Policy in the EU; Transport Economics; Telecoms liberalisation.



Margaret Doyle, Contributing Editor, Economist Conferences

Ms Doyle is based in London and is an international speaker, writer and moderator of dialogue focusing in global business and finance.

She is a senior commentator and facilitator at board room and ministerial level, an internationally recognised expert on macroeconomics, corporate strategy, business leadership and finance.

She is respected for presenting new insights on complex subjects in a straightforward and engaging way, an articulate and incisive presenter and possesses strong, natural moderating skills.

Margaret was the editor of Global Agenda, the World Economic Forum’s Davos magazine. Previously she was finance correspondent for The Economist and then editor of Economist TV.

Her comments are regularly sought on business, the economy and the stock market, with frequent television commentary on NBC, CNN, ITV (UK) and NHK (Japan) and others.

She is a newspaper reviewer on BBC Breakfast and Sky News Sunrise, a radio commentator on various BBC shows and also NPR, including commentaries on Marketplace.

She is retained to chair a series of Economist Conferences' events, including industry roundtables on pharmaceuticals, insurance, banking, property, retail and shipping, and senior executive dialogue on subjects like mergers and acquisitions, Asian finance, public-private partnerships and public sector reform.



Valerie Frissen, Erasmus University, Rotterdam/TNO

Valerie Frissen is currently working as senior strategist at TNO ICT, focusing on societal impacts of ICT. Until January 2007 she was head of the department ICT & Policy of TNO ICT. Since 2003 she is also part time professor on 'ICT and Social Change' at the Erasmus University Rotterdam, Faculty of Philosophy. Before she started working at TNO in 1999, she was a researcher and lecturer at the University of Amsterdam. She holds a PhD in Social Sciences (1992), a MA in Communication Studies (1987) and a BA in Cultural Anthropology from the University of Nijmegen.

She is also a partner in the 'Centre for Public Innovation' (a cooperation between Dutch universities, research/consultancy organisations), which focuses on the implications of ICT-developments for public administration and the public sector. She is a member of the Board of Supervisors of the Dutch Public Broadcasting organisation, a member of the Board of Governors of HEC (a semi-public consultancy organisation on ICT-innovations in the public sector) and member of the advisory board of HIVOS, a Dutch development organisation. She has published widely on social impacts of IT, and also on e-inclusion related subjects.



Professor Francisco Godinho, Professor at the University of Trás-os-Montes and Alto Douro (UTAD), Engineering Department

Francisco Godinho, 39 years, is a rehabilitation engineer. He was in the vanguard of Portugal's and European Union's efforts to make the web accessible to people with disabilities. During the Portuguese presidency of the European Union in 2000 he was responsible for the promotion of an European debate to support the eEurope's essential actions concerning citizens with special needs.

- Professor at the University of Trás-os-Montes and Alto Douro (UTAD), Engineering Department

- Co-ordinator of the Rehabilitation Engineering Centre on Information and Communication Technologies (CERTIC/UTAD)

- Adviser of the Portuguese Ministry of Science, Technology and Higher Education for Technology and People with Special Needs issues.

1999-2000, since 2005

- Co-ordinator of the Portuguese National Plan for the Participation of Citizens with Special Needs in the Information Society in 2003

- Founder of SUPERA - Portuguese Society of Rehabilitation Engineering and Accessibility

More Information at: http://www.acessibilidade.net/godinho/cv_en.html



Tony Graziano, Director, EICTA

Tony Graziano is Director Technical and Regulatory affairs of EICTA, the European Industry Association that is the voice of the Information and Communications Technology and Consumer Electronics industries in Europe.

Tony joined EICTA from EACEM (the former European Association of the Consumer Electronic Manufacturer) where he was Technical Officer, charged specifically to organise, co-ordinate and administer EACEM's Technical Committee liaisons with the standardisation institutes and EU legislators, as well as provide expert information and advice on regulatory issues.

Before joining EACEM in 1998, he spent nine years at Matsushita Electric (Panasonic) Television Division, where he held senior European and international positions. He was Senior Design Engineer during the introduction of the first digital signal processing TV for Panasonic in Europe, before being appointed Senior Project Manager coordinating Panasonic's European TV design department.

Prior to that, he was a project engineer with AB Electronics Newport, Wales, working on communication and IT products. He began his career as a graduate Engineer for AB Electronics, charged with developing and coordinating the subcontracting department.

Tony holds a B.Sc. Honours in Electrical Electronic Engineering and a Master's certificate in Business administration from the University College of Cardiff, UK.



George Hall, EU Public Affairs and Government Relations Consultant

George Hall has worked on both sides of the public sector/private sector divide, first as a member of the British Diplomatic Service and then as a senior executive in the IT industry. He is now an independent advisor on public policy and governmental affairs, with a special focus on the EU, particularly the Lisbon Agenda, Information Society and Enlargement issues. He has been involved in EU affairs since 1973 when he worked in the UK Permanent Representation to the EU in Brussels. During his diplomatic career, he served in the Foreign and Commonwealth Office in London and in the British diplomatic missions in Caracas, Brussels, Bonn, East Berlin, Budapest and Ottawa. He was also attached to the UK Prime Minister's Office, working in the

Press Office. Following his move to the private sector, he represented the IT industry in European and global forums, such as chairing the UNICE Information Society Steering Committee in Brussels, he was a founding board member of EICTA, he was EU issue manager on eCommerce in the Trans Atlantic Business Dialogue (TABD) as well as a member of the Business and Industry Advisory Committee of the OECD.

In 1994 he was secretary to the Bangemann High Level Group which presented a report "Europe and the global information society" to the European Council which forms the basis of the EU's Information Society policies to this day.

He is currently on the Board of the Broadband Stakeholder Group (BSG) a public/private partnership between the UK Government and the private sector players in the "broadband value chain" He chaired the e-Infrastructure Work Group of IANIS+ (Innovative Actions Network for the Information Society), a 2 year programme jointly funded by the European Commission and EU Regions largely drawn from the membership of eris@ (European Regional Information Society Association) based in Brussels. George Hall is a Patron of erisa. He also chairs the Industry Advisory Panel of DEMO-net, an FP6 Network of Excellence focussing on e-Participation.



John D Kemp, Partner, Powers, Pyles, Sutter & Verville, PC

John D. Kemp is widely respected for his many achievements, both in the corporate and non-profit worlds. With personal disability experience using four prostheses, John inspires others to achieve the impossible through knowledge, experience, vision, personality, and persistence. Mr. Kemp graduated from Georgetown University in 1971 and from Washburn University School of Law in 1974. Mr. Kemp was awarded an Honorary Doctorate of Law from Washburn University School of Law in May, 2003.

With more than 45 years of direct experience in the disability movement, currently, John D. Kemp is a principal at the Washington, D.C. Law Firm of Powers, Pyles, Sutter & Verville, P.C.. In his practice, he serves as the CEO of ACCSES, HalfthePlanet Foundation and The One Percent Coalition, as well as the Executive Director and General Counsel to the US Business Leadership

Network. In addition, Mr. Kemp represents several technology companies interested in disability.

In October 2007, Mr. Kemp received the New Freedom Initiative Award which annually recognizes non-profits, small businesses, corporations and individuals that have demonstrated exemplary and innovative efforts in furthering the employment and workplace environment for people with disabilities. In March 2006, Mr. Kemp received the Henry B. Betts Award, widely regarded as America's highest honor for disability leadership and service. Presented jointly by the Rehabilitation Institute of Chicago and the American Association of People with Disabilities (AAPD), the Betts Award recognizes a person's work and scope of influence that have significantly improved the quality of life for people with disabilities in the past and who continues to be a force for change in the future

Appointed by Secretary Leavitt of Health and Human Services, Mr. Kemp served on the Medicaid Commission from July 2005 through December 2006. He currently serves on the State Department's Advisory Committee on Persons with Disabilities which guides the Secretary of State and the Administrator of the Agency for International Development (USAID) in the formulation and implementation of U.S. foreign policy and assistance with respect to people with disabilities.

John D. Kemp has led, partnered, worked for and served on the Boards of Directors of many of the leading disability and non-profit organizations such as: United Cerebral Palsy Associations, Very Special Arts, Independent Sector, The Abilities Fund Inc., Disability Service Providers of America, Easter Seals, Goodwill Industries of America, and the U.S. International Council on Disabilities, to name a few. In 1995, Mr. Kemp co-founded AAPD and continues to be active with the organization today. During his tenure with Kemp & Young, Inc., John D. Kemp developed disability employment management training and consulting services. He may be reached by contacting Laurie Blair at 202-466-6550 or via email at Laurie.Blair@ppsv.com



Hervé Le Guyadier, Vice President of the Board of eris@, the European Regional Information Society Association

- Vice President of the Board of eris@, the European Regional Information Society Association (www.erisa.be).

Together with its 40 regional members, eris@ aims to promote and support regional development through the take-up of information society strategies, actions plans and projects.

- Managing Director of AEC, Aquitaine Europe Communication (www.aecom.org), the ICT development agency for the Aquitaine Region.
- Expert for the European Commission, on Information and Knowledge Society programmes and projects. Hervé Le Guyader spent 10 years with the T.E.I. group, a U.S. sales and marketing organisation, including a six years stint in Boston, Massachusetts.

Qualified Electronic Engineer (ENSEEHT, 1978), he spent the five first years of his career as R&D engineer in digital telecommunication hardware, Computer Aided Design and visualisation software.



Luis Magalhães, President, UMIC Knowledge Society Agency, Portugal

President of the Knowledge Society Agency (UMIC), Ministry of Science, Technology and Higher Education, Portugal, since July 2005; Member of the Lisbon Strategy and the Technological Plan Coordination Network; Member of the National ICT Directors Forum and of the i2010 High Level Group of the European Union; Member of the Committee for Information, Computer and Communications Policy of OECD; Member of the Advisory Group for the Internet Governance Forum appointed by the United Nations Secretary General; President of the General Assembly of the Installation Commission of the International Iberian Nanotechnology Laboratory;

Member of the Governing Boards of the MIT-Portugal, CMU-Portugal, UT Austin-Portugal Programs; Member of the Fraunhofer-Portugal Program Steering Committee, Full Professor at Instituto Superior Técnico (IST) of the Universidade Técnica de Lisboa (UTL), since 1993; Correspondent Member of the Lisbon Academy of Sciences since 1995; Member of the Luso-American Foundation for Development Consultative Council since 1997; Member of the Scientific and Technological Council of Taguspark – Science and Technology Park since 1997.

Formerly, President of FCT – Science and Technology Foundation (the Portuguese Research Council) between 1997 and 2002; Member of the eGovernment Subgroup and of the eGovernment Ad-hoc Group of the European Union (2005); Member of the European Science Foundation Governing Council (2000-2002); Member of the OECD Science and Technology Policy Committee and to the OECD Global Science Forum (1998-2002). Worked at IST (1972-97, 2002-05), FCT (1997-2002), Institute of Mathematics and Its Applications, University of Minnesota, USA (1982-83, 1985), Division of Applied Mathematics, Brown University, USA (1978-83), Biology Center of the Gulbenkian Institute of Science (1972-78).

Obtained the university degrees of PhD (1982) and MSc (1980) in Applied Mathematics from Brown University, USA; and of Electrical Engineer – Telecommunications and Electronics (1975) from IST.



**Dr. Rui Marques, High Commissioner,
High Commission for Integration and Inter-Cultural Dialogue**

High Commissioner for Immigration and Intercultural Dialogue , Portugal .

44 years old.

Degree in Medicine.

MA Communication Sciences.



Mark McGann, Director General, EICTA

Mark MacGann is Director General of EICTA, the European Industry Association that is the voice of the Information and Communications Technology and Consumer Electronics industries in Europe.

Mark joined EICTA from Brunswick Group, where he was an Associate Partner, charged specifically within the TMT (telecom, media and technology) practice in Europe. Based in the Paris office of this leading global communications advisory firm, he advised on cross-border mergers and acquisitions in Europe and the USA.

Before joining Brunswick in 2001, he spent seven years at Alcatel, where he held senior European and international positions. He was Director of European Affairs during the deregulation of telecommunications in Europe, before being appointed Vice President, Strategic Affairs for the company's satellite division, with responsibility for global government and institutional relations. He also led the successful effort to win global spectrum rights and market access for SkyBridge, the global satellite-based broadband communications system.

Prior to that, he was a consultant with Euro RSCG in Paris, working on the communications and media aspects of privatisation in France. He began his career as an advisor to the President of the Rhône-Alpes region in France, charged with attracting European structural funding and private investment to the region.

Mark holds Masters and Bachelors degrees in political science and economics from the Institut d'Etudes Politiques, France and Kingston University, England. He is a member of the Management Board of the European Information and Network Agency (ENISA), and was recently appointed a member of the French Government's Advisory Group on the future of the telecoms sector in France and Europe.



Helen Milner, Managing Director, UK online centres

Helen is the Managing Director of the UK online centres - a division of Ufi. She is responsible for ensuring the success and development of the UK online centres network.

Helen has over 20 years experience of working in the e-learning industry starting in 1985 in the private sector with The Times Network Systems, developing online education services for schools.

She has been at Ufi, the organisation behind learndirect and UK online centres, since 1999.

The majority of this time was spent leading the operation of the learndirect learning network and learndirect advice services.

She also led the ippr and University of Sunderland 'university for industry' pilot, following the publication of the ippr report and the Labour victory in May 1997.



Emilie Normann, Chief Consultant, Danish Technological Institute

Emilie Normann has 12 years experience of ICTs, public administration, policy development, and project management. She has been extensively involved in the analysis and development of national and international policies on digital literacy, education and training, eGovernment, and society and technology. Her posts have been with the European Commission, central government, NGOs, media and think tanks. Currently, at the Danish Technological Institute she is responsible for studies, strategies and projects in the area of Information society and innovation. She acts as the European Commission's external contractor on the Cluster on ICT, which runs a series of peer learning activities for European Ministries of Education and she is the project manager for the Commission's Europe wide study on digital literacy policies and initiatives. She is active in the area of innovation and foresight, and is responsible for a large project for the Nordic Innovation Council on innovation and technological convergence in the Nordic countries. Additionally, she is involved in work for the IPTS on social computing and user driven innovation in public services.

Before joining the DTI, Emilie Normann worked as project officer in the European Commission, DG Information Society and Media, and as policy advisor in the UK Cabinet Office. She holds two MSc degrees in political science and media and communications from the University of Copenhagen and the London School of Economics, in addition to a diploma degree in Journalism from the Danish School of Journalism.



Anne-Sophie Parent, Director, AGE - the European Older People's Platform

Anne-Sophie Parent is Director of AGE – the European Older People's Platform, a EU network representing 25 million older people across the EU-27. AGE aims to voice and promote the interests of the 150 million inhabitants aged 50+ in the European Union.

Ms Parent was elected twice President of the Social Platform (March 2003 to March 2007). She sits on various advisory committees set up by the European Commission (Science in Society programme, e-Inclusion programme, European Year of Equal Opportunities for All, European Health Policy Forum). She is also a member of the Steering Committee of the Social Justice Programme of the King Baudouin Foundation (B) and chairs the francophone jury of their Intergenerational Solidarity Programme.

www.age-platform.org



Anabela Pedroso – President of AMA - Agency for Public Services Reform

Anabela Pedroso is President of AMA – Agency for Public Services Modernization since 14th December 2006.

Anabela Pedroso was in the UMIC – Knowledge Society Agency direction since 2005, being responsible for the eGovernment area, leading projects such as the Citizen's Website, the Official Portuguese Business Website, Enterprises Life Cycle, the Public Administration Interoperability Platform, etc. Anabela Pedroso was also responsible for the UMIC –Unity of Mission for Innovation and Knowledge between 2003-2005.

Anabela Pedroso is also member of the coordinate council of UCMA – Unity of Coordination for the Services Modernization, where she leads the Citizen's Card project.

Prior to join the Agency, Anabela Pedroso was Secretary-General in the Ministry of Finances (2001 – 2003), responsible for the ICT area. She held activities as the implementation of an internal information integrated system, which was honoured with a best practices in public administration award in 2003.

Between 1999 and 2001, Pedroso was with the direction of the Management Institute of the Citizen's Shops. Before she led the team that developed the Citizen's Shops in Portugal (1997- 1999), where she held the conception and implementation of the technological model that supports the shops functioning.

Anabela Pedroso had technical functions in the Ministry of Finances, where she started her work in the Portuguese public administration (Informatics Institute - 1977). She was in the team that created the Government Informatics Network. She worked in the introduction of the electronic bureau system in the Ministry of Finances and was a teacher in the REPER – Portuguese Permanent Representation to the European Union.

She collaborates with INA – National Administration Institute, since 1986, where she is responsible for the coordination of several diplomas in the rationalisation and reengineering processes area. She lectures in ISCTE, a public university institute. She is the national member of the European workgroups EPAN, MODINIS, i2010 eGov Subgroup and Porvoo Group (eID).



Dan Pescod, International Campaigns Manager, Royal National Institute of Blind People

Dan Pescod is the European and International Campaigns Manager at the Royal National Institute of Blind People (RNIB) in the UK. Mr Pescod campaigns internationally to gain greater access to information, rights and services for blind and partially sighted people.

Among other areas, he has worked with the UN Convention on the Rights of Persons with Disabilities and on EU legislation relevant to blind and partially sighted people such as the recent revision of the Television Without Frontiers Directive, which now

includes a clause on disabled people. Before joining RNIB, Mr Pescod studied languages at Exeter University and then worked as the European Relations Manager for Royal Mail.



Professor Gerard Quinn, National University of Ireland

Gerard Quinn is a professor of law at the National University of Ireland (Galway).

He specialises in international and comparative disability law. His joint research (with Prof Thereia Degener) - 'Study on the Current Use and Future Potential of UN Human Rights Instruments in the Field of Disability' - was published by the Office of the United Nations High Commissioner for Human Rights in 2002.

He led the delegation of Rehabilitation International to the UN Working Group which drafted the initial text of the recently agreed UN Treaty on the Human Rights of Persons with Disabilities.

He is a member of the Irish Human Rights Commission. Acting on behalf of the Irish Commission he is the UN 'Focal Point' for Human Rights Commissions throughout the world on disability and human rights.

He is a former First Vice President of the European Committee of Social Rights (European Social Charter of the Council of Europe). He is a former official at the European Commission and a former Director of Research of the Irish Government's Law Reform Commission. He was a member of the Commission on the Status of Persons with Disabilities (1993-1996).

His current research focuses on the UN disability treaty (book project) and on internet accessibility for persons with disabilities. He co-directs a major legal research project on eAccessibility funded by the Norwegian Research Council.

He is a barrister-at law (King's Inns) and graduate of Harvard Law School. He leads a Disability Law & Policy Research Unit at NUI Galway. His first child has a disability.



Professor Christian Roßnagel, WISE Demographic Network, Jacobs University

Christian Roßnagel is Research Director of the WISE Demographic Network.

In this network, the Jacobs Centre on Lifelong Learning and major companies (e.g., Deutsche Bank, DaimlerChrysler, Volkswagen) collaborate to provide actionable solutions to the problems raised for companies by the demographic change.

Mr Roßnagel's research adopts a life-span perspective on organisational behaviour and is concerned with maintaining the fit between ageing workers' changing needs and abilities and job requirements.

One research focus is the development of older workers' (informal) learning competency and ways of enhancing this competency by age-differentiated training.

Mr Roßnagel has had five years' industry experience; most recently he has been General Manager of an international market research agency's German branch.



Susan Scott-Parker, Employers' Forum on Disability

Susan Scott Parker is the founder and Chief Executive of the Employers' Forum on Disability. The Forum is the world's first employers' organisation established by business to mobilise business behind the economic and social inclusion of disabled people.

Launched in 1991 by HRH Prince of Wales, the Forum now has some 400 members who employ nearly a quarter of the UK workforce. The Forum's 120 global members employ circa 8 million people worldwide.

The Forum makes it easier for employers to become 'disability confident' and to employ disabled people, to welcome disabled customers and to develop partnerships with disabled people as valued stakeholders.

Susan has an international reputation as a persuasive and authoritative advocate for the advantages for global business linked to realising the potential of the 15-20% of the world's population who have a disability. In 2005 Susan led the development of the world's first standard to measure an organisation's performance on every aspect of disability as it affects a business. The Employers' Forum Disability Standard involved 80 organisations, including B&Q, Cisco Systems, Merrill Lynch and Royal Mail. TDBank in Canada and Starbucks in California are now piloting the Standard for tailoring for companies head-quartered in North America.

Susan works with her members to advise governments and bodies such as the EU, ILO and UN on how they can help more disabled people into work.

The Forum under Scott Parker's leadership has become the world's leading publishing house on disability as it affects business and has sold more than four million educational publications to employers.

Publications include the development of 'Disability Confident', the definitive e-learning package, publication with Simon Zadek on the business case (Realising Potential), as well as toolkits helping global companies in their global disability confidence approach: e.g. Barclays Capital tailored the Disability Communication Guide for the USA, Cisco are piloting Disability Confidence in the UK for global roll-out.



Steven Sintini, eAccessibility expert, National Centre for Informatics in Public Administration (CNIPA)

Steven Sintini is a 29 years old computer engineer and Web specialist.

He began exploring the benefits deriving from the interaction between ICT and disability during his apprenticeship at ASPHI, an Italian NGO dealing with eInclusion since the early 80's.

In 2003, European Year of People with Disabilities, he moved to the "eAccessibility Bureau" of the National Centre for Informatics in Public Administration (CNIPA) where he followed the birth of the Italian body of laws against discrimination in the

Information Society.

He is now actively contributing to the enforcement of those policies by providing technical and legal assistance to public agencies, giving lectures on the culture of eAccessibility and serving on national and international elclusion Committees and Working Groups.



Luc Soete, Professor MERIT / UNU Maastricht

Dr. Luc Soete (License Econ. MA Dev.Econ. (Ghent), Phd Econ.(Sussex) is Professor of International Economics (on leave) at the Faculty of Economics, University of Maastricht, The Netherlands, and Director of the Maastricht Economic Research Institute on Innovation and Technology (MERIT), which he established in 1988. Since January 2005 he is appointed as director of UNU-Intech, the Maastricht based institute on New Technologies of the United Nations University. On January 1, 2005 Luc Soete became joint Director of the United Nations University Institute for New Technologies and the Maastricht Economic Research Institute on Innovation and Technology, now called UNU-MERIT.

UNU-MERIT is now a world class research institute with some 40 full time researchers. The research activities of UNU-MERIT are structured along five broad themes related to a central research programme: the need to acquire better insights into the mechanisms governing the development and diffusion of technological change. Before coming to Maastricht in 1986, he worked at the Department of Economics of UFSIA, University of Antwerp, the Institute of Development Studies and the Science Policy Research Unit (SPRU) at the University of Sussex, England. He was Visiting Associate Professor at the Department of Economics, Stanford University. He is a member of the Scientific Committees of CEPREMAP in Paris, DIW in Berlin, the CIAR Economic Growth Programme in Toronto, the Pole Universitaire Européen in Grenoble and the newly founded research group on economics and new information and Communication technologies, Zentrum für Europäische Wirtschaftsforschung, Mannheim. Since January 2004, he is also member of the Dutch Adviesraad voor Wetenschap en Technologie (AWT) (Dutch Advisory Council on Science and Technology). Dr. Soete's research interests include both the theoretical and empirical study of technological change on employment and international trade and investment, the economics of technological change and innovation, and the related policy measurement issues. In 1994-1995 Dr. Soete was co-ordinator for the OECD's Directorate for Science, Technology and Industry, the G-7 project 'Technology, Productivity and Job Creation'. Dr. Soete Chaired the High Level Expert Group on the 'Social and Societal Aspects of the Information Society' for the European Commission. This group was set up in May 1995 to look into the social and societal aspects of the Information Society, and is seen as an integral part of the European Commission's Action Plan on the Information Society.



Veli Sundbäck, Executive Vice President, Corporate Relations and Responsibility, Nokia Corporation

As Executive Vice President, Corporate Relations and Responsibility, Veli Sundbäck heads up Nokia's government and public affairs function, and Nokia initiatives aimed at achieving sustainable development and providing access and technology to emerging markets. Moreover, Veli is dedicated to advancing Nokia's profile as a good corporate citizen and shaping the policies that allow Nokia to function as a successful business and socially responsible company.

Veli joined Nokia in 1996 after a distinguished diplomatic career spanning over 25 years. Prior to accepting his current position at Nokia, Veli held various ministry positions in Helsinki, Brussels and Geneva, including Under-Secretary of State for External Economic Relations at the Ministry for Foreign Affairs, 1990 to 1993, and Secretary of State at the Ministry for Foreign Affairs, 1993 to 1995. He was also chief negotiator for Finland's accession to the European Union.

During his years at Nokia, Veli has been instrumental in Nokia's efforts to ensure open competition and standards. He has served as a member of the Board of EICTA (the European Information and Communication Technology Industry Association), where he was well positioned to observe and influence telecom regulations.

Veli has been a member of the Group Executive Board of Nokia since 1996. He is chairman of the Supervisory Board of Nokia (Deutschland) GmbH, Board Member of Finnair, a Finnish airline company, chairman of the Finland-China Trade Association, member of the Board and its executive committee of the Confederation of Finnish Industries (EK) and member of the Board and its executive committee and vice chairman of Technology Industries of Finland. He is also a Member of the Board of Trustees of WWF Finland.

Veli is decorated with many titles including Commander, 1st Class of the Order of the White Rose of Finland, Commander of the Order of the Lion of Finland, Commander, 1st Class of the Order of the Isabel Catholic, Spain, Grand Cross of the Order of Danneborg, Denmark, Grand Cross of the Order of Orange-Nassau, Netherlands, Grand Cross of the Order of Merit, Republic of Italy, Grand Cross with Star and Sash of the Order of Merit, Germany, Grand Officer of the Order of Infante dom Henrique, Portugal, and Grand Cross of the Order of Phoenix, Greece. Veli has a Licentiate in Law from the University of Helsinki. He is a Senior Lieutenant in the Finnish army. Veli was born on May 29, 1946, in Helsinki, Finland. He is married and has three children. In his spare time, Veli enjoys tennis, golf, fishing, reading and "trying to understand the world better." He is a great admirer of the arts and is a member of the board of the Finnish National Theatre.



Prof. Tapio Varis, University of Tampere Finland and Unesco Chair in global e-learning

Professor of Vocational Education, with particular reference to global learning environments at the University of Tampere, Finland, Research Centre for Vocational Education, and UNESCO Chair in global e-Learning with applications to multiple domains.

Principal research associate of UNESCO-UNEVOC. Acting President of Global University System (GUS). Former Rector of the University for Peace in Costa Rica.

Expert on media and digital literacy to the European Union. Communication and Media Scholar at the University of Helsinki and the University of Art and Design in Helsinki. and the University of Lapland, Finland, Published approximately 200 scientific contributions.

Visiting Professor and Lecturer in many countries in Europe, North and South America, Asia, Africa and Australia.

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Kurt Vogler-Ludwig; Director of Economix Research & Consulting, European Employment Observatory

Director of Economix Research & Consulting, Munich, Germany

Correspondent of the European Employment Observatory of the European Commission

Labour economist, specialist for empirical economic research, and policy consultant for national and international organizations. During the 30 years of research experience, 150 articles, books and reports were written on the subjects of labour economics, long-term growth and economic restructuring, and empirical research methods. The particular focus was on labour market policy, reform of social systems, education and training and skills forecasts. Human capital was identified as the fundamental determinant of growth and social development. An interdisciplinary approach was followed concentrating on the interfaces of economic, social and institutional systems.

In the field of ageing, several studies were undertaken on behalf of the European Commission, and German public institutions. This included theoretical and empirical analysis of labour demand and the forecasting of labour supply.

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The 2007 European Year of Equal Opportunities for All is an initiative leading the way to a bolder strategy seeking to give momentum to the fight against discrimination in the EU. The Year aims to make people in the European Union more aware of their rights to equal treatment and to a life free of discrimination, irrespective of their sex, racial or ethnic origin, religion or belief, disability, age and sexual orientation. At the same time, the activities under Year raise awareness of the benefits of diversity both for European societies and individuals.

To this end, 432 actions and projects are being implemented on the national, regional and local level in all of the 27 EU Member States plus Iceland, Liechtenstein and Norway. Other EU-wide activities include a photo competition for students, a road-show with the Diversity Truck as well as a creative competition featured on the MTV Europe Network.



MORE INFO

www.equality2007.europa.eu





Many people are exposed to risks and danger every day. This may result from the nature of their work or other threats such as physical violence. But in case of emergency, to receive accurate help you not only need to communicate quickly and easily, but also to indicate accurately your location.

Background

Housing Officer Steve has to visit Reggie at home regularly due to his various alcohol related issues and on his latest visit, Reggie became aggressive and threatening. Steve pressed his MobilAlarm which he keeps in his trouser pocket and his colleague arrived shortly afterwards to support him on his visit.

Megan had been with David Evans for 12 years and they have three sons aged seven five and four. There had been a number of instances of domestic violence between the couple. He spent

several months in jail but is now out. Megan has always her MobilAlarm with her which allows her to lead a more normal life with the confidence that she will have access to full and rapid response from the authorities in case of an attack by her ex husband.

In cases such as above, the freedom to perform everyday working or daily activities safely may be restricted or even prevented by concerns over personal safety.

Certain professions run a high risk of needing emergency support in isolated situations – examples are forestry workers, and employees of utilities such as gas and electricity companies. Another increasingly worrying aspect of modern society is the number of women who are at risk of physical violence from ex-partners. In Spain last year, 68 people were killed as a result of assaults, and many thousands more live in a state of fear which prevents them from leading a normal life. Such concerns though can be significantly reduced when there is someone else available to provide or summon help if the need arises.

Approach

Tunstall has developed a mobile social alarm – a small portable device which immediately sends a distress signal with GPS satellite location data to the police, who can intervene as required.

The benefits of Tunstall's safety by satellite technology are multiple. Links to monitoring centre mapping facilities are far more accurate than standard mobile location. The alarm is used reactively – the user doesn't have to predict where he will be at a specific time. The service is truly personal as user's details and location are sent to the monitoring centre once the alarm is raised. It can be configured for silent operation and it is able to force a GPS location update before entering a building or risk situation.

Impact

People in high risk of needing emergency support can now carry on with their daily tasks with certainty that should the need arise, help can be summoned and it will arrive in time.

MORE INFO
www.tunstall.es



People with hearing problems can now test their hearing at home over the Internet and telephone. That can be a first step to hearing rehabilitation which may bring them back to full participation in society.



Background

Our society is strongly and increasingly communication oriented. For people with hearing loss or those working or living in poor acoustic surroundings there are many barriers to overcome if they are to fully participate in society.

Hearing impairment is the world's largest hidden disability. More than 10% of the EU population encounter hearing related communication problems in daily life but only 25% of those people seek help. Hiding a hearing problem may put them in social isolation, reduce their quality of life and, especially for elderly people, their ability to be self-reliant. Young and middle age people, active in a professional life, who experience reduced hearing, may face a decline in their career or even an inability to work. Many people with hearing problems do not seek professional help because of the perceived social stigma, a lack of knowledge about the possibilities, or a limited access to diagnostics and professional help.

Approach

HearCom has developed hearing tests for self screening via the Internet and telephone. These tests will radically improve access to hearing checks and facilitate a wider understanding of hearing problems. They will also provide reassurance when no hearing problems are found. By providing information, the public can gain a greater understanding of hearing impairments, either for themselves or friends and relatives.

HearCom is also developing new methods to assess ambient factors that disturb hearing in daily life. The main factors are background noise and poor room acoustics leading to adverse reverberant conditions in many facilities. HearCom is investigating acoustic and perceptual models that predict the effects of both the environment and hearing impairment on speech intelligibility. Using these data, improved acoustics for buildings can be achieved through better design and procurement guidelines.

Another key area is the development of new technologies to assist people with hearing problems including research into signal-processing methods to reduce the adverse effects of background noise and reverberation. In addition, assistive technologies are being investigated that provide text information to support hearing-based communication.

Impact

HearCom will provide new tools for better hearing and communication. Easy access will be provided to screening tests, which can be a first step towards hearing rehabilitation. In this way, the quality of life of many people can be improved and their ability to work restored.

New signal-processing methods will help people to better understand speech. These technologies will be built into new hearing devices. In addition, procedures to optimally tailor hearing devices to a person's hearing disability are also being developed. Models to predict speech understanding in situations with background noise are being developed and will be included in new standards. This will help architects to design buildings with better acoustic properties.

HearCom has the potential to improve quality of life and increase the socio-economic participation of millions of people that otherwise face isolation due to hearing communication problems.

MORE INFO
www.HearCom.eu



PT GRID 2 is the Portugal Telecom's solution for voice and mobility to people with special communication needs, including those with severe mobility limitations or mental disability. PT TeleAula allows students unable to physically attend school to be part of the classroom - actively and in a real time.

Because Communication is for All

Background

Everybody should be able to communicate. By developing the right tools ICT addresses the inclusion of those with special needs in the Information Society, in order to promote their autonomy and independence. PT GRID 2 puts particular emphasis on augmentative and alternative communication and easy language domains.

Approach

People not able to communicate with their own voice can now use Augmentative Communication Solution. This tool is also tailored for people with Severe Motor Disabilities - it enables them to access computer and the Internet and therefore allows them to control their environment (TV, radio, doors, or any other equipment controlled with infrared).

PT GRID 2 is also a high quality tool to promote effective inclusion at school. To benefit fully from using support technologies its use should start as soon as possible, even before primary school. IT should also be used at all places: at school, at home and at the social institution if that's the case. Training is "a must" in order to guarantee best use, so it should be provided to users, experts and families.

Missing School Doesn't Mean Missing the Classes

Background

PT TeleAula consists of an integrated collaborative environment together with specially designed educational and recreational solutions. It aims to apply communication technologies to improving the educational integration of children who cannot physically go to school.

Approach

The children or youth unable to attend regular classes due to degenerative neural-motor disability or severe illnesses, such as cancer or cystic fibrosis, can learn through TeleAula. It connects home, hospital or other institution where the pupil happens to be with their classroom, enabling them to attend lessons and, in this way, to continue school education.

Impact

These two projects help people with special needs and children unable to attend school to share, communicate and learn.

MORE INFO

www.fundacao.telecom.pt



Mobile communications has profoundly changed the lives of billions of people. While the benefits are self-evident, the other side of the same phenomenon is giving us a new challenge: How do we bridge the gap for those people who for some reason cannot yet connect to other people via mobile channels?



Background

The last remaining barriers to being connected are economic or physical. As mobile telephony has become significantly more affordable in recent years, we have seen a massive proliferation of mobile communications to countries and areas which have not been connected even by wireline telephone before. Many people are making their first ever phone call via mobile phone. It is remarkable to see the impact of mobile telephony in strengthening local economies and empowering more and more people.

As mobile telephony has become the pervasive form of communication, people with limitations or disabilities have often felt excluded from many benefits of technology. Connecting people with physical or sensory limitations is a challenge we embrace.

Approach

Accessibility is at the forefront of our mobile phone and converged device design. We will achieve this goal by subtle inclusion of accessibility and usability elements in our products, solutions, and marketing.

Nokia's approach is to look at how people will communicate in 10 years time from now and already start to prepare solutions to overcome the growing needs for accessible products. This is particularly challenging in the context of ageing and future ageing populations who have grown up with mobile technology and will expect it to serve them at least as well in old age as in their youth.

Impact

We recognize that accessibility is not only about serving special groups with special needs. It is about building a community of people who are all included in mobile communication, and who – regardless of any physical or other limitations – can enjoy the full benefits of modern life.

MORE INFO

<http://www.nokia.com>

<http://www.nokiaaccessibility.com>



People with motor function disabilities are now free to easily use computers thanks to COGAIN's eye control technology. As a result, their quality of life improves as they interact more with their communities and can pursue their personal and professional interests.

Background

More than 100,000 people each year are diagnosed with motor function diseases such as cerebral palsy, muscular dystrophy and multiple sclerosis. As a result, they experience increased exclusion as their ability to pursue their professional, educational and social interests become more limited.

The COGAIN project empowers people with physical impairments to use ICT by using their eye movements to control what happens on a computer. This technology increases

their interaction with family, friends, healthcare providers and others. It opens up a new world of opportunities for them to explore.

Approach

Eye control technology uses infrared lasers and cameras connected to a computer to determine exactly where a person's eyes are focused. It allows the user to control the cursor with eye movements similar to the way a mouse is used.

The person can then operate the computer by using the cursor to select characters from an onscreen keyboard, move objects on the computer screen or browse the Internet. It allows a full range of functionality so that they can use it for everything from email to entertainment. COGAIN hopes to develop new equipment, in cooperation with manufacturers, which provides sufficient resolution at a reasonable cost. As a result, eye tracking technology will become available to more people across Europe.

Impact

Users of the COGAIN eye control technology stress the dramatic change their improved independence has made to their overall quality of life, and that of their family and friends. For example, Sarah (pictured) is a young adult with high spinal lesion that limits control of her body below her neck and requires a ventilator to breathe. She is very enthusiastic about COGAIN's eye control technology because it is much easier to use than the traditional mouth-stick control device developed in the past. She says she needs the added accuracy of COGAIN to design web pages.

Another COGAIN client stresses how he appreciates the way it helps him connect with his family. For example, he sends frequent emails to stay in constant contact with his children who do not live nearby. And he and his wife enjoy playing computer games together so they can escape from the daily worries of life for a moment.

COGAIN seeks to make such assistive technologies more accessible and affordable so more disabled Europeans can benefit from ICT. As a result, they will be able to explore new job, educational and social opportunities. The barriers that previously limited their participation and contribution to society and the economy will be eliminated or minimised.

MORE INFO

www.cogain.org



Why is it that the core functional use of a mobile device - speaking to someone - often gives us the most trouble? In a noisy environment anybody can find themselves hearing impaired. You can try to block the noise out, but can your handset overcome the disruptive environment?



Background

Using the new Motorola RAZR2 V8 and V9 mobile devices equipped with CrystalTalk technology, you can avoid most of these problems and achieve crystal clear communication.

Approach

Motorola will showcase samples of its latest line of handsets and the distinguished features for user with various disabilities focusing on CrystalTalk technology and TalkingPhone.

It's difficult to deliver loudness and maintain voice/speech quality simultaneously, but CrystalTalk does exactly that. It filters out the caller's voice from background noise and then amplifies it, while also being able to determine background noise on the other side and increase or decrease volume accordingly.

All these enhancements improve the clarity and intelligibility of speech while you are in a noisy environment – this resembles sometimes as being affected by a hearing impairment.

CrystalTalk is a bundling of: microphone noise reduction, noise adaptive speaker enhancements, and a full duplex speaker phone. It incorporates a number of voice enhancement technologies for the device, wired headset and speakerphone. It works on any handset network or platform you're on.

CrystalTalk is able to automatically adjust the audio quality to provide the optimal conversational experience.

For visually impaired people Motorola has developed the TalkingPhone feature which reads out menus and messages to you. User can navigate through the menu, listen to text messages and email without needing to watch the display.

Impact

Latest technology combined with well thought out accessibility features in Motorola phones mean freedom to communicate when you want, how you want, whatever needs you may have.

MORE INFO

<http://direct.motorola.com/ens/accessibility/default.html>



People with visual impairments can now also enjoy web content that has been enriched with electronic documents, enabled by PDF, as well as with non-text content, including video, supported by Flash.

Background

Providing robust, engaging, dependable electronic information that is viewable and printable across many computing platforms and mobile devices around the globe is essential to the delivery of powerful and consistent user experiences. The PDF and Flash formats enable those who create content to distribute that content with the confidence of knowing the message will be received or the experience will be shared just as the author intended.

Those who receive the information do not have to tailor their electronic platform for the convenience of the publisher. Delivering consistent and reliable electronic information across platforms with anyone around the world is the foundation of Flash and PDF. Through their support of the standards upon which the users of assistive technology rely, every effort is made to ensure Flash and PDF are accessible to all.

Approach

Adobe takes the needs of all users into consideration during product development. Adobe also participates actively on several standards committees that address accessibility, including the W3C's Web Content Accessibility Guidelines and Authoring Tool Accessibility Guidelines working groups and AIIM's PDF/Universal Accessibility work group. Through standards support and work to ensure that user needs can be met, Adobe delivers products that include accessibility support and continually works to improve this support.

Impact

Government, public, and charity organizations need simple ways to deliver documents, gather information, and provide resources and services to users of all abilities. Providing an accessible method to accomplish these needs is critical. Adobe tools are used at all points of the process.

Manage your own services: Users regularly encounter PDF documents containing needed information and forms which can be submitted online or offline. Adobe Acrobat's PDF and LiveCycle's PDF and HTML forms allow developers to offer forms that allow all users to manage their services and gather information independently.

Interact with sophisticated web applications: Some users struggle with the recent move

on the web toward more complicated user interfaces found in many web-based applications. Adobe recognizes the challenges and has products such as Adobe Flex that allow authors to create powerful applications with accessibility in mind.

Access video. Increasingly, information is provided for users in non-text formats, including video. Adobe Flash Player provides a standards-based method to deliver subtitles for users who are deaf or hard of hearing, a straightforward process to include audio description for users who are blind or visually-impaired, and a user interface that allows all users to interact with and control the video playback.

MORE INFO

<http://www.adobe.com/accessibility>



Consumer products can now help people with hearing or visual impairment, to access the latest technologies.

Background

How can those with special needs benefit from the latest technological developments? How can technology help them in their everyday life?

Panasonic is developing safe and user-friendly consumer products, which include a variety of products for handicapped people and for the aging society. Among those is a DECT (Digital Enhanced Cordless Telecommunications) telephone, with bone conduction technology that allows people with hearing trouble to hear more clearly. And Viera flat panel TV sets for people having visual difficulty to take advantage of the services that digital TV brings. Through working together with support groups Panasonic provides products that really help.



Approach

The technology used in the Panasonic Bone Conduction DECT phones converts amplified sound into mechanical vibrations that are transmitted to the auditory nerve. The sound is loud, clear and easy to perceive. The telephone handset design is also simple and effective - a big button keypad with backlight, along with an easy-to-grip design. This improves accessibility and usability.

The remote control design of latest Panasonic Viera flat panel TV models has large buttons size, text size and text contrast to help people with visual difficulties. More attention is given to the guidelines so that operating instructions are easier to read and understand. Additionally, all UK Viera flat panel TV models are equipped with an audio descriptor (additional, audio description of the action on the screen) which enables and enriches the watching experience of sight impaired people.

Impact

Less trouble hearing, easier calling: the advanced bone conduction technology makes sound loud, clear and easy to decipher. So conversations go much more smoothly, no matter how noisy the surroundings are; useful for those needing that extra help in hearing, useful for everyone.

Less trouble understanding, easier watching: the last Panasonic Viera TV design features assist people with visual impairment. There is no need to purchase any additional adaptor or assistive product. They can simply purchase any mainstream integrated Digital Panasonic Viera TV product and benefit from its supporting features.

MORE INFO

<http://panasonic.net/>

<http://panasonic.co.jp/euhouse/en/index.html>



Children with severe physical impairments will have now the possibility to freely explore their environment through this novel vehicle for augmentative mobility. The possibility to interact with the world around will be significantly increased, contributing to their inclusion in the society they belong to.

Background

Play is the way how all children learn about themselves, the others around and their environment. Children without disabilities develop harmoniously because they are able to explore around independently, mostly through activities of play. Movement and mobility are important aspect of play as they allow children to explore their significant contexts independently, contributing to their overall development. Thus, activities of independent mobility are crucial for the development of all children including those with disabilities.

Many children with severe motor impairments like cerebral palsy, experience exclusion as their ability to move around independently can be severely restricted. The “classical” solution of providing those children with powered wheelchairs does not always signify that they will reach total independence or that they will be able to be engaged in the same activities as their non-disabled peers. Thus, new solutions are needed.

Approach

The PALMIBER project was developed under a conceptual model of how different human activities (e.g. mobility, communication, manipulation, etc.) taking place in different contexts are dynamically correlated to each other and with those contexts, and how novel equipments could be developed in order to allow those activities to take place in all contexts, independently of the functional limitations of the persons performing the activities.

The outcome of the project is a vehicle for independent mobility that can be fully controlled by children with severe disabilities, independently of their motor, sensory or cognitive impairments. An array of ultrasonic sensors embedded in the car provides a continuous feedback about the presence of obstacles in the vicinity of the vehicle, warning the user about those obstacles and allowing him/her to take control of the direction of the movement of the vehicle. The vehicle can be controlled by any interface available in the market, thus extending widely the possibility of autonomous control by severely disabled children that are often depending on those interfaces to control their assistive devices.

Several levels of autonomy (of the vehicle and of the user) are available and can be pre-programmed by a technician, allowing the use of this technology by a significant number of children with severe motor, sensory or cognitive disabilities.

Impact

The PALMIBER project offers the possibility to severely disabled children to be engaged in independent mobility activities, not by the use of a “classical” mobility equipments such as a wheelchair - often associated with negative concepts of disability - but through the use of a novel device that makes these children more willing to move independently, contributing to their perceptual, conceptual, and intellectual abilities.

The project will also have a positive impact in other related areas, as through movement and mobility with this car, children will also improve important aspects of communication and interaction with their significant peers and adults in their environments.

A series of pre-industrialized vehicles will be produced to be tested in several pediatric rehabilitation centers of Portugal, Spain and countries in South America that contributed to the outcomes of the project. A larger production of the finished product will follow shortly, making this novel equipment available in the rest of the European countries.

MORE INFO

www.anditec.pt



The visually impaired can now enjoy TV programmes thanks to Audio Description, a narrative soundtrack which explains what happens on the TV screen. Sony includes this technology in all BRAVIA televisions as a standard.



Background

While the majority of us have embraced and benefited from the increase in services, channels and programmes today's digital broadcasters provide, many of the visually impaired are unable to take advantage of these benefits – and yet the technology exists for them to enjoy TV programming as much as the rest of us.

With the opportunities presented by digital broadcast channels today, Sony believes that the ability to enjoy a great televisual experience should not be the preserve of those that can see, but should also be accessible to blind and partially sighted people.

Approach

Audio Description (AD) is an additional narrative soundtrack for blind or partially sighted people. During gaps in programme dialogue, an additional voice explains visual plot points, enabling visually impaired people to follow the storyline more fully.

Audio description is available on a variety of television programmes throughout Europe but, until now, has only been accessible through the purchase of a separate set-top box or satellite receiver. From March 2007 all Sony BRAVIA televisions include Integrated Digital Television (IDTV) as standard, and provide access to AD without the need for an additional decoder.

Most television manufacturers now have products that offer IDTV, a built-in digital tuner that does away with need for a separate set-top box for converting digital channels. However, few - if any - have the ability to offer AD access. Sony engineers and designers constantly assess and refine every aspect of BRAVIA TVs to ensure that they are as good as they can possibly be. One result of this scrutiny is a new, more powerful audiovisual processor, capable of decoding multiple audio channels and thereby providing access to AD in addition to other aesthetic benefits.

Impact

As a result there is no longer the need for visually impaired people to get a separate set-top box for converting digital channels. Audio Description is built in to all BRAVIA televisions.

However, there are still a number of challenges facing AD before the 30 million blind or visually impaired 'viewers' in Europe can claim to enjoy the same kind of service that subtitles provide for the hard of hearing:

1. lack of legislation requiring the provision of AD
2. low awareness of AD

In order for it to become truly valuable for blind and partially sighted people, European broadcasters need to be legally obliged to offer it as a service.

Sony is now also undertaking a Europe-wide PR campaign to raise awareness of the issues amongst consumers, media, legislators and manufacturers, working with organizations for the visually impaired throughout Europe, such as the Royal National Institute of the Blind (RNIB).

MORE INFO

www.sony-europe.com



Microsoft and HP are committed to creating a more forward looking accessible technology ecosystem that is inclusive of people with disabilities, both young and ageing technology users, and anyone who desires to adjust their technology experience to meet their individual needs.

Approach

Engaging older citizens

Microsoft and HP are currently pilot testing affordable technology and hardware packages tailored to the needs and interests of seniors. These packages include either a **HP desktop or notebook** computer running **Windows Vista** and Microsoft productivity software. The **Senior PC** packages come with a colour printer and software applications designed to help seniors manage their prescriptions, sharpen memory, and

stimulate other cognitive functions. Some of the packages also include ergonomic features and assistive technology—such as large font keyboards and track balls.

Improving business IT skills

In May 2007 HP launched its new '**Graduate Entrepreneurship Training through IT**' (**GET-IT**) programme where HP and its partner Micro-enterprise Acceleration Institute (MEA-I) collaborate with local non-governmental organisations (NGOs) in 18 countries in Europe, Middle East and Africa (EMEA). 35 GET-IT training centres have been opened across the region. The programme provides IT equipment for these organisations and professional guidance courses for trainers. It enables them to offer interactive courses based on a curriculum specifically designed to improve business IT skills of young unemployed school leavers and graduates.

Enabling users with a range of impairments and needs

New accessibility offerings in **Windows Vista** include the **Ease of Access Center** which provides a centralized location for quick access to adjust accessibility settings and manage assistive technology. Additional features include state-of-the-art speech recognition, newly improved Narrator text-to-speech tool, and enhanced magnification capabilities.

Promoting Web Accessibility

Microsoft Office SharePoint Server 2007 technologies provide a foundation for building rich website applications, and the new, open-source **Accessibility Kit for SharePoint** ("AKS") enhances this experience for those using access technologies. **HiSoftware's** compliance solutions for SharePoint enable customers to address Web Governance standards through a collaborative workflow solution between development, content providers, compliance officers and executive management.

Reversing the brain drain

The joint UNESCO-HP "Piloting Solutions for Alleviating Brain Drain in South East Europe" project aims to improve scientific research and contribute to reducing brain drain in South East Europe by providing grid computing technology to universities. Another HP project aims to help reduce brain drain in Africa by providing grid computing technology to universities in Algeria, Ghana, Nigeria, Senegal and Zimbabwe.

Expanding technology opportunities for underserved

Microsoft's **Unlimited Potential - Community Technology Skills Program** partners with NGOs and provides cash grants, software donations, technology solutions and curriculum to enhance the IT skills of the most underserved. The **Digital Literacy Curriculum** helps teach and assess basic computer skills and it has supported 1.7 Mil people since Feb 2006.

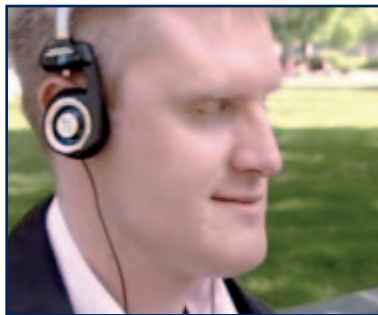
HP's **Microenterprise Acceleration Program (MAP)** in partnership with the NGO MEA-I provides agencies involved in regional development a turn-key solution for micro-enterprises access to technology and training.

MORE INFO

<http://www.microsoft.com/enable/>
www.hp.com/accessibility
www.graduate-training-through-IT.net



Inclusive technology is enabling the blind and visually impaired as well as people with other disabilities to, thanks to an increased access to the information society, achieve a better quality of life, focused on an increased individual autonomy and an easier participation in social and cultural life.



Background

New technologies have the potential to open up a whole world of possibilities for the disabled who regularly are confronted to inclusion and integration obstacles in the daily life. Continuous research into the accessibility of technological elements, computer programmes and technical devices and the growing awareness of the public authorities, manufacturers and society in general are transforming the initial barriers into tools for integration.

A number of technological developments have been developed in the area of ICT by the Spanish National Organisation of the Blind (**ONCE**) to allow people with specific needs increase their physical mobility and access to areas such as leisure, education, etc. These developments are the inclusive game **ONAE**, the geographical accessibility tool **SIGMA** and a range of mouse emulators.

Approach

Until now, games available on the market for blind users have been designed specifically for them. They do not include any graphic parts and the ones that do, may not be attractive for another public. "**ONAE: Zoe's adventure**", developed by ONCE's Centre for Research, Development and Typhlotechnical Applications (**CIDAT**), is the first inclusive videogame with an attractive graphic quality for the sighted user. It uses technology which entitles people with visual disabilities to travel in and explore 3D virtual environments. It therefore offers the player a perfect orientation within the videogame context, giving a greater sense of reality. For the first time it is an inclusive game which can be played together by blind and sighted people.

Limited mobility due to physical barriers is another important obstacle that people with disabilities encounter in their daily lives. "**Sigma**", developed by the Fundosa Group (managerial division of the **Foundation ONCE**) is a geographic information system which allows the user to find, by using Internet, the accessibility of a specific location. With this system, people with disabilities can identify, using the digital street directory, the most accessible itineraries they can use to reach a given destination. Sigma provides as well information on the architectural and other potential obstacles they may find during their journey.

The **Fundosa Group** has as well developed a wider range of "**mouse emulators**" based on buttons, joystick, blow-suck or friction devices which aim at facilitating the use of computers by people with functional limitations.

Impact

Access to leisure and participation in social and cultural life through an inclusive information society is key to ensure full integration of people with disabilities. Technological developments such as **ONAE**, **SIGMA** and the **mouse emulators** are contributing to opening doors for people with specific needs through the use of ICT, in the areas of leisure, communication, social integration and mobility.

MORE INFO

<http://www.once.es>

<http://cidat.once.es>

<http://www.accesigma.com>



Europe is undergoing big changes in both demography and technology. The population is ageing where as new technologies are introduced at a fast pace into our everyday lives. These technologies have a great potential to facilitate life for everyone, but there is still a significant gap between those who use them and those who do not.

Background

The number of people in Europe 65 to 80 years of age will rise by nearly 40% between 2010 and 2030. Many older persons feel excluded from the new technologies for different reasons. Sometimes the products are not adapted to them, they find the products difficult to understand and use, which may be reinforced by problems such as reduced vision or memory.

Approach

MonAMI will show examples of technical devices that allow older persons and persons with disabilities to continue living independently at home, feeling as safe and secure as anybody else.

Amongst the exhibits are a locating device, Ippi the message viewer showing SMS, MMS and video clips on an ordinary TV, a medicine reminder or a cell phone with GPS tracking and care alarm.

User-friendly interfaces, good design, open standards, spreading of knowledge, awareness-raising and economical viability are all part of the challenge. The technological, social and economical requirements are complex and have to be approached in parallel.

The MonAMI project will demonstrate how to deliver the technology and services in mainstream systems and channels, for general use in the whole of Europe.

The collaboration of fourteen partners in Sweden, France, Spain, Great Britain, Slovakia, Germany and Belgium will deliver tests of new services with the users in six of the countries, followed by large-scale validation trials in users' homes in four countries.

Impact

In the future, older persons and persons with disabilities will have increased possibilities to be active social citizens, living an independent life in security and comfort. Small technological devices in mainstream systems accessible for everyone will facilitate and enhance daily life. The demand for societal interventions and institutional care will be reduced.

MonAMI will benefit all Europeans and especially older persons and persons with disabilities.

MORE INFO

www.monami.info



More independent lives for all? A digital accessible platform “designed for all” can help us achieve this, as it allows elderly, disabled and info-marginalised people to have easy contact with their relatives, administrations and carers.



Background

Ageing of the population is resulting in a larger demand for long-term care services, therefore integration and coordination of conventional care services is a must. A greater decentralization is taking place in almost all countries, which asks for a new coordination system between stakeholders at national, regional and local level. At the same time information and communication technologies (ICT) create new streams of inclusive e-Services, transforming many of these services into care e-Services. Seniority aims to deploy a digital platform to structure the provision of care services following the principles of Availability, Affordability and Accessibility.

Approach

A digital accessible platform “designed for all” - to enjoy an autonomous life and to close the digital divide. SENIORITY is primarily targeted at the integration of e-Services applied to diverse care needs in a wide range of service modalities for people (home care, tele-assistance, mobile telecom services, tele-alarms, nursing services, doctor appointments, pharmacy services etc.). A new model that improves the current situation of the provision of care services and caters to the demands of a growing elderly population.

SENIORITY supports different operators providing personalised services, allowing for different business models based on private-public partnerships. It takes advantage of mobile technology, internet, GPS and the TV through the Prevention and Early Action side of the social care sector, in order to avoid undesirable situations, allowing the digital inclusion.

Impact

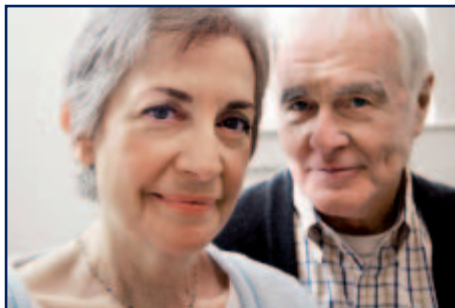
SENIORITY has a direct impact on improving the quality of life of people in risk of exclusion due to lack of access to information, inadequate service provision or access to an efficient response of their individual needs.

People wishing to contact their relatives, friends and caregivers through their remote control at home are able to do it via the SENIORITY digital TV services.

It empowers modern administration to better participate in the 'care-cycle' giving the citizens access to more personalized services. Just a finger-touch away - PC screen, PDA or other device is enough to create a communication bridge between the administration and its elders. People at risk of digital and physical exclusion can enjoy an active life within their community.

MORE INFO

<http://www.eu-seniority.com/>



The world is facing the convergence of three forces that will transform the global health landscape in the next few years: disruptive demographics that are straining health-care systems to the breaking point; disruptive economics that will render today's model of medical care unsustainable; and emerging disruptive technologies, which will enable an entirely new paradigm of care.

Background

Janet (79) lives alone at home and treasures her independence. Generally in good health, she feels dizzy occasionally, needs to monitor her blood pressure, and sometimes loses her train of thought. Janet's daughter, Mary, lives in another city and worries that she can't care for her mother every day. Janet's primary care provider, Dr. Paul, strongly supports her decision to live at home, but likes to keep track of her health. A new system of sensors for unobtrusively monitoring a person's health is installed in Janet's home. Software helps to identify any worrying trends or events and alerts Mary and Dr. Paul if necessary. Additionally, the system communicates up-to-date health information regularly to Mary and Dr. Paul, as well as readings of several 'markers' which are analysed to assess and predict health. This technology provides information on Janet's condition previously unavailable to her physician and carers remotely.

Approach

This scenario is becoming a reality. By helping individuals, families, and the extended healthcare community connect to the right information at the right time, we empower them to make better, more informed decisions—and accelerate the ability to radically improve health and healthcare.

Researchers at Intel Ireland, in collaboration with three Irish universities and Intel's US-based research teams, are investigating new ways to use technology to unobtrusively support seniors living independently at home. The virtual research institute, the 'Technology Research for Independent Living (TRIL) Centre', bases its technology development through social scientific and ethnographic research.

Impact

The technologies that Intel is exploring will support a new model of healthcare that is personal and distributed. Healthcare data will be accessible to formal healthcare providers and informal caregivers wherever they are located. Most importantly, elders and those battling chronic conditions will maintain their independence and manage their health in their own homes.

Several pilots of prototype technologies are under way. Many focus on proactive health technologies. The impact is wide ranging maintaining social health, promoting medication compliance and preventing falls.

Intel is committed to evolving the current model of care by connecting patients, their families and healthcare providers to the right information at the right time. This would allow for more informed decision-making, while empowering patients to take a more active role in their own care from the comfort and convenience of their home. To this end, Intel is developing products to better care for ageing and chronically ill individuals, the first of which is focused on managing chronic diseases.

MORE INFO

<http://www.intel.com/>



Background

Millions of people live with varying degrees of hearing difficulties. Extensive use of Information and Communication Technology can create barriers which are hard for these people to overcome. Try to imagine a world where almost everyone has a telephone but you don't. Try to fix a doctors appointment, call in a plumber to fix a leak, resolve an incorrect payment on your credit card...

Approach

Tess aims to establish relay services for people with hearing problems in Germany, to enable them communicate more easily. Tess is a joint project of the German Society for the Hearing-Impaired – Self-Help and related Associations, and of Deutschen Telekom AG.



TeSign, the video relay service

Hearing-impaired people can contact the TeSign (video-based) relay service, using either a PC with a webcam (connected to the internet), or a video phone (using the phone line). Expressing themselves in German sign language, they will thus be connected to a sign-language interpreter of TeSign. The sign-language interpreter will establish a connection to the desired recipient (with, or without hearing problems). The interpreter then "translates" the message from German sign-language into spoken language, and vice versa. TeSign also translates between people using gestures accompanying spoken language and those using spoken language only, and vice versa.

TeScript, the text-based relay service

Customers with severe hearing impairments or deaf people can contact the text-based TeScript service in writing. They can call a written-language interpreter, using either a PC connected to the internet, or a telephone with a QWERTY keyboard, using the phone line. They communicate their connection request in writing. The written-language interpreter then establishes a connection to the requested participant (with or without hearing problems), and then "translates" the message from written language into spoken language, and vice versa.

TeSign requires a PC with Windows operating system, a webcam, a DSL-based internet access and MMX software. In addition, TeSign is also accessible via a video telephone. With the same PC equipment (without webcam), customers can, of course, also reach TeScript. Moreover, TeScript can also be accessed via a browser and Java support, irrespective of the operating system used.

Finally, TeScript can also be reached using a telephone with QWERTY keyboard functionality, using the European Deaf Telephone standard.

Impact

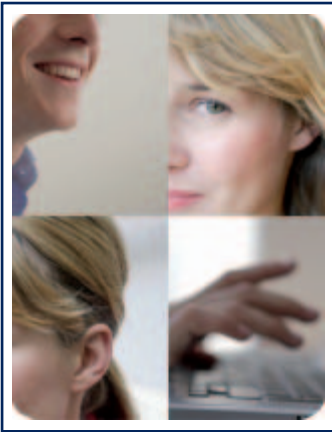
Both services require prior registration. Once registered, customers are also easily reachable for people without hearing problems via Tess. The services are reachable 7 days a week, between 8 am and 11 pm. Over 40 specially-trained and qualified interpreters are ready to assist customers with Tess relay services, guaranteeing good reachability and fast connections.

Expected developments:

- By end 2007, Tess will be reachable via video calls from mobile phones, using the UMTS network.
- By end 2007/start 2008, both relay services, TeSign and TeScript, will be accessible via public internet terminals of Deutsche Telekom, using text and video communication.

MORE INFO

www.tess-relay-dienste.de (in German language only, for the time being)



An estimated 8 million disabled people live in France; a further 11 million people aged over 60 suffering from age-related disabilities. France Télécom Group and Orange, its commercial brand, wish to answer to their needs of access to communication and to the latest technologies.

Approach

France Télécom Group is developing a design for all strategy, under the supervision of the Group accessibility division (DAG), by integrating accessibility from the product's conception, and adapting their channels of distribution. This strategy is based on feedback from elderly and disabled customers as well as innovations achieved by orange laboratories and partnerships with associations.

Total conversation:

The Total Conversation concept aims to make telecom services and devices accessible to most people, giving them a choice between several call modalities (speech-text, speech-video-text etc.).

Orange is working on this subject at a European level, focusing on the interoperability of accessible conversational services. This work centred around: real-time text, good video quality for signing and lip-reading, interoperability between networks, providers or terminals, interoperability between systems in scope and legacy Text telephony, accessibility of CRM and accessible Human Computer Interfaces. Developments with eConf software have allowed the prototyping of several Total Conversation services on PC and Smartphone. These services are currently being tested in France, so the technologies will facilitate people with speech or hearing impairments in communicating naturally, whenever, and with whomever they please.

Mapa:

Mapa aims to address the loss autonomy faced by many elderly people in a non-intrusive manner. Mapa helps to determine the evolution of a vulnerable or elderly person's level of dependency by analysing the measurement of the electric activity in their daily lives. By correlating electric signatures of domestic equipment, the service determines the level of activity of the person and can detect and signal any anomalies. The appropriate caregiver can then be alerted.

The project can greatly improve the quality of life of elderly people, especially by enabling them to stay at home, where they usually feel most comfortable. Such services can also be of huge benefit to relatives, carers and key players involved in providing assistance.

Ocawa: Operational control and Analysis for Web Accessibility:

France Telecom Group launched a major project aiming to ensure the accessibility of its web sites in 2005. The aim was to achieve WAI AA accessibility (Web Accessibility Initiative criteria) on a long term basis enabling their sites to be globally accessible for all. This involved the creation of an automatic assessment system intended for Webmasters to determine the degree of accessibility of web sites for individuals suffering from visual deficiencies. OCAWA integrates an expert system checking compliance with different types of rules such as WAI (Web Accessibility Consortium), DGME French references (RGAA), and usability rules defined by France Telecom, in the analysis of site accessibility.

MORE INFO

www.francetelecom.com



Designers and engineers need to experience what it feels like to be old using an ageing suit to help them develop easy-to-use and accessible products and services that take into account the needs and limitations of the growing number of older consumers.



Background

Do you know what it feels like to be old? As people age, their physical capacities diminish and they start to experience limitations in terms of vision, hearing, mobility and coordination.

Older people represent a growing share of the market for new technologies. Demographic forecasts show that older people will account for 33% of the European population by 2050. Well designed ICT products can help them to remain at work for longer, have access to today's goods and services, remain actively involved in society and maintain their independence for longer. Unfortunately, new ICT products and services are seldom designed with such needs in mind.

Approach

AGE is committed to working with ICT industries to find solutions to mainstream the needs of older users in new technologies. Goods, technological applications and services should be user-friendly, accessible, affordable and appropriate for all. AGE therefore calls for a Design for All - approach in the development of ICT products and services.

Some companies have developed ageing suits, such as the "seniosimulateur" developed by **Seniosphère**, to raise the awareness of designers and help them to design products that are accessible to all. Wearing an age suit as the "seniosimulateur" restricts movement of the body, reduces eyesight, diminishes the sense of touch, and decreases hearing, akin to the ageing process. This experience should help designers and engineers to better understand the particular needs of older people and their limitations, and assist them in developing new products and services.

In the nineties, the need to better understand the special requirements of older customers, also led **Ford** to develop its "Third Age Suit" used in ergonomics research worldwide. The suit restricts the physical agility of Ford engineers in order to simulate driving capabilities of individuals often 30 years or more older than themselves. It is not Ford's intention to develop a vehicle for elderly people but to ensure through constructive measures that older people can enjoy driving over a longer period of their lifetime.

Impact

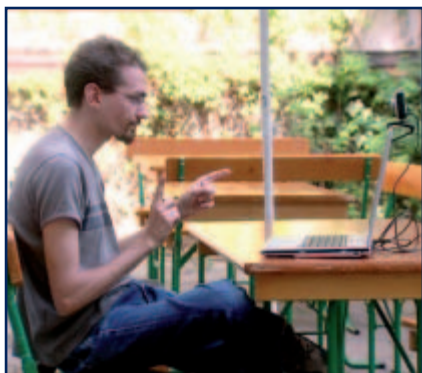
User-friendly, accessible and affordable technologies that take into account the needs of older consumers can increase their independent living and active participation in society. They assist older people in carrying out their daily activities as well as monitoring their health, creating social networks, better ensuring their safety and facilitating their participation in work or volunteer activities. In addition, developing products and applications that are designed for all should help the European ICT industry to become more competitive at a global level.

MORE INFO

www.age-platform.org

<http://www.seniosphere.com/>

www.ford.co.uk



Experience first hand how challenging many everyday objects are to use if you have visual and hearing impairments or dexterity problems.

Background

To be fully included in today's world, through access to education, jobs and a fulfilling social life, access to ICT services and products is vital. There are many examples of the barriers faced by persons with visual and hearing impairments or with dexterity problems in emergency services, television, websites, and many technology-based products, such as remote controls and mobile phones. Access remains inadequate in terms of quality, interoperability, cost and choice.

The European Disability Forum (EDF) is a European non-governmental organization promoting the rights of the approximately 50 million disabled persons in the European Union by working towards accessible, user needs-based and affordable telecommunications solutions. EDF is actively supported by its member organizations, in particular the European Union of the Deaf (EUD), the Royal National Institute for the Blind (RNIB) and the Royal National Institute for Deaf People (RNID).

Approach

Visitors to the stand can place themselves in the same conditions as blind or deaf people and experience the reality of digital through the following demonstrations:

- Access to digital television: Visitors will be invited to sit wearing "simspecs" (glasses that simulate various sight impairments) in front of an ITV clip with audio description. They will then be asked to use an EPG (electronic programme guide) remote control.
- Web accessibility: participants will be put on "simspecs" and use a mouse, to demonstrate problems with design of websites
- Access to ICT manuals: how ICT manuals can be made accessible.
- Sign language relay services: demonstration of how video communication technology can be used to allow sign language users to talk to hearing people via a remote interpreter;
- Real-time text as an alternative to voice: character-by-character, real-time text, as an alternative to voice telephony, including the ability to make calls to voice phones via a relay.
- Making multimedia content accessible to deaf and hard of hearing people.

Impact

By actively incorporating inclusive design at the earliest stage of development, products and services benefit not only persons with disabilities and elderly people, but can also be better to use for the mainstream population.

MORE INFO:

www.edf-feph.org

www.eudnet.org

www.rnib.org.uk

www.rnid.org.uk



Approach

Our Inclusive Society Programme focuses on two main areas – increasing access to technology and making BT itself an inclusive company. For access to technology we structure our digital inclusion programme around three main themes (3C's):

- Connectivity – giving more people access to communications technology
- Content – developing content and encourage communication and its use for social and economic benefit
- Capability - helping groups and individuals develop skills and use technology

In this exhibition we show three new initiatives in the area of inclusive design.



BT's Inclusive Design Toolkit

By applying inclusive design principles and considering the needs of people with reduced capabilities as part of the design process, products can be made usable, useful and desirable to a far wider audience.

The Inclusive Design toolkit took three years to complete and provides a comprehensive guide to the principles and commercial benefits of inclusive design. It supports both designers in terms of developing new products that can be used by anyone regardless of age or ability and also those involved in product management by providing general guidelines for business and the commercial benefits of using inclusive design.

BT Sign website

It is estimated that there are 50,000 native BSL (British Sign Language) users in the UK (RNID). Following a consultation process with BSL users which highlighted the need for more information to be made available to them in their first language, BT developed their BT Sign site. This website was designed for deaf people to give information in British Sign Language (BSL) about the company's products and services. It shows that new technology like broadband can bring us closer towards greater accessibility for all. Many deaf people have been early adopters of the newer forms of text communication like short message service (SMS), instant messenger and e-mail, and make good use of webcams combined with broadband.

BT Balance

BT researchers have used Nintendo Wii style technology to develop a device for laptops that removes the need for a keyboard or a mouse. The solution called BT Balance, a technology concept demonstrator, works by enabling the user to manipulate menus and applications simply by moving or tilting their machine.

The BT Balance adaptor is built around an accelerometer chip, which works in much the same way as the balance system in the human ear. It tells the computer which way is up and how the device has been moved. When the user makes an action, like tilting the machine left or right, the BT Balance software interprets this and manipulates the on-screen content

The small, specially designed adaptor containing movement sensors can be plugged into any standard laptop or tablet PC. The adaptor is then able to 'talk' to software downloaded to the laptop and then translate the motion and rotation into actions on the user's computer screen.

MORE INFO

www.inclusivedesigntoolkit.com

http://www.btplc.com/age_disability/bsl2007/btsign.asp

http://www.bt.com/age_disability



Learning by interactivity is much more than computers, keyboards and databases. Exciting new technologies such as image processing and augmented reality are now giving way to full immersive technologies that create rich, virtual animated worlds. The Virtual Garden yWalk is only a small (but exciting) peak into what Portuguese company YDreams is doing in the field.

Background

Developing cognitive and perceptive abilities, such as stimulating eye-hand coordination, visual perception and attention, is of utmost importance to children with special needs. Interactive installations also run on computers but take things a step further when compared to computer desktop-software. These installations create immersive experiences that are conceived to appeal to the senses and trigger intuitive responses.

Approach

The Virtual Garden yWalk – interactive walkway – is a reactive floor projection where virtual elements respond to human presence. By default (when no one is stepping on the installation) we can only see the grass and a rabbit hole. As soon as the child steps onto the projection, butterflies flutter about and flowers blossom leaving a trail behind the user. The rabbit emerges from the hole and reacts to human presence by stepping out in their direction and then running away from them.

There are various levels of interaction involved. The first are the beds of flowers that spring up in specific areas to coincide with the presence of the child. The subject is able to identify the blossoming flowers as a direct cause of their presence, thus stimulating cause-effect perception. The flying elements (butterflies) also indicate that the yWalk is engaged and provide colorful indicators that stimulate attention and spatial perception. The rabbit, as the yWalk's most prominent actor, is the central element in the entire interaction. As it is initially drawn by the presence of people, it then engages in a fun game of "catch" by running away from the users.

Blending easily into their surroundings in a non-intrusive way, these walkways show the public how deploying technology in innovative and creative ways can significantly alter the way edutainment and cultural experiences are perceived.

Impact

The concept behind the yWalk is simple; a sophisticated webcam detects passers-by as they stroll over a walkway, in turn, contents projected onto the ground from above react to visitors.

The result is a fun interactive activity, using color and movement stimuli to develop attention, endurance and capacities related to perception and cognitive skills, important factors associated with learning. The fact that it has no physical elements makes it a safe installation and adaptable to various spaces. Virtual walkways may have any type of digital content, realistic or stylized, reflecting various themes or creating different activities. The imagination is the limit and the possibilities are endless.

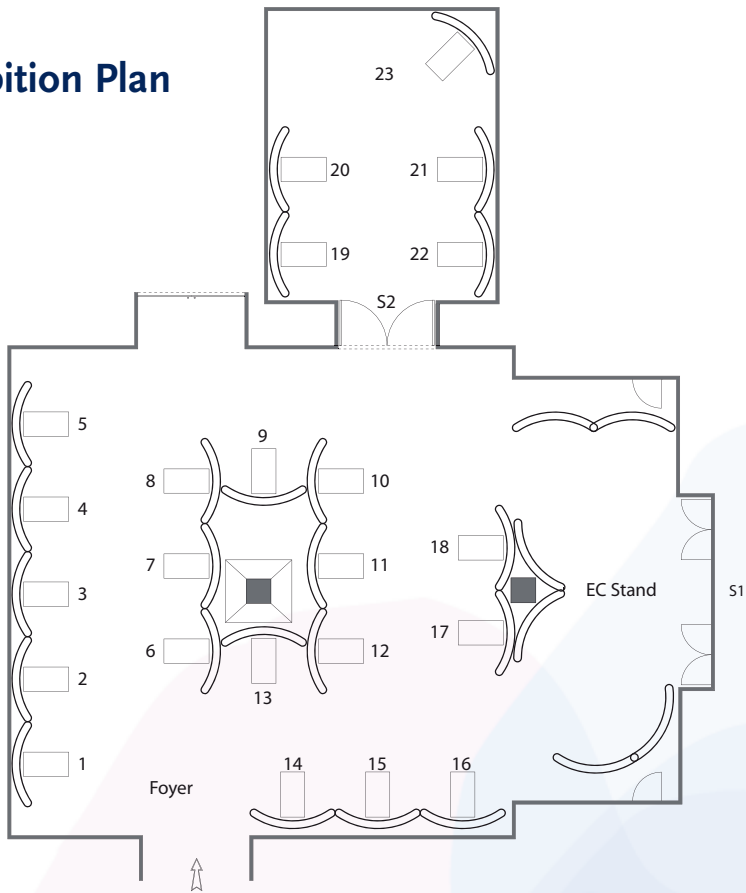
MORE INFO

YDreams website: <http://www.ydreams.com>

yWalk webpage: http://www.ydreams.com/ydreams_2005/index.php?page=365



Exhibition Plan



- | | | | |
|-----|--|----------|---|
| 1. | 2007 European Year of Equal Opportunities for All (European Commission) | 12. | e-Inclusion through Collaboration (HP and Microsoft) |
| 2. | Safety by Satellite Technology (Tunstall) | 13. | Leisure for All (ONCE) |
| 3. | Internet Hearing Screening (HearCom Project) | 14. | New Technology Not Just for the Young (MonAMI Project) |
| 4. | Communicating and Learning for All (Portugal Telecom) | 15. | Enjoying an Independent Life (SENIORITY Project) |
| 5. | Connecting People (Nokia) | 16. | Better Ageing Better Care (Intel) |
| 6. | The Eyes Have It (COGAIN Project) | 17. | Phone Calls for Hearing-Impaired People (Deutsche Telekom) |
| 7. | Understand More with Technology (Motorola) | 18. | Accessibility and Communication for All (France Telecom) |
| 8. | Compelling and Engaging Digital Experiences for All (Adobe) | 19 – 20. | Experience Age (AGE) |
| 9. | Easier Calling, Easier Watching (Panasonic) | 21. | Experience the Barriers (EDF) |
| 10. | Independence to Explore Your World (PALMIBER Project) | 22. | Inclusive Design in Action (British Telecom) |
| 11. | Television for the Visually Impaired (SONY) | 23. | Step into a New World of Sensations (YDreams) |