First of all, let me thank to the organizers, and OECD in particular, for inviting me to this very interesting session today on:

Measuring ICT for Development

And on how to reap the benefits of the rapidly changing information society, with a view to designing and reviewing national policies and strategies due to the impact of ICTs on social and economic development

Discussant points:

1. Importance of ICT measurement for public policy

- The indicators track economic, social and political developments.

What does it mean for long-term growth and stability? It means to provide policy makers with rigorous facts and figures for framing national and recovery strategies for the short, medium and long terms

 Despite low penetration rates for new technologies Information and communication technologies (ICTs) in developing countries, innovative applications of ICT have been increasing and blooming in areas such as

e-banking, e-payments, e-agriculture, e-business, e-trade, e-government, e-education, e-health/e-medicine

and therefore no doubt that *these new tools are helping to shape a new paradigm of development,* contributing to market development and overcoming traditional infrastructure constraints

2. The need of evolution and modernization of NSOs

- The current indicators measured by the National Statics Offices (NSOs) were defined years ago and therefore the *transformation of the paradigm is insufficiently perceived due mainly to the fact that ICT generate fast and huge information flows* examples:
 - it's still not systematically measured mobile BB;
 - it's still not measured the bandwidth effectively supplied besides that subscribed;
 - electronic commerce is still only measured on the basis of transactions done through web browsers, leaving aside important transactions via mobile telephones, ATMs and sensor networks (which will very soon increase enormously), ignoring therefore major uses, as in the case of e-commerce and up to certain extent to BB

- Measuring ICT impact for development has to inform about the present and not only the past
- 3. Limitations of surveys and the importance to measure the internet traffic flows and supply of services
- Surveys should only be conducted when what needs to be measured cannot be done through *direct collection* such as *Internet Traffic Flows (ITFs)* since all activities over the Internet generate ITFs *and information on the supply of services from Internet Service Providers (ISPs)*
- Surveys are expensive and have limited reliability, as people responding to enquires frequently misunderstand the questions.
 - Example: when Internet Traffic Flows to schools in Portugal informed that 100% of schools were connected in BB in 2006, a survey to head principals at the request of the European Commission gave that only 73% were connected in BB (a gross underestimation) This type of wrong measurements can be disastrous for policy making!
- The collection of Internet Traffic Flows data allows to perceive changes in ICT use and the bandwidth of content and the same applies to Internet Service Providers
- This direct collection activity is still not regulated and privacy and security issues must be adequately solved, but overcoming these problems will imply enormous advantages for an effective and quick perception of the ICT reality through improved statistical quality

4. Problems with private collection of ICT data

- Nowadays, there is a wave for the use of private collection of ICT data for public policy purposes, due to the growing limitations found in the evolution and costs of National Statistics Offices data collection.
- However, private collection of ICT data frequently do not stand on robust methodologies, lack transparency, evidence problems of consistency when compared with related data capture through other sources, they are not subjected to systematic quality control and monitoring, and very often involve conflict of interests as they are used for commercial purposes.
- As a result most of private collection of ICT data have no true value for public policy

- It is feasible that for certain specific variables, private collection of ICT data could be of use, but only if an adequate regulatory framework is established along with an appropriate quality control system to be defined and ensured by National Statistics Offices
- The truth is that the evolution and modernization of National Statistics Offices is necessary, obvious and inevitable, and any partial use of private collection of ICT data cannot be done without major changes of the National Statistics Offices

5. ICT measurement impact is of major importance and requires partnering at supranational level

- The measuring of *access* to the Internet, *elnclusion* and ways to overcome the digital divide, the *use of ICT in schools* and the *training of Human Resources* in this area, as well as the *use of ICT for public health* are of fundamental importance to track economic, social and political developments
- It is therefore urgent that the partnership evolves because only through a close work between National Statistics Offices and International Organizations with responsibilities in development will be possible to change the status quo towards a new philosophy of collection of ICT data
- Besides, the usefulness of statistical data for public policy also requires benchmarking, which is only possible on the basis of harmonization of methodologies - another reason why partnering at supranational level is essential
- The necessary national and supranational engagements will only be possible through a concerted action between main important international organizations with recognized competence in this field.
- That's why we attach the most importance to this workshop today and are fully involved in different *fora* trying to change the current *modus operandi*!

Hoping you found my comments useful! Let me thank you for your attention!