ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES

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Measuring ICT: What Are the Challenges Before Us?

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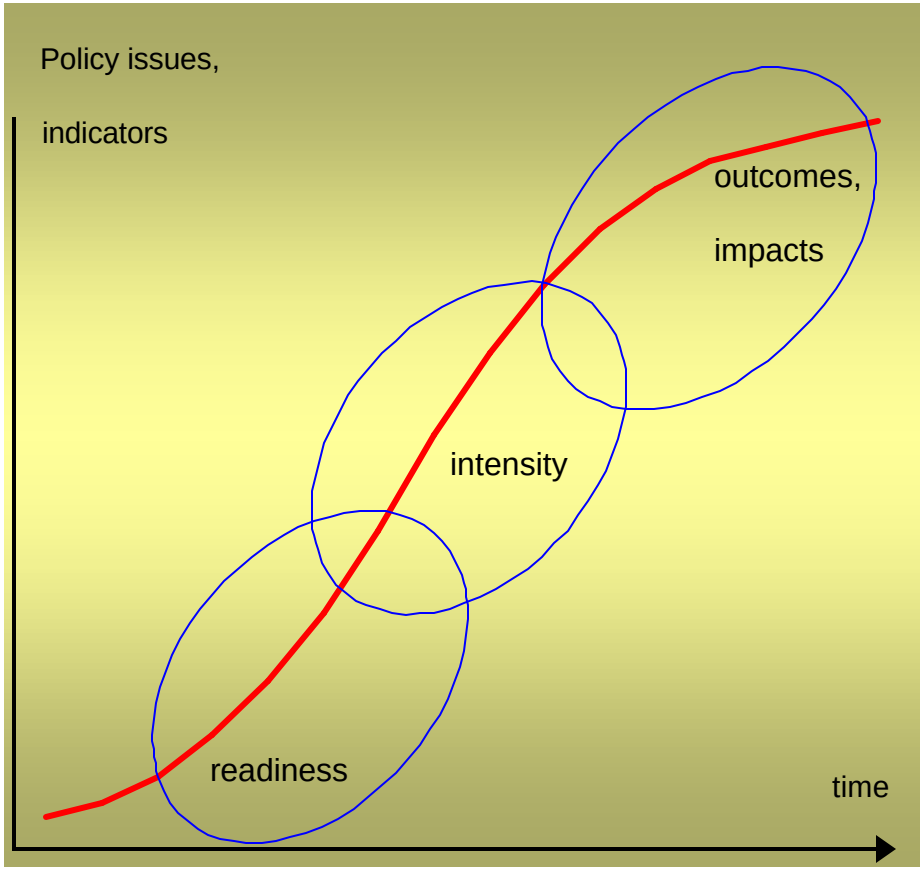
Policy drivers

THE SEOUL DECLARATION FOR THE FUTURE OF THE INTERNET ECONOMY (2008):

- *Improving **statistical systems** to measure the changing **access and use** of the Internet and related **ICT networks** by citizens, businesses and institutions in order to provide reliable measures of evolving uses and **the impact of the Internet on economic performance and social well-being**.*

Where do we stand?

- Statistical demands evolves as ICT diffuse
- We are **very good** at measuring **readiness**
- **Pretty good** at measuring **intensity**
- We still **have to make progress** in measuring **impact**



Our achievements (WPIIS)

1. A general approach to information society indicator development
2. Standards for industry related statistics
   1. The ICT sector definition
   2. The media and content sector definition
3. Standards for product related statistics
   1. ICT goods
   2. ICT services
4. Standards for trade in ICT goods and services
5. Definition of e-commerce
6. Model surveys
   1. ICT use by households and individuals
   2. ICT use by businesses
7. Partnership's *Core Indicators* (UN Statistical Commission)
8. The Guide to Measuring the Information Society
   www.oecd.org/sti/measuring-infoeconomy/guide

Challenges

Can be grouped under 4 headings:

1. Conceptual framework
2. Scope of measurement
3. Type of measurement
4. Survey design

I will

- Give example of these challenges
  - Refer to OECD work

1. Conceptual framework

Our capability to measure ICT impact is limited by the lack of a well-defined conceptual framework

- Social impact: what channels?
  - OECD study on student performance in PISA
  - *OECD definition of technology engagement*
  - *OECD module on self-perception of impact*
- ICT networks: network theory?
  - OECD project on open innovation in software
- E- business: what drivers?
  - *Eurostat ICT business survey*

2. Scope of measurement

The scope of measurement is too narrow to capture the effects of ICT as a General Purpose Technology (GPT)

- ICT-related R&D:
  - Development of R&D satellite accounts
- ICT, bio & nanotechnologies:
  - OECD project on emerging technologies
- ICT capital/intermediaries flows:
  - Refinement of OECD of I-O tables

3. Type of measurement

Some of the problems in measuring the impact of ICT are due to the inadequate measurement

- ICT use: duration & type
- Network flows
- Surveys are limited: burden & accuracy
- Internet-based statistics:
  - Joint work by EC/Eurostat/OECD
  - Feasibility study in 2010
  - Special session in ISI 2011 in Dublin
- Private data & official statistics

4. Survey design

All statistical information necessary to measure ICT impact cannot be collected in one survey

- Need to link different survey...

  ... but surveys were not designed for that

- Need to use micro data...

  ... but confidentiality rules prevent it

  - OECD micro data project “ICT-enabled innovation”
  - Eurostat micro data linking project
  - OECD recommendations/micro data center

If you wish more information:

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Thank you!