



# OECD work on measuring the Information Society

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# Introduction

- The rapid diffusion of ICTs is an important contributor to the development of knowledge-based societies.
- Since 1997, OECD has been working with member countries to develop statistics for the Information Society:
  - an activity-based ICT sector definition
  - narrower and broader definitions of electronic commerce tx
  - model surveys of ICT use – businesses and households/individuals
  - an ICT goods classification.
- The accompanying paper describes this work and outlines work in progress and potential areas of future endeavour.
- This presentation will focus on revisions to the OECD model ICT use surveys (especially e-business and IT security)
- ... and OECD involvement in the international *Partnership on Measuring ICT for Development* including work on developing a guide to Information Society measurement.

# Revisions to the OECD model surveys of ICT use – household survey

- Revisions are underway to update content to align with country practices and policy needs.
- To the extent feasible, the revised model will include new or expanded areas – IT security, e-government, digitised products (buying and downloading), mobile phone and email use.
- We hope to finalise the revisions by the end of 2004.

# Revisions to the OECD model surveys of ICT use – enterprise survey

- Revisions to update content to align with country practices and policy needs.
- To the extent feasible, the revised model will include new or expanded areas – IT security, e-government, digitised products, electronic business processes.
- The first stage is incorporation of “updating” revisions and possibly some new material (e.g. IT security) by the end of 2004.
- The second stage is to incorporate remaining new material, including a module on e-business processes for the 2005 WPIIS meeting.

# Measuring electronic business

- This topic is of particular interest to policymakers because of the transforming potential of electronic business.
- A status report on OECD work on developing statistical standards was presented to last year's Voorburg meeting.
- Work has progressed since then – starting with an OECD-convened expert meeting on measuring e-business which was held in December 2003.

## Measuring electronic business – Dec 2003 meeting

- Definition of electronic business – is one necessary?
- Broad framework for describing business processes generally – is the Porter value chain model sufficient?
- Which broad business functions are important and measurable? Are they generalisable across industries, firm size and country?
- Classification of e-business processes – is it possible given the integrating and evolving nature of e-business? Is it necessary?
- Organisational change – it is important but is it measurable via large scale, mail-based surveys?
- Impacts – important but how do we measure them?
- Networks – what kind of networks we interested in measuring? The focus seems to be on IP networks but the technical distinctions are blurring.

# Measuring electronic business – current work

- Current work: a module for measuring e-business
  - A questionnaire module on electronic business has been drafted.
  - The module is to be included in the OECD model questionnaire on ICT usage in enterprises in 2005.
  - It includes e-commerce and e-government questions.
  - The term "electronic business" is not used in the module.
  - There has been extensive consultation on the module during this year.

# Measuring electronic business – statistical and policy feedback

- Include non-Internet business processes and distinguish IP from non-IP networks.
- Include email business processes.
- No need to distinguish in-house business processes from those occurring between related enterprises.
- Information on Human Resource Management processes is not a priority.
- There is general support for e-government questions.....and questions on digitised products (sales and purchases).
- Additional areas of measurement suggested include outsourcing and drivers of business adoption of ICT.



# Measuring electronic business – integration questions

- Integration questions in the module
  - It is assumed that there will be greater benefits from e-business where there is a more integration between functions.
  - The draft module asks about linkages associated with e-commerce e.g. whether systems used to receive orders were linked with invoicing systems, customers' systems etc...
  - ...and general integration questions where respondents select from a list of business functions and report whether there are system linkages with other functions.
- Both approaches are broadly supported over the alternative which is to ask about particular types of 'integrating' technologies such as ERP or SCM.
- The main issue is whether a list of processes is generalisable across sectors.

# E-business measurement work – challenges and the future

- OECD is working with a smaller group to refine the module and expects to present it to WPIIS in April next year.
- To ascertain statistical feasibility of new questions, Canada may pilot test some of the more complicated questions.
- Challenges are numerous and include:
  - how to measure impacts (subjective, microdata approaches)
  - the convergence of technologies (IP, non-IP)
  - measuring complex relationships, changing and little understood phenomena
  - the limitations of survey vehicles.
- Voorburg delegates' views are invited on the issues raised.
- Copies of the current draft are available to those who are interested in becoming involved in this work.

# Measuring IT security

- IT security is seen as an important area for measurement....
- ...and several countries are measuring it with some success.
- The new questionnaire would have a separate module on IT security which would include:
  - questions on IT security measures in place (e.g. anti-virus software, firewall, secure servers etc)
  - .... and security incidents encountered.
- Challenges include developing robust classifications of security measures and incidents.

# A partnership for measuring the Information Society

- An outcome from the 2003 WSIS is the formation of an international *Partnership on Measuring ICT for Development*.
- OECD is one of the partners, with the others being the ITU, UNCTAD, the UNESCO Institute for Statistics, the UN Regional Commissions, the UN ICT Task Force and the World Bank.
- The Partnership has the following broad objectives:
  - to achieve a common set of core ICT indicators
  - to enhance the capacities of NSOs in developing countries in the area of Information Society statistics
  - to develop a global database on ICT indicators.

## A partnership for measuring the Information Society – OECD contributions

- to provide ICT metadata information for OECD countries as part of a global stocktaking exercise
- to assist in the development of a common list of core ICT indicators
- to provide assistance with ICT statistical work through preparation of a guide to Information Society measurement
- to participate in the development of a global database of ICT indicators, mainly by providing data for OECD countries and for some non-OECD countries.

# Guide to measuring the Information Society

- OECD is drafting a *Guide to Information Society Measurement*.
  - The main aim is to consolidate WPIIS knowledge for the benefit of official ICT statisticians in member and non-member countries.
- The Guide will include information on:
  - existing standards – definitions, classifications, outstanding issues
  - other areas e.g. electronic content – conceptual issues, future work
  - metadata on OECD countries' survey methods and outputs
  - an annex on the experiences of non-member countries.
- A near-final draft will be ready for approval by WPIIS 2005.
- The Guide will be finished for the WSIS in November 2005.
- The annex to the OECD paper contains a draft outline.
- Members of the Voorburg Group are invited to become involved in this project as reviewers.



# Finally...

- Thank you for listening!
- Please contact me if you would like to be involved in any of this work or offer feedback after the meeting
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