MEASURING TRADE IN ICT GOODS: FROM HS2002 TO HS2007

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Why does it matter?

**Core ICT Indicators** include 2 indicators:

**ICT3**: ICT goods imports as a percentage of total imports

**ICT4**: ICT goods exports as a percentage of total exports
Two major changes in ICT trade statistics

**2007:** Change of the Harmonized System (HS) classification

**2008:** New ICT products definition based on CPC rev. 2 by OECD

*Trade in ICT goods are not comparable before and after 1996 (time break)*
Outline

1. New OECD definition of ICT products
2. Changes in the Harmonized System (HS)
3. Proposal for trade in ICT goods
4. Trade in ICT services
5. Recent trends
New OECD definition of ICT products

- Change in the underlying classification:
  *From HS2002 to CPC rev.2*

- A narrower scope:
  
  *ICT goods must either be intended to fulfil the function of information processing and communication by electronic means, including transmission and display, or use electronic processing to detect, measure and/or record physical phenomena, or to control a physical process.*

- Includes Content media products, services and goods

- Rational:
  
  *ICT products are the output of the ICT producing sectors*
ICT products

<table>
<thead>
<tr>
<th>Broad level categories</th>
<th>Number of CPC subclasses (products)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers and peripheral equipment</td>
<td>19</td>
</tr>
<tr>
<td>Communication equipment</td>
<td>8</td>
</tr>
<tr>
<td>Consumer electronic equipment</td>
<td>11</td>
</tr>
<tr>
<td>Miscellaneous ICT components and goods</td>
<td>14</td>
</tr>
<tr>
<td>Manufacturing services for ICT equipment</td>
<td>5</td>
</tr>
<tr>
<td>Business and productivity software and licensing services</td>
<td>11</td>
</tr>
<tr>
<td>Information technology consultancy and services</td>
<td>10</td>
</tr>
<tr>
<td>Telecommunications services</td>
<td>12</td>
</tr>
<tr>
<td>Leasing or rental services for ICT equipment</td>
<td>3</td>
</tr>
<tr>
<td>Other ICT services</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99</strong></td>
</tr>
</tbody>
</table>
## Content and media products

<table>
<thead>
<tr>
<th>Broad level categories</th>
<th>Number of CPC subclasses (products)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed and other text-based content on physical media, and related services</td>
<td>18</td>
</tr>
<tr>
<td>Motion picture, video, television and radio content, and related services</td>
<td>24</td>
</tr>
<tr>
<td>Music content and related services</td>
<td>5</td>
</tr>
<tr>
<td>Games software</td>
<td>3</td>
</tr>
<tr>
<td>On-line content and related services</td>
<td>12</td>
</tr>
<tr>
<td>Other content and related services</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>
The value of trade in ICT goods according to the new definition was about 10% lower in 2006.

USD billions

- Old ICT goods definition (2003)
- New ICT goods definition (2008)
The Harmonized System 2007

- The Harmonized System (HS) is the standard classification for measuring trade in goods.

- In 2007 deep revision of the HS to stay: “up-to-date in the light of changes in technology or changes the patterns of international trade”

- Result: time break in the ICT trade series
Matching HS 2002 to HS 2007

One to one:

\[ x \rightarrow y \]

One to many:

\[ x \leftarrow y_1 \]

\[ x \rightarrow y_2 \]

Many to many:

\[ x_1 \leftrightarrow y_1 \]

\[ x_2 \leftrightarrow y_2 \]
<table>
<thead>
<tr>
<th>Broad level categories</th>
<th>Number of HS 2007 series</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Computer and peripheral equipment</td>
<td>8</td>
</tr>
<tr>
<td>B. Communication equipment</td>
<td>4</td>
</tr>
<tr>
<td>C. Consumer electronic equipment</td>
<td>28</td>
</tr>
<tr>
<td>D. Electronic components</td>
<td>25</td>
</tr>
<tr>
<td>E. Miscellaneous</td>
<td>7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>

- Under discussion by the OECD Working Party on Indicators for the Information Society (WPIIS)
- Final expected in Fall 2010
Proposed correspondence table

- Separate “Electronic components” from “Miscellaneous group” in the 2008 ICT product definition
- Electronic components and Miscellaneous account for about 38% of the value of trade in ICT goods

**Transitional measures**

- Estimated trade in ICT goods over 1996-2008 based on the old definition
- To reconcile the time series based on the old and the new definitions
- Not to be used from 2008 on.
Trade in ICT goods: old and new definitions
Trade in ICT services

- Extended Balance of Payments Services (EBOPS)
- Comparability over time but...
- 2 “broad” categories only:
  - Communication services
  - Computer and information services
- Finer classification in new EBOPS (BPM6) but...
- Data not available before 2014!
- “Goods for processing” will be classified as services
- Trade in ICT Service not in Core Indicators
Recent trends in ICT trade

Trade in ICT goods, % of total trade

[Line graph showing trade in ICT goods as a percentage of total trade from 1996 to 2008.]
Recent trends in ICT trade

Trade balance of ICT goods
Recent trends in ICT trade

Revealed comparative advantage (RCA) in ICT goods, 2003-2008
Recent trends in ICT trade

Exports ICT groups for OECD countries

[Graph showing trends in USD millions from 1996 to 2008 for different categories of ICT exports: D - Electronic components, A - Computers and peripheral equipment, B - Communication equipment, C - Consumer electronic equipment, E - Miscellaneous.]
Recent trends in ICT trade

The most important traded goods
Recent trends in ICT trade

Trade in ICT services
Recent trends in ICT trade

ICT services exports by countries
Thank you!

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