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# Towards an Information Society Aggregate in ISIC 2007

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# In sight of classification revisions



⌘ Creating a new “Information Economy”  
Section with 3 Divisions :

ICT manufacturing - ICT services - content.

⌘ Development of Information Society fuelled  
by the supply of new ICT and content  
products.

# Industry transformation at work



- ⌘ Intensified use of ICT applications and the Internet, expansion and diversification of the service sector are inseparable phenomena **that fuel each other.**
- ⌘ A shift from **industrial-based economy** to a **service-driven economy**, from an **industrial society** to a **service society.**

# Consequences for classifications



- ⌘ The **limit** between goods and services is **blurred** (electricity, computers ready to use).
- ⌘ **Distinction** between manufacturing and service industries **has lost of its relevance** (publisher - printer, manufacturers without factories).
- ⌘ **Factory model** is totally **predominant** in classification design.
- ⌘ **A section** for activities **focussing on information**: a growing interest for this issue for about 15 years.

# First innovations in 1990



- ⌘ In ISIC Rev. 2 (1968), only two sections were left to identify service industries contributing to half of GDP. Third revision (1990) of ISIC introduced **six new sections for the tertiary sector**.
- ⌘ Two other major innovations in ISIC Rev. 3 :
  - **the creation of division 72** which groups computer services;
  - **the separation** of postal and **telecommuni-**  
**cation services**.

# NAICS and JSIC



- ⌘ The NAICS Information Sector major innovations in 1997: **the identification of information and cultural products; the creation of a new sub-sector** in manufacturing, covering computer and electronic products and their components (**group 334**)
- ⌘ In the 2002 revision of JSIC, introduction of a specific category for Information and Communications industries at the upper level of JSIC (1-letter level), **“H-Information and Communications”**.

# The OECD ICT Sector 1998

- ⌘ The fundamental innovation: its boundaries have been delineated **regardless of traditional distinction between manufacturing and service activities.**
- ⌘ **ICT convergence** and OECD definition of the ICT sector support the case for two new divisions in ISIC Rev. 4: one for ICT manufacturing and one for ICT services.
- ⌘ The special case of content activities: ICT and content industries are closely related; **both are key industries** for the development of Information Economy and Information Society.

# Conceptual framework



- ⌘ **Information** has many different meanings: an electronic signal; a non electronic signal; data; message intended for human being.
- ⌘ To understand what is ICT, **convergence** is the word. Convergence is not the word for all information economy: convergence of broadcasting and telecommunications has not been observed yet.
- ⌘ As for energy, “**Information Economy**” is the new economic speciality, the focus of which is information and related technologies.



# The ICT product



- ⌘ The intrinsic nature of an ICT product is that of a **tool** with which it is possible **to handle** a special kind of material, **information**.
- ⌘ The handling consists in the display, storage, processing or transmission of information, **using electronic means**.

# The ICT sector



- ⌘ **The intrinsic nature of an ICT industry** is that of an ICT application producing industry. Questions to identify an ICT industry are : - is it an ICT producing or an only ICT using industry ? - does it converge with other ICT industries ?
- ⌘ **The ICT sector** is the group of industries that are primarily engaged **in the production or the wholesale of ICT products**, excluding retail trade of ICT products.

# Borderline cases



## Are the following products genuine ICT products?


Watches, body thermometers, insulated wire and cable, cash register, car park meters, photo copiers, electronic scales, digital cameras.

## Are following industries genuine ICT industries?

Industries producing electro-diagnostic apparatus, precision instruments, electronic clocks, avionics equipment and guiding systems, control and command systems.

It is not clear **instrument and control systems industries** converge with computer and telecommunications industries. But data is one form of information whereas, electronically enabled instruments and control systems are data processing equipment.

# Proposed structure for ICT manufacturing



## ⌘ **DIVISION XX ICT MANUFACTURING**

- ⌘ XXX Manufacture of Computer and Peripheral Equipment
- ⌘ XXX Manufacture of Electronic Components
- ⌘ XXX Manufacture of Communications Equipment and Apparatus
- ⌘ XXX Manufacture of Audio and Video Equipment
- ⌘ XXX Manufacture of Precision, Navigational, Medical Instruments and Control Systems

# Proposed structure for ICT services



## ⌘ DIVISION XX ICT SERVICES

⌘ XXX Telecommunications

⌘ XXXX Telephony Services

⌘ XXXX Internet Access and Services Incidental to Internet

⌘ XXXX Other Telecommunication Services

⌘ XXX Computer Services

⌘ XXXX Hardware Consultancy

⌘ XXXX Customized Software Provision and Software Consultancy

⌘ XXXX Pre-packaged Software Publishing, excluding Video Game Publishing and Software in Connection with Other Publishing

⌘ XXXX Data Processing Services

⌘ XXXX Other Computer Services

# Defining content



- ⌘ **An organized message intended for mass dissemination to human beings.** To be memorized and non perishable, content must be stored on a physical medium.
- ⌘ **A content product** is an open to public content combined with a mass communication medium; it is intended for publishing and (mass) distribution to public.

# A content product must meet six nested criteria



- ☒ - It is an organized message intended for **human beings**.
- ☒ - Its content must be **combined** with a medium.
- ☒ - It results from an organized **production** activity.
- ☒ - Its diffusion is **not restricted** to a limited list of privileged recipients.
- ☒ - Its content is a **standardized** message disseminated by means of a (mass) **communication medium**.
- ☒ - A content product must be **published**.

# Content and mass communication medium



- ⌘ The functionality of a mass communication medium is : **to deliver content** and achieve its mass distribution to public.
- ⌘ The **central characteristics** of a content product is its **content format**, not its medium.



# The Content industry and sector definitions



- ⌘ A Content industry is an industry primarily engaged **in the publishing and/or the electronic distribution** of content products.
- ⌘ **The Content sector** is the group of ISIC industries primarily engaged in the publishing and/or the electronic distribution of content products.

# Proposed structure for content division



- ⌘ XXX Publishing Industries
- ⌘ XXX Video Games Production (including animated pictures production)
- ⌘ XXX Motion Picture and Video Industries
- ⌘ XXX Sound Recording Industries and Radio Services
- ⌘ XXX Broadcasting and Distribution of audio-visual services
- ⌘ XXX Information services
- ⌘ XXX Supporting industries