Voorburg meeting, Ottawa 2004

Methodological reference manual for statistics on the Knowledge-based Economy

Abstract

National statistical offices are confronted with various requirements for data by national political and administrative institutions, international bodies and other important stakeholders. Such data requirements reflect the changing needs and the development of the society, and one of the most recent areas drawing a lot of attention, is the Knowledge-based Economy, where data are required in order to follow the many ways in which information technology and knowledge-based services affects economy and daily life of the enterprises and citizens in a broad range of areas, spreading from health and education to the effects of ICT on productivity, globalisation etc.

The manual and in particular the description of the domains of the Knowledge-based economy identifies a large number of indicators based on key variables. As such the manual is a tool, and its usefulness is particularly evident in two contextual frameworks.
One is to explain to the users of statistics what the Knowledge-based economy is about; which are the domains; how do they interact; what domains are already covered by available, regular figures; what areas still need to be developed.
The other framework would rather focus on how the producers of statistics in close collaboration with key users - e.g. politicians, government administrations and business federations - would identify the future challenges and the priority given to them.
In both frameworks the details about domains and variables would in a simple way provide a transparent check list when published.

The manual deals with the international requirements supplemented by national needs and demands.

The manual makes an attempt to define the Knowledge-based Economy although there is no simple and unambiguous definition. In relation to statistics about the Knowledge-based Economy the concept can be defined and delineated in a pragmatic way, based on the building blocks found in existing as well as new special statistics, and also in international requirements and recommendations.

The way that statistics concerning the Knowledge-based Economy is being developed is in many ways parallel to the development that has taken place in other statistical areas. But one crucial feature separates the Knowledge-based Economy from other areas, i.e. the rapid speed of progress and change caused by technological development. This creates a need for new knowledge and updating of indicators and delineations.

The need for topicality necessitates changes, but at the same time it constitutes a challenge in connection with other demands and wishes concerning statistics, like comparability over time and

need for coherence between different areas. Therefore it is important to place the individual statistics in a contextual framework in order to better understand the resulting economic and social effects.

An important part of the Knowledge-based Economy is the Information Society and its components are described in a separate chapter.

The manual broadly follows the structure given below.

1. Introduction
1.1 Aim, scope and background
1.2 Structure of the manual

2. Delimitation of the concepts of Knowledge-based Economy and Information Society
2.0 Introduction
2.1 The elements of the concept of Information Society
2.2 Information Society in a broader perspective: the Knowledge-based Economy

3. International data requirements and guidelines
3.0 Introduction
3.1 Regulations
    3.1.1 Information Society statistics regulation
    3.1.2 eEurope
    3.1.3 Science and technology regulation
3.2 Gentleman agreements and ad-hoc projects
    3.2.1 COINS
    3.2.2 AUVIS
    3.2.3 Ad-hoc projects
3.3 Manuals and other guidelines
    3.3.1 ICT use in enterprises
    3.3.2 ICT use in the public sector
    3.3.3 ICT use in households and by individuals
    3.3.4 Canberra manual
    3.3.5 Frascati manual
    3.3.6 Technological balance of payment manual
    3.3.7 Oslo manual
    3.3.8 COINS
    3.3.9 AUVIS
3.4 Classifications and delimitations
    3.4.0 Introduction
    3.4.1 Activity classifications
    3.4.2 Product classifications
    3.4.3 Other classifications

4. Indicators and variables related to the Information Society
4.1 The structure and contents of the list
4.2 The list of indicators and variables by areas
    4.2.1 Information Society – eEurope
    4.2.2.a ICT use in enterprises
    4.2.2.b ICT use in the financial sector
    4.2.3 ICT use in the public sector
    4.2.4 ICT use in households and by individuals

Annexes