For Official Use **STD/NAES(2004)1**

Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development **22-Sep-2004**

English - Or. English

STATISTICS DIRECTORATE

STD/NAES(2004)1
For Official Use

Cancels & replaces the same document of 06 September 2004

National Accounts and Economic Statistics

THE MEASUREMENT OF DATABASES IN THE NATIONAL ACCOUNTS - DRAFT ISSUES PAPER

This document has been prepared by Nadim AHMAD - OECD (Statistics Directorate).

WORKING PARTY ON NATIONAL ACCOUNTS

To be held on 12-15 October 2004

Tour Europe, Paris La Defense
Beginning at 9.30 a.m. on the first day

For further information please contact:
Nadim Ahmad
E-mail: nadim.ahmad@oecd.org

JT00169755

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Nadim Ahmad, OECD

Executive Summary

1. The 1993 SNA discusses the treatment of databases as a special case of software as indicated in the following paragraphs.

Computer software

> 10.92 Computer software that an enterprise expects to use in production for more than one year is treated as an intangible fixed asset. Such software may be purchased on the market or produced for own use. Acquisitions of such software are therefore treated as gross fixed capital formation. Software purchased on the market is valued at purchasers' prices, while software developed in-house is valued at its estimated basic price, or at its costs of production if it is not possible to estimate the basic price.
>
> 10.93 Gross fixed capital formation in software also includes the purchase or development of large databases that the enterprise expects to use in production over a period of time of more than one year. These databases are valued in the same way as software, described above.

2. Unfortunately implementing the recommendation that the acquisition and production of large databases should be recorded as fixed capital formation has proven to be difficult. There appear to be two principal reasons for this. The first concerns the definition of a database and the second relates to the quantitative meaning of 'large' in the SNA.

Recommendations

3. On the first issue there is now broad agreement that databases are made up of two components, the supporting software and data embodied/stored in the database, and this is a position that the Canberra II Group concurs with. Concerning the second issue the Canberra II Group took the view that 'large' could not be readily interpreted either in monetary values or in terms of the physical (memory) size of the database, and as such ***recommends that references to 'large' should be removed***.

4. The Group did however consider whether databases could be categorised in a different way, such that some databases, such as those owned by statistical offices, should be excluded from investment. In fact the Group considered four specific options:

I. To treat as fixed capital all databases with an expected service life of more than year including those produced on own-account;

II. To treat as fixed capital only those databases maintained by businesses in data-providing industries;

III. Not to record the own-account production of databases as capital formation but to record the sale of databases (only when exclusive property rights are sold) in the revaluation account;

IV. To record as fixed capital only databases that are regarded by businesses as fixed capital.

5. The Group's recommendation is that ***all databases, in principle, should be recorded as fixed capital***. The Group recognised the practical difficulties inherent in this but concluded that the characteristics of, and economic benefits from, databases are similar to those of other assets, including many where estimation is also problematic.

Practical Feasibility

6. At present it would appear that few databases are currently recorded as fixed capital in the national accounts of many statistical offices. This may partly reflect a particularly demanding definition of 'large' in SNA93 but it may also reflect difficulties in estimation more generally. It is possible that better use could be made of business accounts but even here the position is mixed. Some companies with large databases treat them as assets, others do not.

7. The Canberra II Group, therefore, ***recommends*** that the SNA includes a reference describing how (second-best) macro-based estimates of own-account databases can be derived in the absence of real or better data (similar to the recommendations made for own-account software by the OECD/Eurostat Task Force); as shown below:

Own-Account database production =
*Total number of employees working on database construction/updating **
*Average remuneration **
Proportion of time spent on development of databases on own-account +
Other intermediate costs used in own-account production of databases (including data costs) +
Notional operating surplus related to own-account production of databases.

Impact on GDP

8. Although few databases seem to be captured by this name in the national accounts, some may be recorded as software, especially large own account databases with customized software and purchased databases. To the extent that this is so, the impact of dropping the qualifier "large" will have no impact on the size of GDP. To the extent that large databases are currently omitted from the national accounts, any impact of including them will not be due to the proposed change in the SNA. The impact of including smaller databases is unknown but is not expected to be significant.

Consistency with Other Manuals and Business Accounting Standards

9. No significant change is implied here and, so, no significant change is expected to consistency. There are no separate provisions for databases in international accounting standards; and so databases would be treated in line with general principles of IAS 38 (Intangible assets). IAS38 specifically mentions "customer lists", but does not mention "databases" or "content of databases". Nevertheless it seems to be widely accepted in the business accounting world that valuable databases can and should be identified as separate intangible assets. International accounting authorities did discuss the treatment of database content in business accounts back in February 2002 (in the "International Financial Reporting Interpretations Committee") but decided not to pursue the subject, and since then no further development work has taken place.

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