

Agenda item : II
: Research and Development

Introduction

The recording of research and development (R&D) as gross fixed capital formation has raised some practical implementation issues, which may negatively impact on an internationally comparable implementation. An EU Task Force is currently investigating these issues. A final report is expected at the end of 2012/early 2013.

Guidance on documentation provided

The attached issues paper presents the provisional recommendations of the EU Task Force related to the implementation and measurement of R&D for consideration by the AEG.

Main issues to be discussed

The AEG is requested to express their views on the provisional recommendations of the EU Task Force with respect to the implementation and measurement of R&D.

**PRACTICAL IMPLEMENTATION ISSUES RELATED TO THE CAPITALISATION OF RESEARCH
AND DEVELOPMENT**

Provisional recommendations of the EU Task Force

I. Introduction

1. The recording of research and development (R&D) expenditure as gross capital formation according to the 2008 SNA has raised some practical implementation issues, which may affect the international comparability of the national accounts R&D estimates. An EU Task Force has been set up to investigate these implementation issues.

2. The mandate of this Task Force is to test the reliability of the R&D data; to exchange experience on the basis of the data transmitted by EU Member States and the methods used in the various countries; to identify the major practical difficulties; and to propose solutions to these difficulties. Nearly all EU countries participated in this test exercise.

3. The first meeting of the Task Force took place on 31 March 2011, and the second meeting on 16 February 2012 with the participation of almost all Member States. A third meeting was held on 22 March 2012. A final report is expected in the second half of 2012. Eurostat will communicate the full report from this EU Task Force to the ISWGNA. This note presents some provisional recommendations.

II. Provisional recommendations

4. Agreements have been reached by the Task Force on the following issues:
- a. Full consistency between the data in the agreed compulsory R&D tables and the national accounts should be ensured in the course of the capitalisation of R&D services.
 - b. Until the R&D stocks are available, the consumption of the R&D assets used in the production of R&D services does not have to be taken into account in the estimates of the R&D output (as a part of the consumption of fixed capital).
 - c. It is recommended to use input methods¹ in the calculation of R&D in volume terms.
 - d. A geometric depreciation function is recommended as a reference method in the calculation of the consumption of fixed capital of R&D. However, countries that have developed alternative methods may continue to use them.
 - e. The R&D services subcontracted by one R&D institutional unit to another R&D institutional unit should be recorded as intermediate consumption. However, the possibility of recording the output of R&D institutional units net of subcontracted R&D would be left open to countries that encounter problems in obtaining data needed to adjust the Frascati intramural expenditures on R&D to gross recording.

¹ as sum of volume measures of inputs.

- f. The net operating surplus of market producers of R&D is derived as mark-up² including unsuccessful R&D. The mark-up may be calculated as industry specific or as a single mark-up for all industries. To ensure stability of the mark-up time series, an average or a weighted moving average of several years should be used.
 - g. Service Life estimates used in the calculations of R&D should be based on dedicated surveys or other relevant research information, including information of other countries with comparable market/industry characteristics. Where such information is not available, a single average service life of 10 years should be retained.
 - h. The above mentioned Service Life estimates should be investigated regularly, e.g. every 10 years.
5. Furthermore, the Task Force made the following conclusions:
- a. Double-counting is to be eliminated by cross-comparing competing source data for the same product classes/fields. Care must be taken for differences in definitions.
 - b. Exhaustiveness is ensured by cross-comparing competing and supplementary source data (R&D surveys, BoP, SBS, etc) with simultaneous harmonisation for definition differences.

III. Issues for consideration

6. The AEG is requested to express their views on the provisional recommendations of the EU Task Force with respect to the implementation and measurement of R&D.

² There is no single way of calculating a mark-up; there are several possibilities (e.g. based on the ratio of net operating surplus to output or gross value added of a comparable industry).