

MEETS programme - towards more efficient enterprise and trade statistics

Statistics Explained

This article is part of an [online publication](#) presenting the results of the [European Commission](#) programme 'Modernisation of European Enterprise and Trade Statistics', or MEETS for short, which ran from 2009 to 2013 with the objectives of adjusting European business statistics to new needs and reducing the burden on [enterprises](#) .

It presents the results for its **third objective** , increased integration of data collection and [data processing](#) . This objective was to allow for a more effective use of already existing statistical information and, additionally, to encourage the increased use of administrative data sources, either through integrating all collected data into a single system or through using microdata linking techniques. More specific issues treated under this objective include ensuring the quality of data collected from different sources, standard [estimation](#) techniques and assessing the differences between accounting concepts and statistical variables.

Use of existing data

Action 3.1: Making better use of data that already exist in the statistical system including the possibility of estimates

New or current statistical information required could be obtained by linking together existing types of business statistics without the need to increase the burden on enterprises. The aim of action 3.1 is to exploit the potential of business statistics in a more efficient way.

Data warehousing and data linking in statistical data production

The work on "data warehousing and data linking in the production of business statistics" was carried out by an European Statistical System Networks (ESSnet) set up in 2010. The ESSnet first established an overview of the state of the art and future needs in integrated business data systems of the ESS members. On this basis it established a work programme focussing on the creation of a set of guidelines, models and recommendations for building a statistical data warehouse. The results include a generic architecture detailing its processes and metadata and providing some insight into methodological aspects. The impressive set of deliverables was presented in a handbook guiding the users during the entire process of setting up a statistical data warehouse. As the development of integrated systems requires a long period of time and to enable the ESS members to continue using each other's experience after the end of the MEETS programme, Eurostat and part of the ESSnet have created the centre of competence for data warehousing.

[Data warehousing and data linking on CROS portal](#)

Deliverables on CROS portal:

[Project period 1 \(4/10/2010 – 3/10/2011\)](#)

[Project period 2 \(4/10/2011 – 3/10/2013\)](#)

Further links:

[Overall handbook on how to set up a statistical data warehouse](#)

[Final report](#)

Methodology for modern business statistics

The ESSnet on “Methodology for modern business statistics”(MEMOBUST) set up in 2010 provided methodological guidance to support the modernisation and integration of business statistics in the ESS. In addition to methodological developments concerning specific production steps (design, data collection and estimation), the project summarised the body of business statistics methods in the coherent framework of an electronic handbook. The project has also reused work done by previous projects. The handbook will serve in the future as a reference work both for subject matter statisticians and methodologists. It can also be used as basis for training. A possible follow-up by a centre of competence is under consideration.

[Methodology for modern business statistics on CROS portal](#)

Deliverables on CROS portal:

[Handbook on Methodology for Modern Business Statistics](#)

Further links:

Background material: [Handbook on design and implementation of business surveys \(1998\)](#)

Linking of microdata on international sourcing (global value chains)

The ESSnet on Measuring Global Value Chains (ESSnet GVC) consisted of 6 work packages:

1. [Development of indicators on economic globalisation](#)

In this work package three sets of indicators are being developed: [main indicators](#) (country level), [supplemental indicators](#) (breakdowns of the main indicators available in the ESS) and experimental indicators (breakdowns not available in the ESS but resulting from MicroData Linking – not yet published).

2. Survey on global value chains/international sourcing

This work updated the previous survey on international sourcing and its guidelines and gave methodological support to the countries carrying out the survey. This resulted in a [new survey](#) and [accompanying definitions and guidelines](#).

3. Microdata linking (MDL)

This project developed a methodology and computer code for linking data from structural business statistics, foreign affiliate statistics, international trade, research and development (R & D) and global value chains/international sourcing and produced input for the experimental indicators mentioned above.

4. Linking of inward and outward foreign affiliate statistics (FATS) with business registers

The goal of this project was to match inward [FATS](#) of countries with the corresponding outward FATS data. Possible reasons for non-matching were analysed and suggestions for improvements were made. [The results \(pdf\)](#) were presented in the Copenhagen workshop mentioned below.

5. Dissemination of the results of the work packages

Apart from the reports mentioned above, an [article on International sourcing of business functions](#) has been published. In 2014 three or four more articles will be published that can be accessed from the [CROS-portal on Global Value Chains](#) where also a [complete list of deliverables](#) can be found.

6. Co-ordination, administration and organisation of meetings/seminars/workshops

This included not only the organisation of the taskforces and meetings of the steering groups but also the organisation of and participation in several workshops. This included the presentation of two articles for the ISI World Statistics congress 2013 in Hong Kong on [Measuring International Organisation of Enterprises and Sourcing of Business Functions \(pdf\)](#) and [A measurement framework and a narrative on global value chains and economic globalization \(pdf\)](#). Among the workshops organised were [Europe in a globalised world \(pdf\)](#) (Copenhagen - December 2013), [Global Value Chains and economic globalisation](#) (Dublin – April 2013) and a [Eurostat workshop on Global Value Chains](#) (Luxembourg October 2012).

Another achievement of the ESSnet GVC has been the publication of a report by Dr. Timothy Sturgeon of the Massachusetts Institute of Technology titled [Global Value Chains and Economic Globalization - Towards a New Measurement Framework \(pdf\)](#) which makes an assessment of the data-gaps related to Global Value Chains and International Sourcing and provides a vision for improving the statistics on this subject.

Linking microdata on external trade and business statistics

In 2009 the project on data linking of trade and business statistics used an external study to develop the methodological framework producing statistical indicators on external trade by business characteristics, and pilot data collection tested its feasibility. In 2013 ESS members developed and compiled an extended set of indicators based on trade and business microdata. The new indicators will be included in the TEC (trade by enterprise characteristics) database. A compilers' guide for the production of statistics on international trade by enterprise characteristics based on the linkage between trade data and business register information is available. In addition, a first set of trade by enterprise characteristics indicators for services was developed.

Linking of microdata on ICT usage

ESSnet on linking of microdata on ICT usage (ESSLimit, 2010-2012)

The methodology for linking of microdata on ICT usage builds on the [Eurostat ICT Impacts Project](#) (also known as the Feasibility Study), carried out in 2006-2008. The Feasibility Study developed a Distributed Microdata (DMD) approach and tested it on linked data (with a main focus on the ICT usage) provided by 13 National Statistical Offices for the year 2001-2005. The [ESSnet on Linking of Microdata on ICT usage, ESSLimit](#) (2010-2012) was launched with the objective to address the main methodological issues revealed by the Feasibility Study and to explore the use and impact of ICT in the business sector. The Project involved 15 National statistical offices and extended the previous project by both including more recent years and adding new data dimensions (mainly from the Community Innovation Survey) to the linked data. The main achievements of the Project are:

- setting up an infrastructure for DMD analysis;
- harmonisation of the national microdata;
- generation of linked microdata at national level;
- production of metadata at industry level across multiple countries and time periods for data warehousing purposes;
- analysis of topics pertaining to seven priority areas of [Digital Agenda for Europe](#) ;
- a study on survey methodologies to improve quality of linked [datasets](#) and a protocol on access to partially confidential data.

The approach developed permits the production of indicators comparable across countries, and auditable back to source data. Moreover, it allows the generation of data which can be used for analysis of performance differences in ICT use across countries and industries. It prepared the grounds for making the micro-aggregated dataset (which is an output of the data linking process and the analysis of the linked datasets) available for research purposes via the safe centre facilities of Eurostat. Within the project, a cross-country dataset was built from aggregation of comparable enterprise-level data at a relatively disaggregated industry level across multiple countries and time periods. A public version of this dataset can be downloaded from the link below.

The work on survey strategies was used as an input for the coordination and harmonisation of business statistics within the Framework Integrating Business Statistics (FRIBS).

[ESSLimit on CROS portal](#)

Deliverables on CROS portal:

[Final Report](#)

[Annexes \(data description\)](#)

[Micro-aggregated data](#)

ESSnet on linking of microdata to analyse ICT impact (ESSLait, 2013)

The [ESSnet on linking of microdata to analyse ICT impact \(ESSLai\)](#) built on its predecessor, the ESSLimit Project (2010-2012), and had a general scope i) to apply and improve the methodology for data linking and ICT impact analysis that was developed in the ESSLimit Project and the ICT Feasibility Study (see below), and ii) to generate micro-aggregate datasets for future use. The earlier projects demonstrated that a wealth of information can be extracted by microdata linking, through which information already available can be analysed in completely new ways. This final phase of ICT impacts work fits well with the goals of the [MEETS programme](#) (i.e. efficient production of statistics and secondary use of data) while the analytical work relates to the themes of the [Digital Agenda for Europe](#).

The project involved partners from 14 European statistical offices, supported by academic advisors. It used the general infrastructure developed by its predecessor projects to link and coordinate the data management in the European statistical offices. This infrastructure enables a harmonised approach to analysing the impact of ICT usage by firms through the Distributed Microdata (DMD) approach. A common protocol is used to extract micro-aggregated information from each country's firm-level datasets. This involves the linking of firm-level datasets by participating statistical offices, and the subsequent application of a common software tailored to extract the indicators and statistical data (means, distributions, etc) from the data. This approach guarantees the cross-country comparability of results to the highest possible degree while still allowing information on underlying distributions and correlations to be obtained without impairing national rules of confidentiality. Moreover, the infrastructure allows external researchers to run their own tests on data: harmonised microdata onsite at national statistical offices enable the easy implementation of additional analyses through the writing of analytical add-on modules for the code.

[ESSLait on CROS portal](#)

Deliverables on CROS portal:

[Final report](#)

[Description of the micro moments database and research infrastructure](#)

[Description of the metadata repository](#)

[Micro-aggregated data](#)

Making better use of data that already exist in the economy (Action 3.2)

Statistical information is sometimes collected twice: first for administrative purposes, such as taxes, and then for statistical purposes, in surveys. Two projects were launched to avoid such a double burden.

Use of administrative data

The ESSnet on the use of administrative and accounts data, which was launched in 2009, investigated the practical issues related to the use of these data for business statistics purposes. The main results achieved concern the preparation of the overview of national practices on the use of administrative data, the description of the methods used for estimation of incomplete data sets when using administrative data for short-term statistics, and the production of a list of indicators for assessing the quality of business statistics based on administrative data. In addition, the ESSnet provided information on links from statistical characteristics to the International Accounting Standards (IAS)/International Financial Reporting Standards (IFRS) and EU accounting directives.

[Use of administrative data on CROS portal](#)

Deliverables on CROS portal:

- [Project period 1 \(16/09/2009 to 31/03/2010\)](#)
- [Project period 2 \(28/04/2010 to 30/06/2011\)](#)
- [Project period 3 \(01/07/2011 to 31/12/2013\)](#)

Using the internet as a data source for official statistics

ICT and the internet are generating huge amounts of data with the potential to be exploited as statistical data. In 2013, Eurostat launched a project to assess the feasibility of employing modern methodologies and indicators for collecting high quality statistics from non-traditional sources such as the Internet or other big data sources. The experiences were summarised in a preliminary handbook which can be applied by NSIs. Big data repositories were also identified and their potential for official statistics analysed. This included negotiations with big data owners on conditions for data usage by NSIs and development of criteria for assessing required quality aspects. The results of the project will contribute to a broader initiative from the ESS on “Big Data and Official Statistics” .

Better data extraction, transmission and treatment tools

Action 3.3: Developing tools for the more efficient extraction, transmission and treatment of data

New ICT offer opportunities for simplified reporting. This may be achieved by using company accounts and other financial reports drawn up according to international accounting standards, and appropriate technical standards for such reports.

Facilitation of data transfer from enterprises to NSIs, Accountancy data

Grants aided national statistical institutes to implement online data collection and electronic questionnaires, and conversion tables between GAAP ('generally accepted accounting principles') and statistical characteristics and XBRL (Extensible business reporting language).

Use of customs data (Extrastat)

Making better use of customs data for compiling statistics on the trading of goods with non-member countries (Extrastat)

The project “Making better use of customs data in external trade statistics (Extrastat)” helped ESS members to adapt their data collections systems to the new customs systems of the Modernised Customs Code.

See also

- [MEETS programme - results](#) (online publication)

Dedicated section

- [Structural business statistics](#)

Publications

- [External study on detail evaluation of the legal acts in the areas of statistics which were identified by member states as areas to revision](#)

Legislation

- [Communication COM\(2009\) 404](#) on the production method of EU statistics: a vision for the next decade
- [Decision 1297/2008/EC](#) of 16 December 2008 on a Programme for the Modernisation of European Enterprise and Trade Statistics (MEETS)
- [MEETS project overview, key results and follow-up](#) (downloadable Word document)
- [Modernisation of European Enterprise and Trade Statistics \(MEETS\)](#)
- [Report COM\(2010\) 813](#) on the implementation of Decision 1297/2008/EC of 16 December 2008 on a Programme for the Modernisation of European Enterprise and Trade Statistics (MEETS)

External links

- [Cros portal](#)
- [EuroGroups Register website](#)