# Data requirements for business statistics

### **Preface**

This article outlines the updated set of data requirements for business statistics which are expected to become applicable in 2018-2019.

It is part of the online <u>European Business Statistics Manual</u>, which provides a comprehensive description of methodologies and background information on how these data are produced within the European Statistical System (ESS).

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#### 1. Introduction

This article summarises data requirements in the field of business statistics. It also explains how the current structure of data requirements can be linked to the new integrated structure due to come into play once FRIBS, the new legal act on business statistics, has been adopted.

Current data requirements are broken down into the following domains:

- 1. Structural business statistics (SBS)
- 2. Business demography (BD)
- 3. Short-term business statistics (STS)
- 4. Foreign affiliates statistics (FATS)
- 5. Information Society statistics (ICT)
- 6. Research and development (R&D) and innovation statistics (IS)

- 7. International Trade in Goods statistics (ITGS)
- 8. International Trade in Services statistics (ITSS)
- 9. Production of industrial goods (ProdCom).

For each of these domains, the statistics currently available are summarised in section 2, along with the new data requirements to be used once the new **Framework Regulation Integrating Business Statistics (FRIBS)**<sup>1</sup> has been adopted, which is expected to happen in 2018-2019. As part of the legislative procedure, end users have been consulted intensively on the new proposals for the Regulation, and their response has been very positive (see <u>Summary report on the open public consultations on FRIBS</u>). Please note, however, that the new data requirements proposed by the Commission may still be subject to change during the ongoing legislative procedures to adopt the new legal act.

Section 3 describes the integrated approach to the data requirements under the new FRIBS Regulation. These provisions are classified by their main subject area and topics. The interlinking of current domains (see above) with these main subject areas and topics is shown in figure 1 of the section.

The overview of legal data provisions in section 3, in the form of uniformly structured tables, does not imply that each table is transmitted by EU countries in that exact form. For transmission purposes, some tables may be split up into one or more data sets or may be combined with others. For a general description regarding transmission rules, please see data transmission (EDAMIS, SDMX). The complete technical details of data transmission will be/are specified in the technical compilation guide, which is expected to be drawn up during 2017-2018.

# 2 Current and new data requirements by domain

### 2.1 Structural Business Statistics (SBS)

The basic variables on which SBS currently provide data are: turnover, production value, purchases, value added, stocks, wages and salaries, investments, hours worked and persons employed. The data are broken down by type of economic activity (classification NACE Rev.2) and employment size class, and they should be delivered to Eurostat within 18 months of the end of the reference year. Regional data (NUTS II level) are also provided for the variables 'wages and salaries' and persons employed at 2-digit level of economic activity (NACE Rev.2). Preliminary data are delivered to Eurostat within 10 months of the end of the reference period, for a limited number of variables (turnover, persons employed) compared to the final data. Besides this essential core data on business performance, structural business statistics also provide additional specialised variables used for specific policy purposes. *More information.....* 

From the user perspective, Structural Business Statistics (SBS) currently have the following shortcomings:

- incomplete coverage of the service sector (no sections on education; human health and social work activities; arts, entertainment and recreation; or other personal service activities)
- no preliminary data on small and medium-sized enterprises (SMEs)

<sup>1</sup> The official title of FRIBS is 'Regulation of the European Parliament and of the Council on European business statistics'. The official publication is divided into two parts: <u>Basic Act (without annexes)</u> and the <u>Annexes</u>.

- reporting on the financial sector is not fully harmonised with that on other business sectors and is incomplete in terms of sector coverage
- information on global value chains and international sourcing, and how these affect business performance in the context of globalisation, is also only partially covered (see <u>international sourcing</u> pilot studies), given the lack of a relevant legal basis
- businesses and statistical authorities need to simplify measures so as to reduce respondents' costs and burden.

As compared to existing data requirements, the proposals set out in the FRIBS Regulation are designed to achieve the following changes:

- a) Improve the *service coverage* of all Structural Business Statistics (SBS) by extending the NACE Rev. 2 activity breakdown to the following Sections: P (Education), Q (Human health and social work activities), R (Arts, entertainment and recreation) and S96 (Other personal service activities);
- b) Extend the coverage of variables *investment in machinery and equipment* and *hours worked* for service sectors;
- c) Provide provisional *data on SMEs* (i.e. by size class) for three key variables (number of active enterprises, turnover, persons employed) within 10 months of the reference period;
- d) Restructure data requirements for the *Financial and insurance activities* sector by introducing the standard variables of SBS, deleting the sector-specific variables and extending coverage to all subsectors, such as financial leasing, granting mortgage credit, granting consumer credit and similar financial entities and auxiliary activities;
- e) Introduce new triennial statistics on global value chains and international sourcing, covering information on the group structure of enterprises, employment by business function, domestic and international sourcing and back sourcing of business functions, motives and barriers for sourcing, and the international organisation of activities in the foreign affiliates. These data will be broken down by NACE, size class and region, in line with the other data sets on business performance;
- f) Several simplifying measures:
  - Deletion of data on turnover breakdown by product for trade sector;
  - Deletion of data on environmental protection expenditure;
  - Decreasing the level of detail (NACE 2 digit) for variables specifically needed for national accounts;
  - Extension of the 1 %-rule application to specific data sets of SBS (except the ones on business
    demography), meaning that national data cells representing under 1 % of the EU-total, in
    terms of employment and turnover, will not have to be delivered to Eurostat.

Taking into account the above changes, the full set of data requirements in this domain will cover the following business statistics:

- On activities of enterprises: these data cover the number of active enterprises, number of employees and self-employed persons, employee benefits expense of which wages and salaries, hours worked, purchases of goods and services, net turnover, gross margin on good for resale, value of output, value added, gross operating surplus and gross investments. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-datarequirements.pdf#page=12">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-datarequirements.pdf#page=12</a>
- On activities of enterprises broken down by size class, but with slightly less variables. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=16">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=16</a>

- On purchases by enterprises, covering purchases of goods and services for resale, expenses of services provided through agency workers, expenses of long-term rental and operational leasing, purchases of energy, and payments to contractors. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=50">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=50</a>
- 4. On changes in stocks of enterprises, covering changes in stocks of goods, changes in stocks of finished products and work-in-progress, and changes in stocks of goods for resale. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=53">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=53</a>
- 5. On certain activities of the enterprises covering breakdown of net turnover by product type and by residence of client. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=55">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=55</a>
- 6. On broad activity regroupings type of net turnover breakdown of enterprises. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=58">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=58</a>
- 7. On type of turnover breakdown of enterprises covering data of net turnover from principal activity, and income from sub-contracting. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=60">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=60</a>
- On investments in tangible non-current assets by enterprises, covering gross investment in land, in the acquisition of existing buildings and structures, in construction and alterations to improve buildings, and in machinery and equipment. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=62">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=62</a>
- 9. On investment in intangible non-current assets, notably investment through purchasing software. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=65">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=65</a>
- 10. On global value chains, covering information on the group structure of the enterprise and on employment, sourcing and organisation by business functions. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Dynamic-data-requirements.pdf#page=1">http://ec.europa.eu/eurostat/documents/54610/7779382/Dynamic-data-requirements.pdf#page=1</a>.
- 11. Regional business statistics on local units: regional data on the number of local units and their number of employees and self-employed persons, and wages and salaries. See:

  <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=66">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=66</a>

The data required under points 1 to 10 should be based on Enterprises. Data reported under point 11 should take the Local Unit as statistical unit.

## 2.2 Business Demography statistics (BD)

Business demography statistics currently provide annual data on the number of: active population of enterprises, enterprises with at least one employee, births, survivals, deaths high-growths and related variables on employment. These data are broken down by economic activity (NACE), employee size class and legal form. They are delivered to Eurostat within the following months after the end of the reference year T:

- T+12 preliminary high-growth enterprises,
- T+18 active, birth and survival enterprises; preliminary death enterprises; final high-growth enterprises,

- T+20 active, birth and survival enterprises with at least one employee; preliminary death enterprises with at least one employee,
- T+30 final death enterprises,
- T+32 final death enterprises with at least one employee.

#### *More information....*

From the user's perspective, Business Demography statistics currently display certain shortcomings. Coverage of the service sector is incomplete (the sections missing are education; human health and social work activities; arts, entertainment and recreation; and other personal service activities); preliminary data on small and medium-sized enterprises (SMEs); and regional and quarterly data.

As compared to existing data requirements, the proposals set out in the FRIBS Regulation comprise the following changes:

- a) Improving the *service coverage* of SBS by extending the NACE Rev. 2 activity breakdown to the following sections: P (education), Q (human health and social work activities), R (arts, entertainment and recreation) and S96 (other personal service activities)
- b) Enriching *business demography* data with breakdowns by region, quarterly data on registrations and bankruptcies, and data on young high-growth enterprises ('gazelles').

Taking into account the above changes, the full set of data requirements in this domain will cover the following statistics:

- Country-level business statistics on demographic events for enterprises: these data on number of enterprises, and number of employees and self-employed persons refer to enterprise births, deaths and survivals and to specific groups, conditional on having at least one employee, on having the first employee, or on having no employees any more. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=21">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=21</a>
- 2. Number of active enterprises as part of the country-level business statistics on activities of enterprises (as a whole and broken down by size classes or legal form): described under subsection 2.1., points 1 and 2
- Country-level business statistics on high-growth enterprises: annual data on the number of young high-growth enterprises and the number of their employees. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=27">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=27</a>
- 4. Short-term business statistics on business population: quarterly data on registrations and bankruptcies. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=1">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=1</a>
- Regional business statistics on enterprises: regional data on the number of enterprise births, deaths, and survivals and on specific groups of enterprises (as described in point 1), plus their number of employees and self-employed persons. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=67">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=67</a>

The data required under points 1 to 3 and 5 should be based on Enterprises. Data reported under point 4 should be based on legal units.

### 2.3 Short-term statistics (STS)

Short-term business statistics currently provide monthly and quarterly information on the business cycle of European economies, covering industry, construction, trade and business services. The business cycle is described using indicators such as:

- production/volume index
- turnover
- producer prices and import prices
- building permits
- building costs
- labour input variables (i.e. number of persons employed, hours worked, and wages and salaries).

These indicators are an immediate measure of the business cycle and provide the necessary input for the national accounts. The concepts and definitions used in short-term statistics are therefore closely linked to those used in the national accounts. *More information* ....

Currently, the service and wholesale sectors are not adequately covered by comparison with industry and construction. In particular, an early indicator of the business cycle in real terms (volume) is missing for the service and wholesale sectors, while producer price indices in services are covered only partially. Moreover, there is no obligation to submit seasonally adjusted data under the current STS regulation (although many EU countries already provide time series corrected for seasonal and calendar influences). In addition, some data transmission deadlines need to be tightened up to ensure that data are available more promptly. The first reference period for the new data requirements in STS-FRIBS will be January or the first quarter of 2020.

The proposals set out in the FRIBS Regulation entail the following changes relative to current data requirements:

- a) Introducing a monthly production index for the STS services sectors (NACE H to N with the exception of K, M70 1, M72, and M75; at 2-digit level). For the introduction of this ISP, changes in the requirements for the service turnover and for SPPIs are necessary (see points b and c);
- b) Changing the periodicity of the service turnover indices are produced from quarterly to monthly, including service industries L68 , N77 and complete N81;
- c) Extending the NACE coverage of quarterly service producer price indices or other deflators so as to align it with the scope of the turnover and service production indices (at the same time service producer prices will change from B2B to B2A LL prices);
- d) Introducing a monthly sales volume index for the wholesale sector and the trade and repair of motor vehicles at 2-digit level for all countries, and 3-digit level for medium-sized and large Member States);
- e) Changing the periodicity for the turnover indices in the wholesale sector and the trade and repair of motor vehicles are produced from quarterly to monthly;
- f) Extending the coverage of *labour variables* for the service sectors so as to align it with the coverage of the production and turnover indicators, as described above;
- g) Introducing the submission of *calendar adjusted* data where relevant (i.e. production/sales volume, turnover, hours worked, gross wages and salaries, and building permits); in addition, introducing the transmission of *seasonal adjusted data for Principal European Economic Indicators* (*PEEIs*) (except for price indicators);
- h) Introducing a single producer price index for new residential buildings, to replace the 3 construction costs variables;

- i) Improving the *timeliness* of the following variables:
  - Production and turnover index of industry: reduction of the deadline by 15 days for medium and small EU countries to 1 month and 10 days for the production index and to 2 months for the turnover index;
  - Production index of construction: for medium-sized EU countries, a reduction of the deadline by 15 days to 1 month and 15 days. For this index, the frequency is changed from quarterly to monthly (the latter does not apply to Ireland or Greece);
  - Building permits: reduction of the deadline for small and medium-sized EU countries by 15 days to 3 months;
  - Volume of sales and turnover of retail trade: reduction of the deadline by 15 days to 2 months for data produced on NACE 3- and 4-digit level;
  - Industrial turnover split into domestic/euro area/non-euro area: reduction of the deadline by 15 days to 2 months for small and medium-sized EU countries;
  - Industrial producer prices: reduction of the deadline for small and medium-sized Member States by 15 days to 1 month; reduction of the deadline for large EU countries by 15 days to 1 month for data on NACE 3- and 4-digit level;
  - Import prices: reduction of the deadline for small and medium-sized EU countries by 15 days to 1 month and 15 days.

Taking into account the above changes, the full set of data requirements in this domain will cover the following short-term business statistics:

- Production (volume): monthly indices (except for Section F small countries: these are quarterly), unadjusted, calendar adjusted and seasonally adjusted. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=7">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=7</a>
- 2. Volume of sales: monthly volume indices for retail trade, unadjusted, calendar adjusted and seasonally adjusted. See:

http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=8

- 3. Net turnover: monthly indices, unadjusted, calendar adjusted and seasonally adjusted (not all indices). See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=9">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=9</a>
- 4. Employment: quarterly indices unadjusted. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=2">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=2</a>
- 5. Hours worked and wages and salaries: quarterly indices, unadjusted and calendar adjusted. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=3">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=3</a>
- 6. Producer prices: monthly and quarterly indices, unadjusted. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=5">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=5</a>
- 7. Import prices: monthly indices, unadjusted. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=4">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=4</a>
- Building permits: quarterly indices, unadjusted, calendar adjusted and seasonally adjusted.
   Data on number of dwellings and square metres. See:
   <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf</a>#page=11

The data required under points 1 to 7 should be based on KAUs. Data reported under point 8 should be based on building permits.

## 2.4 Foreign affiliates statistics (FATS)

Foreign affiliates statistics currently cover annual data on the economic performance of, on the one hand, foreign affiliates resident in the compiling country but controlled by residents of another country (inward FATS) and, on the other hand, the foreign affiliates abroad controlled by residents of the compiling country (outward FATS). Both types of FATS data are detailed by country (country of control for inward FATS and country of residence of the foreign affiliate for outward FATS) and by economic activity (NACE Rev.2 classification). Data are transmitted to Eurostat within 20 months of the end of the reference year. *More information* ...

Inward FATS can be seen as a specific subset of the general annual statistics on business performance described in section 1, with the same activity coverage and core variables: number of enterprises, turnover, production value, value added, purchases, personnel costs, persons employed, investment and, biennially, R&D expenditure and R&D personnel. Three of the core variables are also covered by outward FATS (number of enterprises, turnover and persons employed), with complete NACE coverage of industry, trade and services.

Currently, outward FATS do not necessarily include the foreign affiliates that are resident in other EU countries and inward FATS provide more restricted coverage of the service sector, as they do not include sections P, Q, R or S96. Moreover, businesses and statistical authorities would need to further harmonise and simplify these statistics, to cut the costs incurred by respondents and the burden on them.

The proposals set out in the FRIBS Regulation entail the following changes relative to current data requirements:

- a) Introducing 2 new variables for outward FATS: personnel costs and gross investment in tangible goods;
- b) Extending the *coverage of outward FATS* by including all foreign EU affiliates, in addition to the current coverage of foreign *non-EU* affiliates;
- c) Extending the *coverage of outward FATS* by compiling data on all foreign-controlling enterprises and domestic affiliates controlled by residents of the compiling country regarding the three main variables number of enterprises, turnover and persons employed;
- d) Reducing the detailed NACE breakdown in outward FATS by applying a more aggregated activity classification used in National Accounts (A38), thereby reducing the number of categories from 74 to 41.
- e) Extending the NACE coverage of inward FATS to the following sections: P (education), Q (human health and social work activities), R (arts, entertainment and recreation), S95 (repair of computers and personal and household goods (already provided on a legally voluntary basis)) and S96 (other personal service activities);
- f) Reducing the detailed NACE breakdown in inward FATS by applying the more aggregated activity classification used in National Accounts (A38), thereby reducing the number of categories from 127 to 41.

Taking into account the above changes, the full set of data requirements in this domain cover the following annual country-level business statistics:

- Annual country-level business statistics on foreign-controlled enterprises: data on the number of foreign-controlled enterprises, of their employees and self-employed persons, employee benefits expense, their R&D expenditure and R&D personnel, and their purchases, net turnover, value of output, value added and investment in tangible non-current assets.
   See <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=28">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=28</a>
- Annual country-level business statistics on foreign-controlling enterprises and domestic
  affiliates active in the reporting country: data on the number of foreign-controlling
  enterprises and domestic affiliates, the number of their employees and self-employed
  persons, and their net turnover. See:
   <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=31">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=31</a>
- Statistics on international activities control by institutional units resident in the reporting country over enterprises abroad, covering data on the number of enterprises, number of employees and self-employed persons, employee benefits expense, investments in tangible non-current-assets, and net turnover. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=73">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=73</a>

The data required under points 1 to 3 should be based on Enterprises.

### 2.5 Information society statistics (ICT)

*Information society statistics* are annual statistics currently providing data on a varying number of ICT characteristics, including:

- ICT systems
- internet-related aspects
- e-commerce and e-business
- ICT skills
- ICT security and trust.

The list of variables describing these characteristics can vary from year to year. The deadline for providing data is 5 October of the reference year. *More information* ...

Information society statistics could be further aligned with those on business performance (see section A) as regards their coverage and breakdowns into NACE and size-classes. In most cases, the resulting additional data requirements will be optional.

The proposals set out in the FRIBS Regulation entail the following changes relative to current data requirements:

Completing the coverage of enterprises performing professional, scientific and technical activities (NACE M) with those performing veterinary activities (NACE 75):

a) Introducing the optional coverage and transmission of data for enterprises with 0-9 persons employed (apart from the financial sector, NACE K), correcting the previous optional coverage for enterprises with 1-9 persons employed, and discontinuing the breakdown into enterprises with 1-4 persons employed and with 5-9 persons employed;

**b)** Introducing the coverage of enterprises in a few additional detailed groupings of 2-digit NACE for the calculation of EU aggregates only (national aggregates will not be published separately). The aim is alignment with the A\*38 breakdown.

Taking into account the above changes, the full set of data requirements in this domain cover the following statistics:

- 1. ICT usage and e-commerce, covering:
  - information on ICT systems and their use in enterprises
  - use of the internet and other electronic networks
  - e-commerce
  - e-business processes and organisational aspects
  - ICT competence and need for ICT skills
  - barriers to the use of ICT, internet, etc.
  - access to and use of technologies providing the ability to connect to the internet or other networks.

See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Dynamic-data-requirements.pdf">http://ec.europa.eu/eurostat/documents/54610/7779382/Dynamic-data-requirements.pdf</a>#page=7

The data required under point 1 should be based on Enterprises.

## 2.6 Research and Development (R&D) and Innovation statistics (IS)

Current Research and Development (R&D) statistics show the scale of R&D in terms of numbers of people (R&D personnel, researchers) and expenditure, GBARD<sup>2</sup> and national public funding to transnationally coordinated R&D. R&D data are broken down by:

- sectors of performance
- economic activity (NACE Rev.2)
- size class
- fields of Research and Development (FORD)
- regions (NUTS 2 level).

R&D expenditure data are also broken down by:

- source of funds
- type of costs
- type of R&D
- socio-economic objectives.

R&D personnel data are further broken down by:

- occupation
- qualification
- sex
- citizenship
- age groups.

<sup>&</sup>lt;sup>2</sup>Government budget allocations for research and development (GBARD).

Preliminary R&D data on a limited number of variables/breakdowns are to be provided within 10 months of the reference period and final data within 18 months of the reference period. Preliminary GBARD data are provided within 6 months of the end of the reference year, and final GBARD data within 12 months.

Innovation statistics (IS) currently include the results of the Community Innovation Survey (CIS), a biennial survey carried out across the European Union, some EFTA countries and EU candidate countries. It collects data from enterprises with 10 or more employees, in industry and service sectors. The indicators refer to the innovativeness of enterprises, the different types of innovation implemented and various aspects of the development of an innovation, including objectives, sources of information, public funding or expenditure on innovation. The Community Innovation Survey provides statistics broken down by countries, types of innovators, economic activities (NACE Rev.2) and size classes. CIS tabulated data must be submitted by 18 months after the end of the reference period.

#### More information ... on R&D and IS

At the moment, the legal obligation does not include data production on R&D for each of the NACE sections, since some of the sections are only reported as groupings (D+E; O+P and S+T+U). The current breakdown of R&D data by economic activity (NACE Rev.2) is not fully in line with the reference frame A\*38 level of breakdown. Regarding innovation statistics, consistency between the targeted NACE coverage is already guaranteed at sectional level. Only groups of NACE divisions should be added or removed to fit the level of breakdown stipulated in reference frame A\*38.

The size class breakdown variable currently applied for R&D and for Innovation statistics ('number of employees') differs from the size class breakdown variable commonly used in other areas of business statistics ('number of persons employed').

The proposals set out in the FRIBS Regulation entail the following changes relative to current data requirements:<sup>3</sup>

- a) Ensuring R&D data production at NACE section level reporting on existing section groupings (D+E; O+P and S+T+U) and in addition by splitting them into their components (D; E; O; P; S; T; U);
- b) Aligning the breakdown of R&D data by economic activity (NACE Rev.2) to fit into the reference frame A\*38 level of breakdown;
- c) Aligning the size class breakdown for R&D statistics with harmonised size class level (2) for FRIBS (0-9, 10-49, 50-249, 250+ persons employed);
- d) Changing the size class breakdown variable for R&D statistics from ('number of employees') to ('number of persons employed');
- e) Simplification measure for R&D statistics: reducing the number of the size class groups from 6 (0, 1-9, 10-49, 50-249, 250-499, 500+) to 4r (0-9, 10-49, 50-249, 250+);
- f) Aligning the breakdown of innovation statistics by economic activity (NACE Rev.2) to fit into the reference frame A\*38 level of breakdown;
- g) Changing the size class breakdown variable for Innovation statistics from ('number of employees') to ('number of persons employed').

<sup>3</sup> Against the background of the current implementation of the Frascati 2015 Manual and the current review of the Oslo Manual, Eurostat is currently conducting an intensive consultation of EU countries in the STI Task Forces on R&D and the CIS. The idea is that this should lead to a mature proposal to the SIT Working Group in November 2017. This is why the description in this subsection of data requirements for R&D and innovation statistics may be amended subsequently.

Taking into account the above changes, the full set of data requirements in this domain cover the following statistics:

- Country-level and regional business statistics on intramural R&D expenditure: annual data in terms of value covering all NACE Sections A to U. For country-level data requirements, see: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=38">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=70</a>
- Country-level and regional business statistics on employment in R&D: annual data on numbers of R&D personnel and on researchers covering all NACE sections A to U. For country-level data requirements, see: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=42">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=71</a>
- Country-level business statistics on policy-funded R&D: annual data on Government budget allocations for research and development (GBARD) and on national public funding to transitionally coordinated R&D, covering all NACE sections A-U. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=48">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=48</a>
- 4. Innovation statistics, covering innovation activities, product innovations and resulting turnover, type of cooperation for innovation, related expenditures, type of developers, objectives, sources of information and hampering factors. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Dynamic-data-requirements.pdf#page=4">http://ec.europa.eu/eurostat/documents/54610/7779382/Dynamic-data-requirements.pdf#page=4</a>

The data required under points 1 and 2 should be based on Enterprises for the business enterprise sector and on Institutional Units for the other sectors. Data required under point 3 should use the Institutional Unit. The data reported under point 4 should be based on Enterprises.

### 2.7 International Trade in Goods Statistics (ITGS)

Current International Trade in Goods statistics measure the value and the quantity of goods traded between EU countries (intra-EU trade) and between EU and non-EU countries (extra-EU trade) at monthly intervals. The data are broken down by import/export, country, commodity, the nature of the transaction, and, in the case of extra-EU trade, by preferential treatment of imports and mode of transport as well. The main aggregates and detailed data on extra-EU trade are provided within 40 days of the end of the reference month, while detailed data on intra-EU trade are provided within 70 days of the end of the reference month. *More information* ...

Besides detailed high-frequency trade data, the ITGS also produces various annual statistics on Trade by Enterprise characteristics (TEC). TEC data are produced without any additional burden on businesses by combining existing ITGS micro-data with enterprise characteristics. This is done by linking intra and extra-EU trade micro-data with Business Register data. The resulting trade by activity datasets are further broken down by size classes, type of trader, commodity, and concentration of trade, partner countries, and number of partner countries. The deadline for submitting TEC data falls 18 months after the reference year. *More information ...* 

On a biennial basis, ITGS data on Trade by invoicing currency (TIC) are compiled by reusing existing monthly ITGS — Extra EU trade micro-data, broken down by the UN's international commodity classification (SITC) and invoicing currency. *More information* ...

At the moment, it would be relatively easy to extend the annual ITGS-TEC to include new datasets, without creating any additional burdens, on the basis of the micro-data linking between ITGS and the Business Register, which is already established. As regards data requirements, there are no plans to make any changes to ITGS, compared to the current situation.

The proposals set out in the FRIBS Regulation entail the following changes relative to current data requirements:

- a) Introducing 4 additional ITGS-TEC datasets which are currently collected on a voluntary basis:
  - (a) trade by activity, with more detailed levels of NACE
  - (b) trade by activity by type of control (domestically controlled versus foreign-controlled enterprises)
  - (c) trade by activity by exports intensity
  - (d) trade by activity by partner countries and size class.
- b) Improving the *timeliness of the ITGS-TEC data by providing a preliminary set of trade by activity* and by size class within 10 months of the end of the reference period.

Taking into account the above changes, the full set of data requirements in this domain cover the following statistics:

- Statistics on international activities Intra-EU imports and exports of goods detailed data including monthly data in value and quantity. See:
   <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=75">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=75</a>
- Statistics on international activities Extra-EU imports and exports of goods detailed data including monthly data in value and quantity. See:
   <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=77">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=77</a>
- Statistics on international activities imports and exports of goods aggregated data, including monthly data in value of intra-EU imports and exports of goods, and extra-EU imports and exports of goods. See:
   <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=80">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=80</a>
- 4. Statistics on international activities Extra-EU imports and exports of goods by invoicing currency. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=81">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=81</a>
- Country-level statistics on importing and exporting enterprises: annual data on the number of importing and exporting enterprises and the traded values. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=33">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=33</a>

For data required under points 1 to 4 the statistical unit is not applicable. Data reported under point 5 should be based on Enterprises.

### 2.8 International Trade in Services Statistics (ITSS)

International Trade in Services Statistics (ITSS) measure the annual value of services traded between EU countries as well as between EU and non-EU countries. These data are broken down by import/export/balance, partner country and services category. ITSS data are to be transmitted from countries within nine months, and published by Eurostat within a year, after the end of the reference year. The ITSS are part of the Balance of Payments statistics. Therefore, they follow the definitions of the Balance of Payments Manual-6th edition (BPM6) methodology. More information

At this stage the ITSS domain of the Framework Regulation Integrating Business Statistics (FRIBS) proposes no additional data requirements beyond existing ones. However, ITSS under FRIBS introduces an alternative data reporting, on annual and quarterly basis, of the trade in services by considering a pure business perspective (thereby excluding Travel and FISIM services) echoing the need for primary data on services trade. The FRIBS based ITSS definitions will, therefore, only include the primary business elements of trade in services excluding all adjustments and estimations linked to the accounting elements of the Balance of Payments framework. Moreover, an optional requirement for trade in services reporting according to CPA classification is also included in FRIBS. Finally, ITSS under FRIBS will propose some additional developments on ITSS in the form of pilot studies concerning Service Trade by Enterprise Characteristics (abbreviated to STEC) and Trade by Modes of Supply (abbreviated to MOS).

The full set of data requirements in this domain covers the following statistics on international activities:

- Annual data on imports and exports of services. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf</a>#page=82
- Quarterly data on imports and exports of services. See: <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=83">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=83</a>

For data required under points 1 to 2 the use of a statistical unit is not applicable.

### 2.9 Production of industrial goods (ProdCom)

PRODCOM is an EU survey that collects and publishes statistics on the value and quantity of industrial goods produced (mainly manufactures). The deadline for submitting data falls 6 months after the end of the reference year. <u>More information</u> ...

From the users' perspective, ProdCom has the following shortcoming:

Goods produced and sold currently include goods produced under subcontracting operations; data on the latter are not separately available.

The proposals set out in the FRIBS Regulation entail the following changes to current data requirements:

- a) Introducing a separate variable 'Production under subcontracted operations':
- b) Introducing the following *simplifying measure(s)*:

- The PRODCOM list will be kept stable for several years and updated only as often as is required to take account of technological change in the industrial environment and as driven by the related master nomenclatures (if NACE and the HS/CN classification are updated);
- Replacement of input-oriented by output-oriented requirements (e.g. deleting the 90 % coverage rule), to give NSIs more flexibility in setting up their surveys;
- Introduction of a 'Contribution to European totals only' (CETO) flag to reduce the quality requirements for small contributions (to EU totals) that do not have the reliability required for publication at national level.

Taking into account the above changes, the full set of data requirements in this domain cover the following annual country-based business statistics:

On manufactured goods covering sold production, production under subcontracted operations, and physical volume of actual production. See:
 <a href="http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=61">http://ec.europa.eu/eurostat/documents/54610/7779382/Detailed-data-requirements.pdf#page=61</a>

The data required under point 1 should be based on KAU.

# 3 Data requirements under FRIBS: an integrated approach

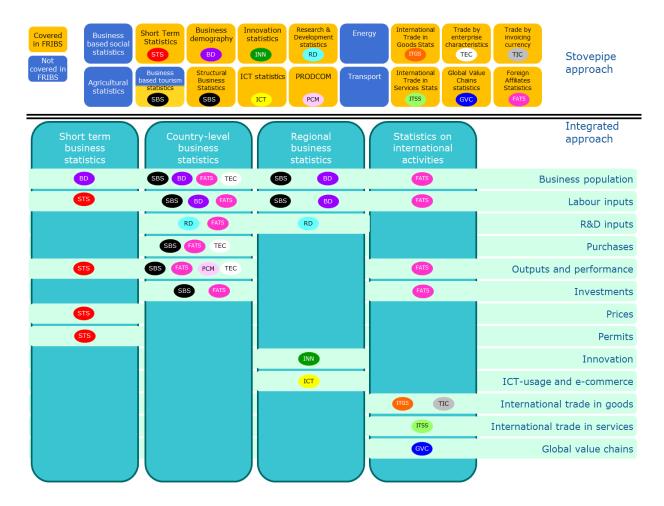
Data requirements of the European Business Statistics are currently covered by domain (see section 2). The new FRIBS legislation for European business statistics follows an *integrated approach* of main subject areas and key topics. Business statistics fall into 4 subject areas:

- short-term business statistics
- country-level business statistics
- regional business statistics
- statistics on international activities.

Key topics include business population, output and performance, and labour input. Data requirements under FRIBS are classified according to the integrated approach of subject area and topics, instead of a domain by domain description.

Figure 1 below shows how the integrated approach will include the current domains' data requirements.

Figure 1. Transposition of current domains (stove pipes) into FRIBS' integrated approach



A detailed mapping of current domains and FRIBS'\_subject areas, topics, detailed topics and variables can be found <a href="here">here</a>. The mapping includes hyperlinks to the detailed data requirements of FRIBS. The mapping excludes, however, 'dynamic topics', for which detailed data requirements are given separately:

- ICT usage and e-commerce
- innovation
- global value chains.

These are dealt with separately because their data requirements can be renewed for each period (under certain conditions).

The data requirement annexes mentioned above stipulate what data are to be supplied to Eurostat. Two articles on data transmission, <u>EDAMIS</u> and <u>SDMX</u>, explain the transmission process.

The above-mentioned overview of data requirements reflects statistical output, i.e. published data. There are also some data collections defined by FRIBS which, though not published, are an essential component of harmonised high-quality statistics entailing limited costs and burden: the Business Registers and EGR, the additional data required for Intrastat's microdata exchange and the weighting schemes of short-term business statistics. links will be added at a later stage>

The description of data requirements through an integrated approach in the legal text of FRIBS is a first step from stove pipes towards a more integrated system of European business statistics, using, where applicable, the same harmonised <u>classifications</u> and standard code lists, the same <u>statistical units</u>, and the same definitions of variables, which help make data more consistent across all domains of business statistics.

For a complete overview of definitions of variables, see the <u>FRIBS variables glossary</u>. This glossary will be populated during the second half of 2017. The harmonisation of cross-domain variables (i.e. variables shared by several domains of business statistics) means that the new definition may differ slightly from the current one: the glossary will clarify the difference in such cases.

In cases where the altered definition causes a significant break in series at national or and/or EU aggregate level, there will be special data flags to point out and explain the difference.

### 4. See also

Overview of methodologies of European business statistics: **EBS manual** 

Legal provisions related to the data requirements can be found in the following overview

Full description of data requirements: all except dynamic statistics and dynamic statistics

**Statistical units** 

Classifications

**EDAMIS** and **SDMX** 

Glossary of definitions of variables: FRIBS variables glossary

### **5. Further Eurostat information**

Data requirements of: <u>ICT usage and e-commerce; innovation; global value chains and other</u> business statistics under FRIBS.

Summary report on the open public consultations on FRIBS

# 6. External links

FRIBS ('Regulation of the European Parliament and of the Council on European business statistics') is divided into two parts: <u>Basic Act (without annexes)</u> and the <u>Annexes</u>.

#### 7. Contacts

For questions or comments on this chapter, please contact <a href="mailto:ESTAT-EBS-MANUAL@ec.europa.eu">ESTAT-EBS-MANUAL@ec.europa.eu</a>.