Eurostat 2017 Statistical Business Register User Survey

1. Introduction

The SBR quality – with regard to content, coverage, accuracy, timeliness, etc. – is determined by the degree the user needs are met. SBR users are statisticians and experts working in the business statistics or other statistical domains. In order to assess the gap between the information available in current statistical business registers and the information needed by users, Eurostat, in cooperation with the Member States developed a questionnaire and conducted a SBR user survey in 2017.

2. Data Quality Programme

The Data Quality Programme (DQP) for European statistical business registers was set-up in 2016. The overall objective of the DQP is to achieve substantial quality improvement for the network of SBRs, allowing the full achievement of the backbone role for the production of business statistics in the European Statistical System.

In line with the general ESS quality standards, the DQP is made of four main components that have to be followed cyclically each year. The improvement of SBR data quality is expected to be done continuously. The quality components to the SBR DQP are the following:

- Part A: Quality reporting or "as-is" state

- Part B: Quality targets or defining "to-be" state

- Part C: Quality assessment or assessing the gap between "to-be" and "as-is"

- Part D: Quality improvement or "reducing the gap"

Part A of the DQP settles a standardized quality and metadata reporting for national SBRs and EGR.

Part B specifies the quality targets to enable assessment of national SBRs and EGR frames throughout the entire production processes, related exchange processes and resulting outcomes. Currently, Eurostat evaluates the compliance of SBRs according to European legislation. It is foreseen to use also extended targets arising from SBRs user's requirements in the next DQP cycles.

Part C is addressed to quality assessment of national SBRs and EGR. By using standardized templates for the comparison of the AS-IS state against quality targets, the SBR quality is assessed annually with respect to the entire production processes, related exchange processes and resulting outcomes. The assessment is done for each quality target separately to identify concrete shortcomings. All results are documented in the assessment reports that are for internal purpose only.

Part D is dedicated to annual improvement procedure. This quality component is focused on continuous improvement of national SBR and EGR quality in order to reduce gap between "to-be" and "as-is" state defined by quality targets.

3. Eurostat 2017 SBR User Survey

In 2017 Eurostat, in cooperation with the Member States developed a questionnaire and conducted a SBR user survey. The SBR user consultation was organized in the framework of DQP and it was the first SBR user survey in the European Statistical System (ESS). Eurostat plans to have a regular SBR user consultation in order to define quality targets for statistical business registers based on user needs.

3.1 Objectives

The main goal of the SBR user consultation is to assess the gap between information available in statistical business registers (national SBR and EGR) and the information needed for SBR users. The quality of a SBR – with regard to content, coverage, accuracy, timeliness, etc. – is determined by the degree the user needs are met. SBR users are statisticians working in the statistical domains. Thus, the user needs generate quality targets defined as compliance or extended quality targets in DQP.

The objectives of SBR user consultation could be summarised as follows:

- To collect information on current use of SBRs

- To collect information on the needs of potential users

- To collect information on possible future user needs

- To identify SBR shortcomings from user perspective

- To adjust SBR quality targets, defined in the DQP

- To define new quality targets for SBR

The assessment of gap between available information in current registers and the information needed by users allows the definition of quality targets. As the targets may change over time, they have to be monitored regularly, preferably annually and adjusted in case it is needed.

3.2. Survey design, data collection and main outcome

The 2017 SBR user consultation was organized as an EU Survey by using online survey management tool. Two questionnaires were designed, the national SBR user questionnaire 2017 and the EGR user questionnaire 2017. The questionnaires collected information on SBR units and characteristics used in the statistical production, SBR shortcomings, other sources used and future changes with impact on SBR user needs.

In the EU and EFTA countries the user survey was coordinated by the national SBR coordinators. The national coordinators granted access to the EU survey to regular SBR users (business demography, FATS, FDI, structural business statistics) and potential users (national accounts, tourism, international trade) at national level.

The results of SBR user consultation were summarised and analysed by Eurostat in order to setup new quality targets for SBRs according relevant user requirements. The national SBRs survey results were used as input to elaborate new quality targets for national SBRs, for compliance assessment and beyond.

In the 2017 Eurostat SBR user survey 339 users of national SBRs and 109 EGR users were consulted, mainly from national statistical institutes (NSIs) and national central banks (NCBs). The responses

were provided by 25 EU countries and 2 EFTA countries. About 10 national SBR users and 5 EGR users per country completed the survey.

The survey results show that national statisticians use national SBRs more regularly than they do the EGR. Almost 90% of survey respondents use national SBRs regularly in producing statistics, while just over a third of EGR respondents reported regular use of the EGR.

At national level, use of national SBRs and the EGR differs according to the statistical domains and the type of statistics concerned. National SBRs are mainly used in areas including structural business statistics (SBS), business demography, short-term business statistics (STS), and national accounts. The main areas in which the EGR is regularly used are statistics on foreign affiliates (FATS).

3.3. Results for national Statistical Business Registers

The national SBRs are used in several statistical domains, with business statistics and macroeconomic accounts predominating. Just over one fifth of the respondents from globalisation and other statistical domains reported that they make regular use of the SBR in statistical production.

Statistical units

Most national SBR users reported that they use identification and demographic characteristics (identification number, name and address) of **legal units** in the regular statistical production. The legal form is also highly relevant and regularly used in statistical production.

The information on linked registers is used mainly with reference to associated registers, in which the legal unit is recorded and which contain information that could be useful for statistical purpose. The information used least at the legal unit level is that concerning linked groups, control and ownership of legal units.

As regard **local units** the identification characteristics are highly relevant to users. The most often used economic characteristics are:

- Principal activity code at NACE 4-digit level

- Number of persons employed

- Number of employees and

- Geographical location code

As regard **enterprises**, the identification number, name and demographic characteristics are most frequently used in regular statistical production. The economic characteristics of enterprises that are most frequently used are:

- Principal activity code at NACE 4-digit level

- Number of persons employed

- Number of employees and

- Turnover

Respondents reported that the information on **enterprise groups** is the least often used in regular statistics production at national level. For the users that use enterprise groups in the regular production, the identity number and the name of the all-resident/truncated groups are highly relevant as identification characteristics, while the principal activity code of the national part of the enterprise group at NACE 2-digit level and the number of persons employed in the all-resident/truncated group are highly relevant economic characteristics.

It was reported that some **other statistical units** regularly used in statistics production are:

- Kind of activity unit (KAU)
- Local kind of activity unit (LKAU) and
- Institutional unit.

Also some other statistical units are used as establishments (in SBS), VAT unit or other fiscal unit (globalization) and the resident part of the group according to the FDI benchmark definition for NACE allocation (balance of payments and international investment positions).

At KAU and LKAU level, the characteristics most often used are the identification, demographic and economic characteristics of the statistical units. Some respondents state that they also use information on control, ownership and linked registers.

At institutional unit level, information on control, ownership, linked registers and linked groups is used in addition to the identification, demographic and economic characteristics.

Purposes of use

Respondents reported that national SBR information is used mainly for statistical analyses/calculation/summing up, identification and delineation of units, microdata linking and sample frame with stratification.

National SBR users referred to a broad range of other purposes, including:

- Profiling
- Customised research
- Source of definition of weightings
- Data validation
- Identification of units and monitoring of demographic characteristics
- Validation and verification of annual national accounts supply-use tables
- Estimates of non-profit institutions serving households
- Defining sector classification
- Compiling TEC statistics (trade by enterprise characteristics)
- Classifying foreign direct investment (FDI) by economic activity, following the principles set out in the manuals, the OECD's benchmark definition
- Providing an additional source of data for the Inward FATS frame
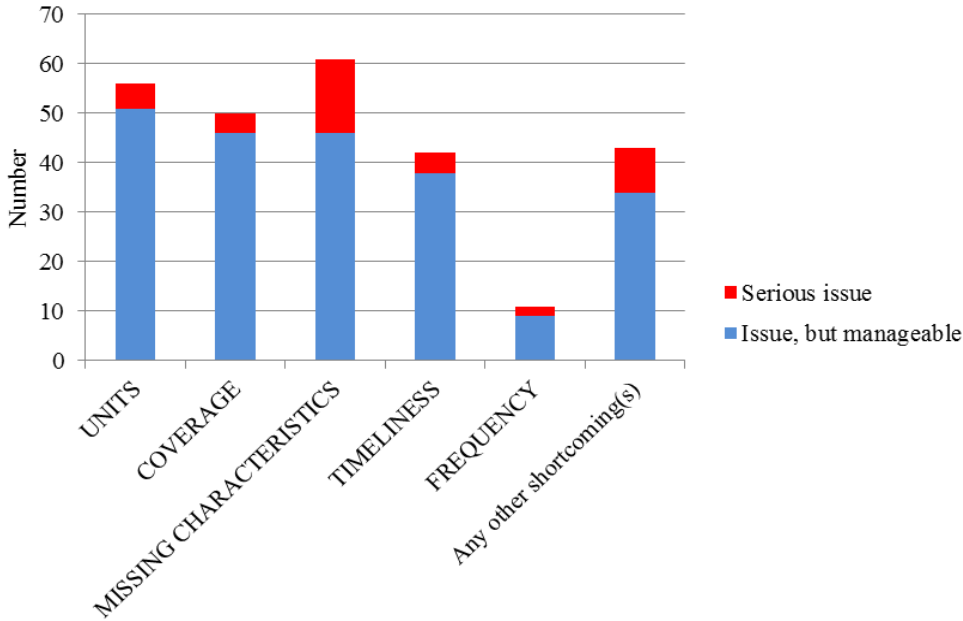
Shortcomings

In addition to the national SBR other sources of information are also used in statistical production. The main reasons given for this are:

- National SBRs do not provide the information requested (48%) or
- National SBRs data are not of sufficient high quality (47%)

Respondents that regularly use information provided by the national SBR mentioned some serious and manageable shortcomings in terms of units, coverage, missing characteristic, timeliness, frequency, etc.

The indicated serious shortcomings refer to units, coverage and missing characteristics. Regular national SBR users rate most of the shortcomings as 'manageable' (see Figure 1).

Figure 1: Shortcomings mentioned by respondents regularly using national SBR information

3.4. Results for the EuroGroups Register

Analysis of the results shows that 36% of respondents regularly use information provided by the EGR in producing statistics at national level. The EGR is used mainly in business statistics and globalisation EGR data are little used in other domains.

Statistical units

EGR users reported that they use most of the **legal unit** characteristics in statistics production, especially identification characteristics and information on the control and ownership of the legal unit. They also indicated that they use the relevant characteristics for enterprises and multinational enterprise groups when producing statistics.

At **enterprise** level, the identity number, name and addresses are the characteristics most often used for identification purposes. EGR users cite the principal activity code at NACE 4-digit level and the number of persons employed as being of major relevance as economic characteristics of the enterprises.

At the level of **enterprise groups** most of the identification and economic characteristics are indicated as being of major relevance to SBR users. The economic characteristic 'group global assets' is the only one which respondents claim to make little use of.

Purposes of use

The survey reported that EGR information is used mainly to identify and delineate units and for statistical analyses.
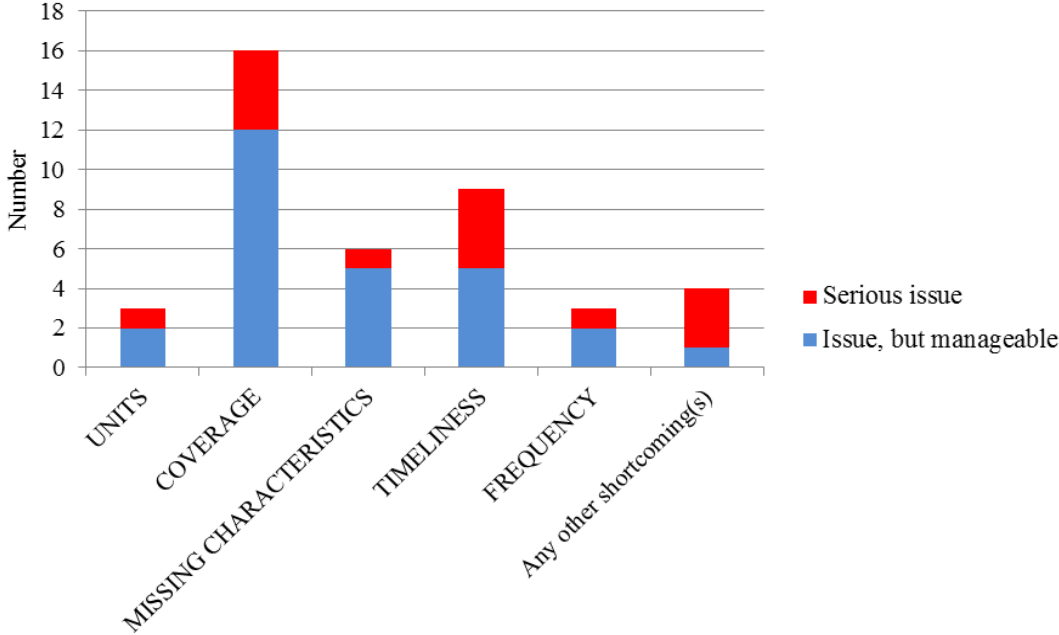
Shortcomings

Those survey respondents that are regular users of EGR information specified some shortcomings with regard to their needs, in terms of units, coverage, missing characteristics, timeliness, frequency and others issues.

EGR users reported that most such shortcomings are associated with EGR coverage (39%) and timeliness (22%). The responses received suggest that most EGR shortcomings are manageable as regards user needs.

Serious shortcomings with regard to user needs are higher in the areas of EGR coverage and timeliness. Some other shortcomings referred to by EGR users are also rated as serious shortcomings with regard to user needs (see Figure 2).

Figure 2: Shortcomings mentioned by respondents regularly using EGR information

The survey results show that national SBR users expect high quality and coherence between national SBRs and EGR.

The detailed report on SBR user consultation 2017 is available only to ESS users at CIRCABC.

4. SBR quality targets

The annual setting of quality targets for the EU statistical business registers (national SBR and the EuroGroups Register) is part of the SBR DQP.

The SBR quality targets are derived from the relevant EU Regulation (EC) No 177/2008 on statistical business registers (BR Regulation) and from the needs within the European Statistical System.

The DQP specifies quality targets to enable annual quality assessment of national SBRs and EGR. The quality targets based on the BR Regulation are stable over time as long as the legislative framework is unchanged. The targets derived from user needs however may change more frequently and to anticipate possible changes of user needs these targets should be regularly confirmed. In the annual SBR quality assessment are used compliance and extended quality targets, derived from the BR Regulation and from user needs.

4.1. Compliance quality targets

In the ESS, the compliance quality targets for statistical business registers are the targets that *shall* be met in order to be compliant to the BR Regulation. Thus, the compliance targets are seen as minimum quality targets that meet implicitly essential user needs and have to be met by SBRs (see Table 1).

Table 1: SBR compliance quality targets

Compliance quality targets	'SHALL' Article in Reg. 177/2008	Assessment criteria	Source of assessment information
1. Mandatory characteristics provided in national SBR	Annex	0% missing characteristics	Annual quality report
2. Statistical units (enterprise, local unit, enterprise group) are implemented	Art. 2 Art. 3	Yes/No	Annual quality report
3. Annual updates of entries and removals	Art. 8 (1)	Yes/No	Annual metadata report (concept 8.1)
4. Annual copy reflects the state at end of a year	Art. 8 (4)	Yes/No	Annual metadata report (concept 5)
5. MS carry out statistical analyses of the national SBR	Art. 9 (1)	Yes/No	Annual quality report
6. MS transmit at request information with regards to implementation of Reg. 177/2008	Art. 9 (2)	Yes/No	Annual quality report
7. MS transmits mandatory data for the purpose of the EGR according to Reg. 192/2009	Art. 11 (1) Art. 11 (3)	0% missing characteristics	EGR process
8. Quality of the statistical business register is assured at national level	Art. 6 (1)	Yes/No	Annual quality report and metadata report (concepts 11-18)

The BR Regulation defines data exchange on multinational enterprise groups between the European Commission (Eurostat) and EU Member States. Thus, the following targets are derived for the EGR to being compliant with the BR Regulation (see Table 2).

Table 2: EGR compliance quality targets

Compliance quality targets	'SHALL' Article in Reg. 177/2008	Assessment criteria	Source of assessment information
Eurostat transmits country specific MNE data to NSI according to Reg. 192/2009	Art. 11 (2) Art. 11 (3)	0% missing characteristics and annually updated	EGR process
If Eurostat transmits country specific MNE data to NCB or ECB the data is transmitted according to Reg. 1097/2010	Art. 12 (2)	0% missing characteristics and annually updated	EGR process

The compliance to the predefined minimum quality targets is assessed and followed up by Eurostat as part of the DQP framework.

4.2. Extended quality targets

The second category of quality targets derived from the BR Regulation are those that could be met by Member States for improving the national SBRs quality. The legislation provides therefore specific enabling clauses.

The extended quality targets go beyond the compliance. No scoreboards are built on them in the compliance assessment. The following targets derived from the BR Regulation could have a positive impact on the SBRs quality (see Table 3).

Table 3: SBR extended quality targets

Extended quality targets	'MAY' Article in Reg. 177/2008	Assessment criteria	Source of assessment information
1. Optional characteristics provided in national SBR	Annex	0% missing characteristics	Annual quality report
2. Exchange of information with other NSI to improve MNE information	Art. 10	Yes/No	Annual quality report
3. Exchange of information with NCB to improve MNE information	Art. 10	Yes/No	Annual quality report

EGR quality targets are defined on the base of EGR macro and microdata indicators calculated by Eurostat and NSIs.

In 2017 quality indicators were introduced in the EGR process on the system input files (input indicators); on the EGR data processing (throughput indicators) and on the EGR output files (output indicators).

In addition micro level indicators are calculated by NSIs on the EGR output, comparing national EGR and FATS populations in order to measure the completeness in terms of data integration between the two populations.

5. Conclusions

The first ever SBR user consultation 2017 held in European Statistical System, provided useful information on the degree the current user needs are met – with regard to content, coverage, accuracy, timeliness, etc. – and outline directions for improvement.

The assessment of gaps between available information in current registers and the information needed by statistical users allows defining directions for improvement and quality targets. The user needs may change over time and SBR quality targets have to be monitored regularly and adjusted in case it is needed.

SBR shortcomings, indicated by statistical users in the user consultation, were analyzed and relevant directions for improvement were outlined. SBR user survey was used to define new quality targets for the European SBRs. The SBR users' needs generated additional compliance and extended quality targets that will be assessed and followed-up annually in the framework of SBR DQP.

The SBR user survey as an institutional direct method to monitor product quality and its relevance will be regularly used by Eurostat to assess quality of the European statistical business registers, national SBRs and EGR. The next SBR user survey will be lunched by Eurostat in 2020.