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Item 5 of the agenda

Guiding principles for the implementation of the statistical units in National Statistical Authorities for business registers and business statistics

Second Proposal

by the sub-group of the Task Force on Statistical Units composed of

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1. Introduction

(a) This paper provides a set of *guiding principles* for the implementation of the [CR 696/93 on](#) statistical units in National Statistical Authorities (NSAs) for business registers and business statistics and coordinated with National Accounts/Balance of Payments combining both the producer and user perspective. These guiding principles should be considered alongside the operational rules and the time frame supporting the Joint BSDG and DMES declaration.

(b) This paper is organised as follows:

- Terminology and scope
- Business registers and business statistics
- Methods to apply the operational rules
- Quality evaluation
- Quality requirements
- Coordinated implementation
- Annex covering the criteria for choosing the relevant statistical units

2. Terminology and scope

(a) In this document, the guiding principles are shorthand for the main guidelines, criteria and principles to be applied for the implementation of the statistical units in business registers and business statistics. The guiding principles are restricted to the following types of statistical units:

- Enterprise group
- Enterprise
- Kind of activity unit
- Local unit
- Local kind of activity unit¹

(b) In the context of the guiding principles, the term statistical unit applies to the unit referred to in the output of business statistics. These can be distinguished from units from which, or about which, the data are actually collected in the process of producing the output.

(c) The ~~more detailed~~ operational rules cover these units.

(d) Although the focus in this document may be viewed as the enterprise, it is important to note that the same principles apply to the other units as appropriate.

(e) In the context of the guiding principles, the term business statistics does not comprise National Accounts but they are an essential data source feeding into the production of the National Accounts.

¹ The importance of a correct delineation of the LKAU has to be emphasised for National Accounts, in particular for units which are vertically integrated.

3. Business registers and business statistics

(a) The types of statistical units to be included implemented, firstly in business registers and then in used in business statistics, are identified in the regulations governing those business statistics.

~~(b) The statistical units enterprise and local unit are covered by regulations governing business registers. If these types of statistical units are implemented in business statistics, then the units of this type actually registered in the business register (or a subset thereof) are to be used. This subset will be defined in the regulations governing those business statistics, however it should be noted that kind of activity unit is in the business statistics regulations but not in the business register regulation.~~

(be) It is important to recognise the role, and links, of the kinds of unit used to create statistical units in business registers and business statistics. These include:

- Administrative unit – this entity is defined for administrative purposes.
- Legal unit – this entity is recognised by law or society independently of the persons or institutions that own them (either legal person or natural person).
- ~~Administrative unit – this entity is defined for administrative purposes and is usually the same as the legal unit.~~
- Observation unit – this entity is defined as the unit about which data are collected.
- Reporting unit – this entity is defined as the unit from which data about an observation unit are collected.

(cd) At the national level, for several Member States the links to the administrative unit(s) are critical to generating and maintaining a high-quality business register. There should also be clear conceptual and practical links between the different types of statistical units as well as the corresponding legal units.

(de) In the case of multi-national enterprise groups it is important that the statistical units are determined in a coordinated and consistent way across the Member States.

4. Methods to apply the operational rules

(a) For statistical units, the Task Force on Statistical Units has elaborated a set of operational rules² These operational rules were drafted in order to provide agreed solutions to problems of unit delineation for common situations that may be encountered by NSAs. For such situations, these solutions result in coordination across ESS Member States as well as across statistical domains.

(b) In some cases but certainly not all cases, these operational rules can be applied *automatically*. The results intended by operational rules can also be approximated by making use of nationally defined automated rules that operate on administrative units or legal units.

² To be found in CIRCABC

Path:

/CircaBC/ESTAT/bsdg/Library/BSDG public/Links to relevant working groups and task forces/Task Force Statistical Units/Definitions and operational rules - latest version

or browse url:

<https://circabc.europa.eu/w/browse/abf838dc-faf7-4e6e-8933-16b239129f96>

(c) Due to the complexity in applying the automatic profiling to large and complex economic organisations, an alternative approach is to apply the operational rules *manually* (manual profiling)³. In this context, complex organisations tend to be large groups of legal units operating within a single nation or multi-national enterprise groups.

(d) Wherever appropriate, and possible, the recommendations from the ESSNets on [ESBRs](#), Profiling and ~~the ESSnet on~~ Consistency should be considered and applied.

~~5. Quality evaluation~~

~~(a) Due to the range of legal, taxation and regional structural differences across Member States as well as the burden on business, resource and time limitations, it may not always be possible to implement best practice. Thus the different operational rules for the different types of units and associated guidance will be categorised as A, B and C quality approaches, where:~~

- ~~• “A” is deemed to meet recommended or best practice, for example, application of manual profiling to deal with all the large, difficult or complex cases. In the case of multinational enterprise groups, the national delineations are based on profiling, which may be (manual or automatic) depending upon the complexity of the case and the global structure.~~
- ~~• “B” is deemed to cover alternatives to recommended or best practice but which form good practice. For example, profiling (manual or automatic) is applied to simple multi-national enterprises at the national level, with appropriate consideration of the global structure of the delineated national enterprises.~~
- ~~• “C” is deemed to recognise the application of the rules, for example in an uncoordinated way to simpler cases or to specific situations addressed without a rules-based approach.~~

~~(b) NSAs must be able to demonstrate in a plausible way that the quality requirements for ESS business registers and business statistics are met. This means that they can convincingly justify the choice made for the threshold for profiling and that the impact of any automated rules has been tested.~~

~~(c) A quality assessment for the evaluation of the delineation of statistical units by the NSAs will be developed by the Working Group on business registers and statistical units.~~

~~6.5. Quality requirements (European Statistics Code of Practice, principles 12-15)~~

(a) It is up to NSAs to organise data collection for the business register and for business statistics in a way that they deem optimal, given their national administrative systems, provided that the quality requirements for ESS business registers and business statistics are met. These include those that apply to business registers and those that relate to upstream

³ It should be noted that profiling has its own definition and some of the operational rules are related to profiling. In business statistics, the term "intensive" profiling is normally used for the activity of sending staff to the headquarters of a large business (group) to discuss the delineation of statistical, reporting and observation units on the basis of the operating structure of the business. If no visit is carried out and just public information (annual reports, information from the website of the business, etc.) plus survey information is used then this is called "light profiling" or "desk profiling". In both cases, it is a "manual" activity. Outside business statistics, the term "profiling" has a more general meaning. The ESSnet on Profiling used the term in the sense of business statistics but also explicitly focussed on multi-national enterprise groups in its scope.

ESS regulatory requirements, for example, SBS, STS and PRODCOM such as for business statistics.

~~(b) Business registers and business statistics will need to consider the requirements of National Accounts, Balance of Payments, Regional Accounts, Environmental Accounts, Price statistics and Labour Market related statistics. These will need to be in the form of associated quality criteria such as completeness, relevance and consistency at the micro and macro levels.~~

~~(be) For enterprise groups and enterprises, NSAs are required to apply the automated rules and, where appropriate, consider manual profiling approaches in business registers, at least to the extent that these are needed in order to they fulfil the quality requirements for ESS business registers and business European statistics.~~

~~(cd) For specific situations that may not be covered explicitly in the set of operational rules, NSAs still have to choose between the different profiling approaches (automated rules, manual delineation of statistical units and the use of administrative units) as proxies for statistical units. This is up to the NSAs provided that the quality requirements for ESS business registers and business European statistics are met.~~

6. Quality evaluation

(a) Due to the range of legal, taxation and regional structural differences across Member States as well as the burden on business, resource and time limitations, it may not always be possible to implement best practice. Thus the different operational rules for the different types of units and associated guidance will be categorised as A, B and C quality-approaches, depending on the complexity and size of the enterprise group, where:

- A methods: most appropriate methods ("A" methods are deemed to meet recommended or best practice, for example, application of manual profiling to deal with all the large, difficult or complex cases. In the case of multinational enterprise groups, the national delineations are based on profiling, which may be (manual or automatic) depending upon the complexity of the case and the global structure).
- B methods: those methods which can be used in case an A method cannot be applied ("B" is deemed to cover alternatives to recommended or best practice but which form good practice. For example, profiling (manual or automatic) is applied to simple multi-national enterprises at the national level, with appropriate consideration of the global structure of the delineated national enterprises).
- C methods: those methods which shall not be used ("C" is deemed to recognise the application of the rules, for example in an uncoordinated way to simpler cases or to specific situations addressed without a rules based approach).

Table: Application of A, B and C methods for delineation of Enterprise Groups

	<u>Manual intensive profiling</u>	<u>Manual Desktop profiling</u>	<u>Automatic profiling</u>
<u>Large and complex</u> ⁴	<u>A</u>	<u>B</u>	<u>C</u>
<u>Large and simple</u>	<u>A</u>	<u>BA</u>	<u>C</u>
<u>Small and complex</u>	<u>A</u>	<u>A</u>	<u>B</u>
<u>Small and simple</u>	<u>A</u>	<u>A</u>	<u>BA</u>

(b) NSAs must be able to demonstrate in a plausible way that the quality requirements for ESS business registers and business statistics are met. This means that they can convincingly justify the choice made for the threshold for profiling and that the impact of any automated rules has been tested.

7. Coordinated implementation

(a) NSAs that do not presently meet the quality requirements for ESS business registers and/or business statistics, required a coordinated, and agreed, roadmap towards implementation of the changes that are needed. It is proposed that the NSAs should focus first on the business registers, and then business statistics followed by the statistics further upstream.

~~(b) For the business registers, Where significant differences occur between there should be a single period providing data on both the old and new method of delineation of bases statistical units, their effect on statistics has to be quantified and coordinated with the users. to allow for the development of link factors, or appropriate joining mechanisms, for users to develop analyses without discontinuities.~~

(c) For business statistics, there will need to be a linked programme between the short-term statistics and the annual statistics. ~~Similar to the business registers, f~~For at least one period, the SBS data will have to be established according to the old and new ways of producing the data. This will provide details of the scale of the discontinuities and allow users (like National Accounts, Regional Accounts, etc.) to plan for, and address, the impact of the changes which may affect key short-term and annual aggregates. The same principle will apply to other statistical domains whereby at least a single period exists to

⁴ Large: significant impact in the NACE classes in question

Small: negligible impact in the NACE classes in question

Complex: e.g. many legal units with many different activities and delivery-relations between the units

Simple: e.g. one activity in all legal units and ancillary activities)

develop the join between old and new and avoid discontinuities. This is covered in the paper covering the implementation time frame or more detail will be produced by the specific Working Groups.

(d) Once the quality criteria for ~~the SBS data are met, including those for statistical business registers on which SBS data depend are met, other~~ business statistics will have to ~~follow and be consolidated within an overall timetable~~ implement the changes following a coordinated approach and timetable. ~~Some short-term surveys may be able to move onto the new basis earlier but will need to be on a consistent basis with other surveys. In all cases, if the way in which statistics are produced is changed substantially, double recording is required for at least one period (one year or one quarter) in order to allow for sufficiently detailed analysis to aid users.~~

(e) After the business statistics have been produced, the implementation of the data changes should be taken through the other domains concerned, National Accounts, Balance of Payments, Regional Accounts, etc. Again, the same principles as above apply, in particular the avoidance of discontinuities.

(f) There is a key extension of the coordinated implementation within NSAs that should be considered. Where enterprise groups operate across borders, there will be a benefit from greater coordination and collaboration between and across Member States to ensure good quality structures and associated data which meet both national and ESS needs. This aspect is being addressed in the context of the EGR and ESS.VIP ESRs as well as developing international profiling across the Member States.

Annex Criteria for choosing the relevant statistical units

~~(a) The choice of the statistical unit is key to all aspects of the statistical system.~~

~~(b) The choice of the statistical unit in all the statistical domains will need to reflect a range of criteria to ensure consistency, coherency and comparability as well as the aims of the domain. For example, these aspects are critical to the estimates of “productivity” which bring together data from different statistical domains producing business statistics. The same approach applies to the production of National Accounts and Regional Accounts.~~

~~(c) The choice and the structure of the statistical unit will be key to various aspects of the business register population and sample frame, examples include:~~

- ~~● Classification by type of activity, e.g. use of NACE rules.~~
- ~~● Classification by region, e.g. use of NUTS rules.~~
- ~~● Classification by employment size bands.~~
- ~~● Completeness (exhaustiveness) and coverage.~~
- ~~● Allocation by type of legal status, preferably by type of institutional sector or a clear link to the institutional sector.~~
- ~~● Consistency over time.~~

~~(d) Which business data can be collected will depend on the choice of the statistical unit.~~

~~(e) Depending upon the choice of the statistical unit, various criteria may or may not be able to be met. Examples of the type of criteria to consider:~~

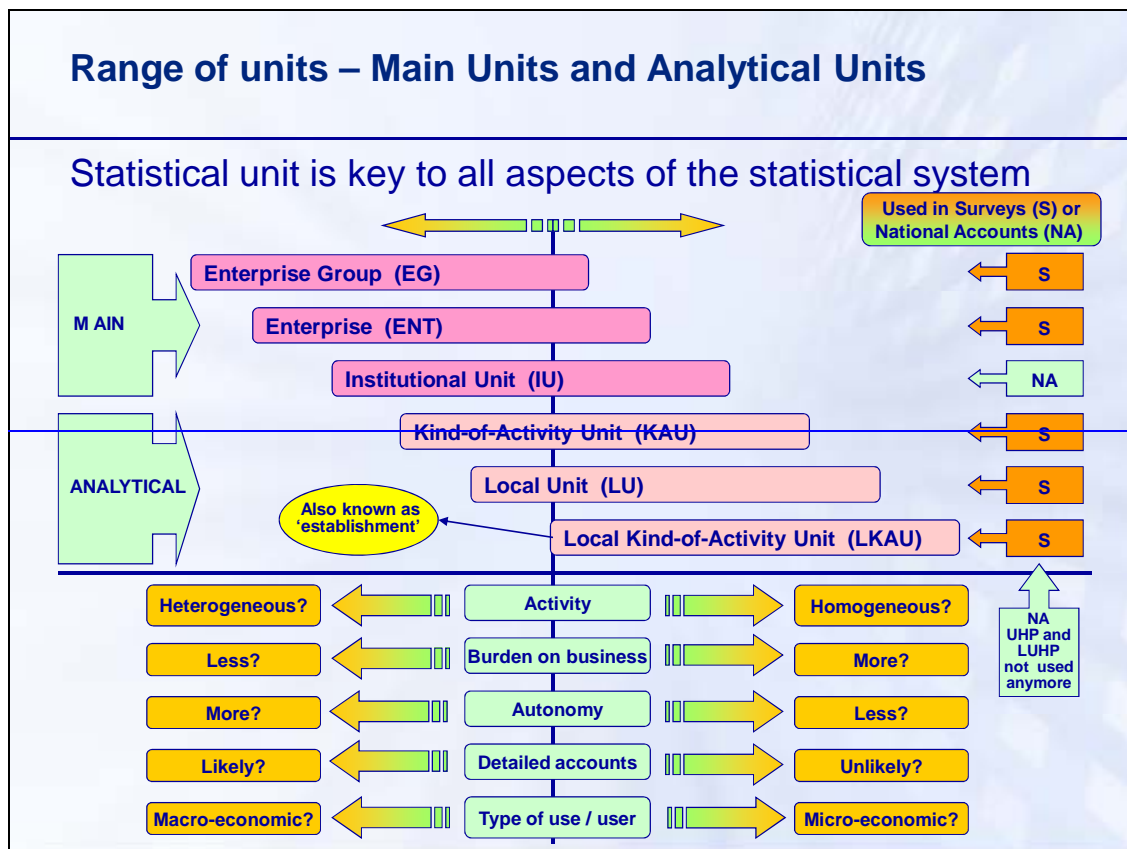
- ~~● Type of activity about which data are being sought.~~

- Burden on business.
- Autonomy of the business.
- Type of use of data.
- User needs.
- Ultimately, the availability of the data and can it be collected.

Based on the above criteria, each statistical unit will:

- have limitations;
- determine what data may be collected; and
- determine the relevance of the data collected.

An overview of the units and these criteria is shown in the diagram below.



(f) Following on from the characteristics of (c), (d) and (e), the same statistical unit should be applied throughout a specific statistical domain thereby increasing consistency and comparability.

(g) The same statistical unit should be considered as far as practically possible across the different but relevant statistical domains. Ideally, the same statistical unit should be used across all statistical domains. However, this approach has limitations, for example it may increase consistency and coherency but may reduce the relevance of the data. This can be illustrated with the different needs of micro data (e.g. regional) and of macro data (e.g. national) which may not be fully met, or possible, with the same statistical unit.

~~(h) Although the institutional unit (which is another statistical unit) is out of scope for the guiding principles, it should be noted that clear links between the statistical units (and the legal units) used in the context of business registers and business statistics to the institutional unit should be considered.~~
