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International Guidelines on Statistical Business Registers**Results of the consultation on the draft
Guidelines on Statistical Business Registers****Note by the Secretariat***Summary*

The note summarises the comments made by members of the Conference of European Statisticians on the draft *Guidelines on Statistical Business Registers*.

The secretariat carried out an electronic consultation in March-April 2015. A total of 46 countries and international organisations replied. All respondents supported the endorsement of the Guidelines. A number of comments and suggestions were received, which are addressed in this note and incorporated in the final version of the Guidelines (ECE/CES/2015/3/Add.1/Rev.1) available at: www.unece.org/index.php?id=38920#/

In view of the high level of support received, the Conference of European Statisticians will be invited to endorse the *Guidelines on Statistical Business Registers*.

I. Introduction

1. This note summarises the comments on the draft *Guidelines on Statistical Business Registers* resulting from the electronic consultation conducted in March-April 2015.
2. The Guidelines were developed by the Task Force on Guidelines on Statistical Business Registers that was established by the Bureau of the Conference of European Statisticians (CES) in November 2011. The objective of the Task Force was to produce a set of international guidelines and recommendations of good practices to help countries in developing and maintaining their statistical business register (SBR).
3. In February 2015, the CES Bureau reviewed the draft Guidelines and requested the UNECE secretariat to send the document to all CES members for electronic consultation.
4. A total of 46 replies were received in response to the request for comments on the draft Guidelines, from 42 countries and 4 international organisations. The following countries and organizations replied: Albania, Armenia, Australia, Austria, Belarus, Cambodia, Canada, Chile, Columbia, Costa Rica, Denmark, Egypt, Finland, Georgia, Germany, Hong Kong China, Hungary, Indonesia, Ireland, Israel, Japan, Latvia, Lithuania, Malaysia, Mexico, the Republic of Moldova, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovenia, Spain, Sweden, Switzerland, the former Yugoslav Republic of Macedonia, Tajikistan, Turkey, United Kingdom, United States, Eurostat, International Monetary Fund (IMF), Organisation for Economic Cooperation and Development (OECD) and United Nations Statistics Division (UNSD).

II. General comments

5. Countries and organisations found that the Guidelines provide useful recommendations and practical guidance for developing and maintaining SBRs in statistical offices. Many countries commended the Task Force on the quality and usefulness of its work. Most countries also indicated that they plan to use the Guidelines, for example to develop or improve their SBR, or for training purposes. All countries and organisations that replied to the survey found the Guidelines ready for CES approval, subject to incorporation of comments received during the consultation.
6. Annex 1 outlines the comments received on topics for future work and research, and Annex 2 the specific comments made by countries and organizations. These have been taken into account in the revised *Guidelines on Statistical Business Registers*. The final draft (ECE/CES/2015/3/Add.1/Rev.1) is available at:
www.unece.org/index.php?id=38920#/
7. A number of general comments are briefly presented below:
 - (a) Canada: The document represents a very good overview of the key elements of an SBR and provides many useful details about the key concepts, data sources and methods countries should use in establishing and maintaining their SBRs in a manner that is consistent with international practices and standards;
 - (b) Germany: Congratulates the authors for the very well structured and understandable manual;
 - (c) Hungary: The Guidelines deal with all core issues of business registers. The reader gains a useful overview of the roles of the business register and of the challenges faced by both beginners and experts. In our view it fulfils the purpose of SBR guidelines in general;

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- (d) Ireland: Topics are covered comprehensively and allow for SBR development as well, if countries so wish;
- (e) Israel: The Guidelines are very clear and detailed and they provide useful guidance for both every-day use and future development issues of the Statistical Business Registers;
- (f) Latvia: The Guidelines are a good starting point for high quality and harmonised Statistical Business Registers;
- (g) Lithuania: Many thanks to the Task Force for the excellent job done. The Guidelines are very useful for practical work;
- (h) Mexico: The Guidelines will be useful for Mexico because they provide concepts, methodologies and best practices for the construction and maintenance of SBRs;
- (i) Montenegro: The Guidelines provide very useful guidance on Statistical Business Registers, especially in the areas of purpose and use of SBRs. It includes not only theory but also a number of excellent examples of good practice;
- (j) Netherlands: The manual is very comprehensive, but the information would be better supported with more graphs;
- (k) Switzerland: The Guidelines are useful for implementation and maintenance of SBRs. They are complete and present best practices for those responsible for SBRs;
- (l) Tajikistan: Adoption of the present manual is very timely, especially for emerging economies. Tajikistan plans to further develop its Business Register on the basis of this manual;
- (m) The former Yugoslav Republic of Macedonia: More concrete examples should be added, not only theoretical explanation;
- (n) United Kingdom: Supports and welcomes the Guidelines as a valuable reference tool and useful for training new business register colleagues;
- (o) OECD: Supports endorsement of the Guidelines as they represent a useful tool for enhancing the role of SBRs in the production and harmonization of business statistics;
- (p) UNSD: The Guidelines touch upon most issues relevant to setting up and maintaining a Statistical Business Register. This will be valuable to many statistical offices, especially in developing countries. However, the guide does not address the issue of using the business register as a central tool in modernizing the statistical system for the collection, compilation and dissemination of integrated statistics for business statistics and macroeconomic and environmental-economic accounts statistics. Anchoring the development of a SBR in such a modernization strategy using multi-mode and multi sources would provide more purpose and direction to statistical capacity building efforts. The Guide will need some more formality (tighter structure within the context of SNA and SEEA, for example) to bring it to the Statistical Commission for adoption as an international standard.

Response by the Task Force

8. The role of SBR in the modernisation of statistical production and services is mentioned in Chapter 1 and Chapter 2, in which the description of the System of Environmental-Economic Accounting (SEEA) has been updated with the proposal from UNSD. Paragraphs 2.9 and 2.68 – 2.70 referring to the role of SBR in the modernisation process have been extended. The Generic Statistical Business Process Model (GSBPM), as an important tool for modernisation of statistical production, is dealt with in Chapter 8. The role of SBR in the modernisation process is also included in the list of topics for future work and research in chapter 12.

9. The references to 2008 System of National Accounts (SNA) have been checked and consistency in terms and concepts ensured. The Task Force has consulted a number of questions concerning institutional units with the Advisory Expert Group on National Accounts to ensure that the Guidelines are in line with the 2008 SNA concerning the definition and use of the related concepts.

III. Conclusion

10. All responding countries and organisations supported the endorsement of the Guidelines.

11. The Task Force on Guidelines on Statistical Business Registers reviewed carefully all comments received from countries and organisations in April - May 2015. To the extent possible and where it was found useful to improve the Guidelines, all comments were incorporated in the final version submitted to the 2015 CES plenary session for endorsement.

12. The UNECE Secretariat will cooperate with UNSD to circulate the Guidelines for global consultation and to initiate the process of seeking endorsement of the Guidelines by the UN Statistical Commission.

13. In view of the wide support expressed by countries and organizations, the Conference of European Statisticians is invited to endorse the *Guidelines on Statistical Business Registers*.

Annex 1

List of topics for future work and research

1. The comments listed in this Annex include the replies to question 3 of the survey questionnaire: “Do you find the list of topics for future research and development in Annex H complete?”. Many countries stressed the usefulness of future work and research on the proposed topics. The following comments were provided:

(a) Australia: Is currently exploring administrative data sources to supplement and potentially replace direct collection activity and the role that the Australian Business Register will play. Consequently, Australia would like to see the research agenda cover the role of the business register in supporting the analysis of multi-source datasets.

(b) Hong Kong, China: Some administrative units are set up for legal or taxation reasons. For instance, some legal or accounting firms have set up such units in bulk for the provision of business start-up services and such “inactive legal units” have resulted in a significantly inflated number of potential statistical units. The confirmation of whether such units are actually carrying out business is resource-draining. It would be very welcome if an internationally accepted means of imputing or identifying establishments as inactive units (e.g. shell companies) based on administrative data and outlier analysis (e.g. multiple registrations within same address) is proposed;

(c) Hungary: A separate point could be added regarding the need for a global level unique and standard identification system registering different kind of statistical units in a consistent way. This initiative could foster the harmonization of different international projects (e.g. the Global Legal Entity Identifier System (GLEIS) the Group of Twenty (G20), Legal Entity Identifier (LEID) of Eurostat);

(d) Ireland: The list of topics for future work and research needs to be constantly monitored and not lost as an annex in a document which depends on it for future development;

(e) Mexico: Proposes future work on Economic Censuses from the perspective of SBR in countries where administrative registers are not yet of sufficient quality;

(f) Netherlands: Proposes to include (a) best practices to cooperate with Central Banks or other external/governmental organizations, e.g. to assign the correct sector code for statistical units; and (b) cooperation with administrative sources to improve the quality of the SBR and administrative sources themselves;

(g) Portugal: Confidentiality along the lines of the recommendations in the Eurostat SBR manual should be mentioned, and reference should be made to the usefulness of SBRs for national accounts;

(h) Sweden: Suggests adding methodological development to ensure consistency between units. Solving issues in linkage and timeliness between units is a key factor for business registers, e.g. when additional, complementary administrative sources are introduced or when the number of units increases;

(i) UNSD: International trade and economic globalisation should also be listed as a topic as well as the role of SBR for modernisation of statistical production. Regarding international trade and economic globalisation the following topics should be included for future work: (a) What are the requirements of new statistical standards regarding the extended international and global accounts, and how can the SBR meet these requirements? (b) Pilot study for the development of a supra-national SBR to deal with multinational

enterprise groups, based on experience with the EuroGroup Register. (c) How can the SBR be linked to international trade, foreign direct investment and the international sourcing of business functions?

Response by the Task Force

2. The role of SBR in supporting analysis of multi-source datasets (Australia) has been reflected in the research issue “SBR as the backbone of economic statistics”. How to derive statistical units on basis of administrative units (Hong Kong, China), best practices in use of administrative sources (Netherlands) and linking of units (Sweden) have been added to the research topic “Use of administrative data sources”. Global identification (Hungary) is covered under the research issue “International comparability”. Improvement of economic censuses (Mexico) has been mentioned under the research issue “Methodological developments”. Issues on international trade and modernisation (UNSD) have been added to the research topics “International trade and globalisation” and “SBR as the backbone of economic statistics”.

3. In reviewing the draft Guidelines the Task Force decided to move the topics for further work and research from Annex H into a new Chapter 12 to ensure more visibility.

Annex II

Specific comments

1. Annex 2 outlines specific comments made by countries and organisations about the Guidelines. The comments are organized by chapter. All corrections, editorial comments and suggestions for clarifications have been incorporated directly in the Guidelines, and are not listed in this Annex.

A. Chapter 1. Introduction

2. Finland: Noted that SBRs should also cover non-market units and not just “business units” (Section 1.2.).

3. Netherlands: Listed a number of topics that could have been dealt with in more detail, including the description of user needs, statistical units, the relations with the central bank, how the SBR may help compiling the national accounts and others.

4. USA: It might be helpful to mention more about the structure of the SBR database, such as whether the structure is longitudinal in nature, a snapshot in time, etc. It might be helpful to list and assign priority to uses. It might be helpful to define a firm and delineate the difference between a firm, establishment, and enterprise.

5. Eurostat: It seems a bit odd not to mention the institutional unit in 1.6 Terminology while in the rest of the document the institutional unit plays an important role.

6. UNSD: Terminology (activity status and inactive) does not seem in line with terminology used in Chapter 7 (Paragraph 1.10). Addition of SEEA, Central Framework, and the IRIS 2008 (Paragraph 1.26).

7. Columbia, Indonesia, Lithuania, Portugal had additional minor comments for improvements that were incorporated.

Response by the Task Force

8. The Introduction was updated to take the proposals into account. In particular the term “business unit” was replaced by “economic unit”; and the terms “firm” and “institutional unit” are now mentioned and explained in the chapter and in the Glossary. The chapter explains that the SBR database needs to be kept updated over time. The main roles and priorities of the SBR are mentioned in section 1.3 and dealt with in detail in Chapter 2.

B. Chapter 2. Roles of the Statistical Business Register

9. USA: The use of SBR for economic research should be mentioned (in addition to generating official statistics). It may be useful to talk about how units are selected to be surveyed. Are they selected randomly every 2 to 3 years? What is the best way to build a survey frame to minimize breaks in economic time series? It may be helpful to mention address standardization as part of geocoding. This can help reduce mailing costs and improve response rates (Section 2.6). It would be helpful to maintain latitude/longitude information over time (paragraph 2.61).

10. UNSD: paragraph 2.1 could make reference to the work of the High-Level Group for the Modernisation of Statistical Production and Services and to the decision of the

United Nations Statistical Commission on the transformative agenda for official statistics, which calls for the modernization of statistical production. The statistical business register plays a pivotal role in this process. UNSD also proposed amended text for the Box on SEEA.

Response by the Task Force

11. The use of SBR for economic research has been added in paragraph 2.7. The selection of units is dealt with in chapter 8 on Survey Frame methodology. The need to update geospatial information has been mentioned in para 2.61. References to the work of the HLG and the modernisation of statistical production are included in paragraphs 2.9 and 2.68-2.70. The box on SEEA, following paragraph 2.54, has been updated according to the proposal from UNSD.

C. Chapter 3. Coverage of the Statistical Business Register

12. Canada: Suggested removing the word “Minimum” from the column title in Figure 3.4 and using three categories of recommended coverage: essential, highly desirable; and desirable, depending on country-specific context.

13. Finland: It should be noted in section 3.4 that a farm might not be an enterprise. A farm may be an establishment of an enterprise or contain two or more enterprises.

14. Montenegro and the Netherlands: Recommended providing more guidance on the coverage of the non-observed economy.

15. Sweden: It could be useful to include a more coherent discussion on the issue of statistical units in the public sector. Such a chapter could be based on chapter 24 of the Business Register Recommendations Manual, 2010 Edition.

16. USA: What are the tools/methods to measure completeness and coverage (Section 3.2)? While corporations are one type of legal entity, they are not the only one. There are limited liability corporations, limited partnerships, etc., which are all included in the BLS SBR. It may be useful to broaden the title of section 3.3.3 to “businesses” or similar.

17. UNSD: This chapter should be checked against ‘Measuring informality’ which International Labour Organization (ILO) published in 2013 (Paragraph 3.19). It would be useful to add some text to section 3.3.1 on institutional subsectors. UNSD suggested text from 2008 SNA paragraphs 4.33-4.35 that could be used for this purpose. UNSD also suggested different levels of recommended coverage in Figure 3.4 (include; include if coverage can be identified; exclude).

Response by the Task Force

18. Figure 3.4 has been updated to reflect the comments by Canada and UNSD. Paragraph 3.51 has been updated to mention problems with associating a farm with an enterprise, and a new section 4.9.1 on the treatment of units in agriculture has been added to chapter 4. The coverage of the non-observed economy is dealt with in section 3.2.3 with references to main current international standards, and some practical guidelines are provided in section 3.4.2. Coverage of the non-observed economy has been added to the research topics in chapter 12. A new section 4.9.2 on units in the government sector has been added to chapter 4. Section 3.4 SBR coverage follows the institutional sectors of the national accounts for which reason the headline for Section 3.3.3 (Corporations) is maintained. Section 3.3.1 has been extended with brief explanation about institutional subsectors, based on proposal from UNSD, and reference to measuring informality (ILO, 2013) has been included in section 3.2.4 Informal Sector.

D. Chapter 4. Units in the Statistical Business Register

19. Canada: This chapter covers conceptual issues that can be very complex. It provides a solid basis for understanding the different types of entities. There are on-going issues with how countries define and create enterprises and enterprise groups and their composite entities. This chapter lays a good foundation for further discussions

20. The Guidelines recommendations of statistical units follow the international standards of the 2008 SNA and International Standard Industrial Classification (ISIC) revision 4. The draft Chapter 4 on statistical units also presented both the existing and the proposed new definitions of statistical units for the EU member countries.

21. A number of countries, including Denmark, Finland, Germany and Sweden, noticed that the chapter should be revised, since the proposed new definitions of statistical units were not agreed upon by the EU member countries. As a consequence, all references to these proposed new definitions should be left out of the chapter. Other countries, including Moldova, Turkey, USA, and organisations (Eurostat and OECD) also had comments in relation to the text on the proposed new EU definitions of statistical units.

22. Netherlands: From the text it is hard to understand why it is necessary to define separate statistical units to compile business statistics. Is it possible to make reference to some practical rules to delineate statistical units? Best practices should be referred to, e.g., using a survey to derive Enterprise Groups. Profiling techniques should be referenced to derive not only global but also national Enterprises.

Response by the Task Force

23. The Task Force removed all references to the proposed new EU definitions of statistical units and the relevant sections of the chapter were restructured and clarified. Delineation of statistical units and profiling is dealt with in Chapters 4, 5, 6 and 7, and has been included as an issue for further work in Chapter 12.

E. Chapter 5. Characteristics of units

24. Columbia: More detail and practical guidance on inclusion of agricultural holdings in the SBR would be useful. It would also be helpful with more guidance on methods for processing conflicting information from different sources.

25. Hungary: In paragraph 5.44, it should be emphasized that units' employment data in the SBR depends on data received from different sources (and therefore on different loading dates).

26. USA: In section 5.39, it is unclear what is meant by "turnover". One of the definitions of turnover is "the amount of business transacted during a given time." If this is what is meant, would "revenue" or "sales" be more appropriate? In Sections 5.43, 5.45, and 5.46, the distinction between "number of persons employed" and "number of employees" was not clear. In terms of the words used, the two terms appear the same. Would revising the wording make the distinction between the two terms more clear? Also, why is "number of persons employed" considered a core characteristic but "number of employees" considered a non-core characteristic? It seems that both should be considered core, as also indicated in Figure 5.1. The same point was raised by IMF.

27. Chapter 5 also made references to the proposed new EU definitions of statistical units. Several countries pointed out that these references should be left out.

Response by the Task Force

28. A new section 4.9.1 on the treatment of units in the agricultural sector has been added. Processing of data from different sources and possible conflicting information is included in research issues in Chapter 12. Paragraph 5.46 has been updated to mention that the sources and quality of information of employment data should be taken into account.

29. In general *turnover* is used, and a definition is provided in the Glossary. *Number of persons employed* and *number of employees* are two different measures, both of which are defined and explained in the text and in the Glossary. The text has been updated so that both are considered core characteristics. All characteristics presented in the chapter are considered core, unless marked as “non-core”.

30. A new Annex B1 on ISIC rev. 4 was added, which also gives guidance on the activity coding of the statistical units.

31. References to the proposed new European Union definitions were left out.

F. Chapter 6. Data sources for the Statistical Business Register

32. Canada: The importance of enterprise profiling is understated, as it is not mentioned in the introduction of the chapter and is the last of the “Statistical sources”.

33. Hungary, Ireland and Portugal: It would be useful to provide more information about the use of administrative data sources, and methods for how to derive statistical units from the administrative sources.

34. Romania: In paragraphs 6.136 and 6.137, only the standard method of blocking is mentioned, but standard blocking methods alone may reduce linkage accuracy. It would be useful to mention other techniques such as: sorted neighbourhood, subsequent blocking, multiple blocking, filtering, clustering and bigram indexing, which may be used to reduce the search space of candidate pairs.

Response by the Task Force

35. Profiling has been added in the introduction of the chapter. The use of administrative sources and how to derive statistical units from administrative sources have been added to the list of research topics in Chapter 12. Section 6.8.6 on blocking has been extended to mention also other methods of blocking.

G. Chapter 7. Maintenance of the Statistical Business Register

36. Columbia: Treatment of conflicting information showed in paragraph 7.2.6 of this chapter is a line of work that Statistical Offices should continue to strengthen from international working groups to provide feedback on methods and procedures.

37. Hong Kong, China: In paragraph 7.42, the conditions for – and meaning of – discontinuation of local units should be elaborated, especially for units that are still in operation.

38. Netherlands: Some practical rules could be given to derive the sector code on different levels (legal unit, statistical unit). A recommendation could be made to foster cooperation between SBR and central bank or Statistics on Sector Accounts on Governmental bodies to process an agreed sector code in SBR. Practical guidelines should be provided for deriving the principle economic activity or the legal form of an enterprise,

etc., in case an enterprise consists of more than one legal unit. In Section 7.3.4, the following phrase could be elaborated: “An important case is when there are several control links crossing national borders leading to seemingly more than one truncated group within the same global group”.

39. USA: In paragraph 7.32, the definition involves 24 months, which seems sensible. Do all NSI use this definition? If not, other definitions that are used (e.g., 12 months, 36 months) should be mentioned.

Response by the Task Force

40. The treatment of different sources including conflicting information has been included as a topic for future work in Chapter 12. Paragraph 7.43 has been changed to clarify the conditions for continuation. A new Annex B2: Classification of Institutional Sectors has been added to provide more practical guidance on the classification of statistical units into institutional sectors. The treatment of control links across borders relates to globalisation and international comparability, which are included in the research topics listed in Chapter 12. Paragraph 7.32 has been clarified in response to the comment from USA.

H. Chapter 8. Survey frame methodology

41. USA: For certain purposes a “frozen frame” approach is necessary. However, one should be careful to use other features of SBR process to account for dynamic features of the population, and to keep “frozen frame” concepts within a specific context (paragraph 8.8). Although a single-frame approach is standard, it would be worthwhile to note cases in which multiple-frame approaches may be feasible and preferred (paragraph 8.14). It would be good to say more about cases in which one obtains ambiguous or indeterminate information on whether a unit is “alive” or “dead” (paragraph 8.17). At about this point, it may be good to discuss differential approaches to quality assessment and error correction for units of different sizes (paragraph 8.19). It would be good to note that resource allocation decisions for data quality work will require consideration of the relative prevalence and impact of different error types (paragraph 8.20). It may be good to include some brief discussion of cases in which one may use frames/registers to provide information that is valuable in subsampling for second- or third-stage units (paragraph 8.32). It would be good to comment on cases in which data are used directly as “observations” or as input for imputation of unobserved variables (paragraph 8.34). Perhaps add that the fundamental unit of analysis may be an individual transaction (paragraph 8.36). It may be good to expand this point to acknowledge many technical details related to unit-level allocation, imputation or prediction (paragraph 8.39). Perhaps note the need to understand the magnitudes of de facto prediction errors arising from a given target variable, data source and metadata (paragraph 8.41).

Response by the Task Force

42. In paragraph 8.8 it has been emphasised that the recommendation for using a single frozen frame refers to surveys for the same reference period. Paragraph 8.14 has been extended to mention also multiple frame approaches. Paragraphs 8.14 and 8.24 have been extended to clarify whether units are active. A new paragraph 8.21 has been added on the balancing of resources against the likely impact of errors, and paragraph 8.31 has been extended to provide more explanations on types of errors. In paragraph 8.35 the terminology concerning units has been clarified.

I. Chapter 9. Dissemination

43. Hungary: Dissemination of business demographics and micro-data are well detailed but there are other types of dissemination opportunities (e.g. number of bankruptcies, etc.) that are not mentioned. It would be useful to compile a list of them.
44. Lithuania: Is anything special about the confidentiality of statistics produced from SBRs (vs. other statistical outputs)? If so, they should be emphasised. If not, the purpose of Section 9.2.2 is questionable.
45. Netherlands: Reference could be made to best practices on confidentiality treatment, e.g. by applying A, B, C dominance in confidentiality rules or the use of Tau-Argus. This chapter could be linked more closely to Chapter 10 and Chapter 7.
46. Portugal: Disseminating data directly from the SBR is not the practice of Statistics Portugal. It is not clear if this is a recommendation or a simple alternative. What should be used to determine the best decision about SBR dissemination?
47. Turkey: Data confidentiality rules may be specified in a more detailed way for several national statistical offices. Examples of country practices could be added.
48. USA: In paragraph 9.5, the subsequent discussion of restricted-access environments in section 9.4 could be referenced. In paragraph 9.11, it should be made clear that the “three or more” rule is only for illustration. Appropriate tabular disclosure limitation methods are complex; it would be good to cite a few leading literature references here.

Response by the Task Force

49. The Guidelines provide detailed guidance on dissemination. A complete list of demographic events or micro data cannot be listed, and countries are not restricted by those listed in the Guidelines. Confidentiality is a key issue also for the SBR and therefore the section 9.2.2 on Confidentiality Considerations is maintained. References to relevant literature on confidentiality, methods and algorithms have been added to address the proposals by the Netherlands and USA, and paragraph 9.11 has been extended to mention the use of dominance rules to ensure confidentiality. Production of statistics directly based on the SBR has become more common and is a potential way of producing coherent statistics in an efficient way. Whether this is feasible depends on the specific statistics in question, the quality of the SBR and available resources.

J. Chapter 10. Quality

50. Lithuania: Section 10.3.1 declares that “SBR quality is strongly linked to the quality of the administrative data it uses, over the generation of which it has limited or no control. This is different from a survey process that is under NSI control.” However, many statistical surveys also integrate administrative data with statistical ones or are even based on administrative data. So, the survey process similar to SBR sometimes depends on the quality of administrative data.
51. Netherlands: The chapter could elaborate on the role of GSBPM regarding quality and discuss setting up a quality framework that starts from the required quality of the statistical indicators to be produced. The aspect of controlling costs related to quality seems insufficiently highlighted. Could mention ways to control quality related to specific sub-populations (e.g. by activity, size, maintenance group, profiling). The quality aspect regarding the number of complaints/issues raised by users could be discussed. The quality aspect of the available documentation about all processes may be insufficiently highlighted in 10.6. Could note that by researching inconsistencies between sources, proper actions may

be taken to improve the coherence in statistical outputs. Could discuss the importance of having an agreement in advance on the quality of the source that is approved by the data supplier. Could mention checking inputs and outputs of each (business) process as a way to prevent severe mistakes in the statistical production processes. In Section 10.8.2, applying priority rules between sources could be an example to support ‘quality without witness.’ In 10.8.4, do thresholds applied to the tax administration records have to be accounted for when all other sources are integrated into the taxation register? Reference to the ESSnet on administrative data should be included.

52. USA: Paragraph 10.22 should be expanded to say more about resource requirements. Paragraphs 10.25-10.31 should also discuss trade-offs and points at which flexibility is desirable. More should be said about priorities based on impact of errors on survey frames and the resulting survey data quality (paragraph 10.30). Paragraph 10.72 could be expanded to include other variables if relevant, e.g., occupational classification or product/service classification. It would be good to go beyond discussion of under-coverage and consider the “informativeness” of that under-coverage, in the usual probabilistic sense (paragraph 10.113).

Response by the Task Force

53. Paragraph 10.17 has been adjusted to address the issue raised by Lithuania. Paragraph 10.4 mentions that the level of quality depends on the sub-population group and the specific maintenance of the SBR. A reference to the ESSnet has been included in paragraph 10.32. Paragraphs 10.81 and 10.84 have been extended to improve the explanation of the quality of input data and cooperation with administrative data authorities. Paragraph 10.22 has been extended to address the comments of the United States on resource requirements, and paragraph 10.27 has been extended to address the comments on trade-offs between quality and resources. A sentence has been added to paragraph 10.30 to mention the balance of priorities against the likely impact of errors. Under-coverage is dealt with in detail in Chapter 8, and has been added to the proposed research topic Methodological Developments in Chapter 12.

K. Chapter 11. Key Considerations in establishing a Statistical Business Register

54. Ireland: Relationships with other systems and registers should be given more focus. Is just establishing a common identifier enough? There are also guidelines other SBS areas have to operate under, statistics they need to produce and multiple different variables that a CBR needs to hold for all areas to work under a common and workable infrastructure.

55. Netherlands: Should discuss consistency checks built into the system to prevent errors and improve system control.

56. Turkey: Providing the workload, frame sizes and number of employees for several NSI's could be a good guide.

57. USA: Paragraphs 11.25-11.29 should be supplemented with additional comments on benchmarking of cost structures. It is important to discuss documentation of benefits of an SBR as seen in, e.g., cost reduction or cost avoidance, per the “public goods” comments in this section. It would be good to add comments about sharing and re-use of some components or architecture and code, when appropriate and cost-effective (paragraph 11.75). It would also be good to discuss a priori “data cleaning” that is often needed before record linkage (Paragraph 11.102).

58. UNSD: Chapter 11 would benefit from an introduction regarding the modernization strategy of the national statistical office (or the national statistical system). Without this

broader objective, it is very difficult to argue why one would want to invest in establishing or improving SBR.

Response by the Task Force

59. Section 11.4.10 mentions a common identifier as useful for linking of information from different sources. Section 11.4.11 provides further practical guidance on establishing a unique identifier for statistical units, the implementation of which has to take national circumstances into account. Paragraph 11.26 has been extended to mention benchmarking of cost structures. Paragraph 11.36 has been extended in response to the comment from Turkey, while it was not possible for the Task Force to collect country specific information on workload, frame sizes etc. Quality assurance and data validation is discussed in paragraph 11.41, which has been extended to mention built-in consistency checks, as suggested by the Netherlands. Paragraph 11.75 has been updated to mention sharing of software, etc. as suggested by USA. Paragraph 10.102 has been extended to mention the need for data cleaning.

L. Comments to the Annexes

60. The Task Force received only few comments for the annexes, and mainly minor proposals for clarifications or updates of country examples, which have been incorporated. The countries, which have provided country examples, have updated the examples on basis of the received comments and with the latest available information. The glossary and the references were also reviewed and improved.
