

Annexes

Annex I: Table of dimensions and stages

	Preliminary	Early	Mature	Advanced
Dimension 1	No statistical law or institutional arrangement or MoU are in place in support of the SBR	There is a provision in the statistical law and/or MoU that mandates the NSO to collect data that are relevant for SBRs. Access to administrative data is not guaranteed by legislation or MOUs	A statistical law allows the NSO to establish and maintain SBR A statistical law gives the NSO access to relevant administrative data for SBR	A statistical law allows the NSO to release the public anonymized microdata , when complying with the principle of confidentiality
Dimension 2	Limited and irregular information available for the update of the SBR	Economic census and maintenance surveys are the main data sources for the establishment and maintenance of the SBR	Maintenance of the SBR is primarily based on administrative sources , combined with surveys	The SBR is based on one or more data sources that allows frequent and comprehensive updates of the SBR
Dimension 3	The SBR is not maintained or updated, or is updated irregularly	The maintenance and update procedures for the SBR are being developed	Maintenance and update procedures and methods of making changes to records are clearly defined and executed	Maintenance and update of the SBR are conducted on a continuous basis
Dimension 4	There is no evaluation of how complete the coverage of the SBR is	Efforts are being made to assess and improve the coverage The SBR does not provide satisfactory sample frames in business surveys	The SBR covers all the institutional sectors of the economy , including multiple types of units and minimum set of variables	Additional efforts are being made to expand the coverage of SBR
Dimension 5	Use of SBR is almost solely to support uncoordinated business surveys and the level of support to business surveys is considered inadequate	The use of SBR is limited to the creation of consistent frame for some business surveys	The SBR is used to create a snapshot/frozen frame Business demography is compiled based on the SBR	The SBR is used for micro-data linking, data exchange and contributes to the development of global/regional registers
Dimension 6	There is no (integrated) IT infrastructure for SBR	The IT infrastructure consists of a simple database structure , containing the essential information from the main data source	The IT infrastructure is well developed and scalable , and supports many tasks and user requirements related to SBRs	The IT infrastructure is part of the NSO integrated production system and extensions for additional features are continuously explored and implemented
Dimension 7	There are no considerations for the interoperability of the SBR	There is limited interoperability of the SBR with other systems	A common Unique identifier framework is used consistently across multiple registers	The SBR is part of an integrated system of registers including population, housing and address registers

Annex II: Self-assessment questionnaire

Introduction

The SBR Self-assessment Questionnaire is a tool that can assist the NSOs in their assessment on the status of development for their SBR in a multi-dimensional approach. It is based on the methodological framework as described in the SBR Maturity Model, which was produced by the UNCEBTS Task Team on SBRs.

It is recommended that you read the SBR Maturity Model first, before completing this questionnaire.

The questionnaire contains seven modules, with each module corresponding to one of the seven dimensions defined in the SBR Maturity Model. In each module, there is a set of questions regarding the current status of your country's SBR in a particular dimension. For each question, please select the answer(s) that best describes your country's SBR. You will receive an assessment result indicating the stage of SBR development in the dimension. The results can be viewed in the Result tab as well.

Questions

*Within a dimension, always answer from the top (e.g., in dimension 2, 2.1 -> 2.2 -> 2.3) to ensure correct results. If you need to go back, delete the answers and start from scratch.

Dimension 1: Legal and institutional framework

1.1 Is there a provision in the statistical law or a MOU that mandates or allows the NSO to collect data that are relevant for SBR? (This includes for example the conducting of economic censuses and surveys, or access to an administrative business register.) Select one of the following.

A. Yes

B. No

If A is selected, proceed to the next question. Otherwise skip to the end of this dimension and give assessment "Preliminary stage"

1.2 Are the following descriptions true for your country's SBR? (Select all that apply)

A. The statistical law allows the NSO to establish and maintain an SBR.

B. The statistical law gives the NSO access to relevant administrative data.

C. The statistical law or MOU has the provision that all providers of administrative data should provide the NSO with access to their data, and at the level of detail necessary to produce official statistics.

If A plus at least one other answer are selected, proceed to the next question. Otherwise skip to the end of this dimension and give assessment "Early stage"

1.3 Are the following descriptions true for your country's SBR? (Select all that apply)

A. Within the fundamental principle of data confidentiality, the statistical law has the provision that allows the dissemination of aggregate data or anonymized unit record data (microdata) from the SBR.

B. The statistical law has the provision that allows microdata sharing from the SBR with statistical authorities of other countries or international/regional organizations when complying with the principle of confidentiality.

C. The statistical law or MOU contains the provision that the providers of administrative data shall consult with NSO before carrying out major changes in their data collection or processing that may affect the data provided.

D. There are formal agreements to allow some data sharing between the national SBR and the SBRs of other countries.

E. There is an inter-institutional committee or other coordinating mechanism with the aim of cooperating in the collection and/or promoting the quality of the administrative data.

If one or more answers are selected, give assessment "Advanced stage". Otherwise give assessment "Mature stage"

Dimension 2: Data sources for SBR

2.1 Is there information which enables regular updating and maintenance of the SBR is based on administrative data (business registers, taxation data, etc.); or economic censuses (possibly in conjunction with SBR improvement surveys)

A. Yes

B. No

If Yes is selected, proceed to the next question. Otherwise skip to the end of this dimension, and give assessment "Preliminary stage"

2.2 Are the following descriptions true for your country's SBR? (Select all that apply)

A The maintenance of the SBR is primarily* based on administrative sources, such as business registers, taxation data, etc. (*Most of the new units are included and the variables are updated)

B. If economic censuses are used, regular and comprehensive updates of the SBR during the inter-census are conducted by additional sources such as administrative data which enable the addition of new units and updated variables.

If A or B is selected, proceed to the next question. Otherwise skip to the end of this dimension, and give assessment "Early stage"

2.3 Are the following descriptions true for your country's SBR? (Select all that apply)

A. The SBR is based on one or more data sources that allow comprehensive and frequent updates of the SBR regularly or in line with the frequency of data source updates.

B. Web scraping and data mining techniques may be used to verify/update the content of the SBR.

C. Where there is enabling supranational legislation, data from other countries can be used to update and validate the SBR.

If one or more answers are selected, give assessment "Advanced stage." Otherwise give assessment "Mature stage"

Dimension 3: Maintenance and update of SBRs

3.1 Are the following descriptions true for your country's SBR? (Select all that apply)

- A. The SBR is updated irregularly with no agreed procedures or schedule.
- B. Maintenance and updating procedures are not well established and continuously reviewed, but under development.
- C. The maintenance and update procedures are well established and regularly reviewed.

If A is selected, skip to the end of this dimension and give assessment "Preliminary stage." If B is selected, skip to the end of this dimension and give assessment "Early stage." Otherwise proceed to the next question.

3.2 Are the following descriptions true for your country's SBR? (Select all that apply)

- A. Validation is conducted on a regular basis.
- B. The SBR is updated regularly:
 - on an annual basis
 - several times in a year (e.g., on a quarterly basis)
 - on a continuous basis

C. The quality of the SBR is periodically evaluated against a set of defined objectives pertaining to coverage of units and variables, accuracy and timeliness of source data, the effectiveness of validation and maintenance procedures, and the extent to which SBR outputs meet user needs

D. Unique identifiers are available in the government institutions and are used for maintenance and update of the SBR.

If all of A-E (one of the three for C) are selected, proceed to the next question. Otherwise skip to the end of this dimension, and give assessment "Early stage"

3.3 Are the following descriptions true for your country's SBR? (Select all that apply)

- A. The maintenance and update of the SBR (live register) are conducted at a higher frequency (more than once in every year) on a regular basis or in line with the updates from the administrative data sources
- B. The SBR maintenance supports SBR outputs, including frozen frames and publication of data from the SBR, and the schedule indicates to users the likely variations in SBR coverage and content over time.
- C. There is a Large case unit to profile the largest, most complex or significant companies in the country.

If one or more answers are selected, give assessment "Advanced stage." Otherwise give assessment "Mature stage"

Dimension 4: Coverage of an SBR

4.1 Is there some evaluation of how complete the coverage of the SBR is?

A. Yes

B. No

If A is selected, proceed to the next question. Otherwise skip to the end of this dimension, and give assessment "Preliminary stage"

4.2 Are the following descriptions true for your country's SBR? (Select all that apply)

A. Which institutional sectors of the economy are included in the SBR:

Non-financial corporations

Financial corporations

General Government

Households

Non-profit institutions serving households

B. Which types of units are included in the SBR:

Legal units

Local units

Establishments (local kind-of-activity units)

Kind of activity units

Enterprises

Enterprise groups

C. Which types of variables are included in the SBR:

Identification and contact information

Demography

Economic/stratification variables

External links

D. The coverage of the units in the SBR is comprehensive* for the formal sector. (*All (or almost all) active economic units in the formal economy that are engaged in economic activities contributing to the gross domestic product)

E. Coverage issues are monitored on a regular basis (and the cases which cause the issues are clearly identified)

If all of A (at least "Non-financial corporations" and "Financial corporations"), B (two or more), C (at least "Identification and contact information", "Demography", "Economic/stratification variables"), D and E are selected, proceed to the next question. Otherwise skip to the end of this dimension, and give assessment result "Early stage"

4.3 Are the following descriptions true for your country's SBR? (Select all that apply)

A. the SBR includes the informal sector in the SBR if it is relevant in the country

B. the SBR includes geospatial information and usage of geographic standards for delineating regional and geolocational information in the SBR to allow for spatial analyses

- C. Other additional variables are included in the SBR (or can be linked to the SBR) that can support thematic analysis such as digitalization, etc.
- D. Dedicated efforts are in place to keep coverage adequate at all times (e.g. monitoring by a special team such as the chain management team)

If one or more answers are selected, give assessment "Advanced stage." Otherwise give assessment result "Mature stage"

Dimension 5: Use of SBR

5.1 Is the SBR used to create consistent frames for some business surveys?

- A. Yes
- B. No

If A is selected, proceed to the next question. Otherwise skip to the end of this dimension, and give assessment "Preliminary stage"

5.2 Are the following descriptions true for your country's SBR? (Select all that apply)

- A. The SBR is used to create a snapshot/frozen frame from which most economic surveys including register-based census frames are drawn
- B. Business demography is compiled based on the SBR.
- C. The SBR is used to link to administrative data.

If all of A-C are selected, proceed to the next question. Otherwise skip to the end of this dimension and give assessment "Early stage"

5.3 Are the following descriptions true for your country's SBR? (Select all that apply)

- A. The SBR is used for microdata linking with other registers
- B. The SBR is used as a tool for data exchange for statistical purposes among producers of official statistics
- C. The SBR contributes to the development of international or regional group registers
- D. The SBR (or part of the SBR) is publicly disseminated in line with legislation and the confidentiality principles of official statistics
- E. The SBR (or part of the SBR) is released to researchers in line with legislation and the confidentiality principles of official statistics
- F. User feedback is regularly sought and incorporated into SBR improvement plans

If one or more answers are selected, give assessment "Advanced stage." Otherwise give assessment "Mature stage"

Dimension 6: IT Environment

6.1 Does the IT infrastructure for the SBR consists of a database structure (not, for example, an Excel spreadsheet)?

A. Yes

B. No

If A is selected, proceed to the next question. Otherwise skip to the end of this dimension and give assessment result "Preliminary stage"

6.2 Are the following descriptions true for your country's SBR? (Select all that apply)

A. The IT infrastructure supports multiple tasks and user requirements related to SBRs, such as the updating of records, the validation of records and the importing of data from administrative sources.

B. The IT infrastructure is supported by continuous maintenance procedures and dedicated staff.

If A and B are selected, proceed to the next question. Otherwise skip to the end of this dimension and give assessment "Early stage"

6.3 Are the following descriptions true for your country's SBR? (Select all that apply)

A. The IT infrastructure incorporates elements such as dealing with big data, web scraping, datamining, or cloud environments.

B. There is a dedicated portal for businesses to enter and edit their information (either directly or via the organization that administrative data is sourced from).

If A or B is selected, give assessment "Advanced stage". Otherwise, give assessment "Mature stage"

Dimension 7: Interoperability

7.1 Is The SBR interoperable with other systems or registers including administrative sources?

A. Yes

B. No

If A is selected, proceed to the next question. Otherwise skip to the end of this dimension and give assessment "Preliminary stage"

A. Unique identifiers for businesses are available across national administrative sources.

B. Where relevant, variables within the SBR are compatible with international standards and classifications, such as ISIC.

7.3 Are the following descriptions true for your country's SBR? (Select all that apply)

A. The SBR contains regional or global identifiers where available.

B. The SBR is part of an integrated system of registers including population registers, housing registers and address registers.

If A or B are selected, give assessment "Advanced stage." Otherwise give assessment "Mature stage"

