Regional Course on Statistical Business Registers

Session 3: Introduction to SBRs (continued)

- Statistics & Research
- Other roles of SBRs
- UN Guidelines on SBRs

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Overview

Session 2 covered the role of an SBR as a live register and as a coordinator of surveys

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Session 3 will cover the potential **additional roles** of an SBR

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This Session will also review the **United Nations Guidelines on SBRs**

Additional Roles of the SBR

Statistics and research

- **SBR-derived statistics**
  - Business demographics
  - Integration with domain-specific registers
- **SBR as a direct source of data**

International data exchange

Modernization of statistical production and services

Statistics and Research

Why use SBRs?

- Increasing demand from governments, international organizations and researchers for business statistics
- Information provided must be consistent and comparable
- NSOs looking to reduce data collection costs and response burdens

Statistics and Research

SBR-based statistics

- Business demographics (births, deaths, etc.)
- Integration with domain-specific registers, i.e. trade

SBR as a direct source of micro-level data/individual information

- SBR regulatory framework
- Lists of enterprises, ownership and control information, etc.

Statistics & Research

Business demography statistics

Provide data on the development of the business population over time and the core variables that describe this development

Focus is on the birth of new businesses, the survival of newly created businesses and the death of businesses

- Birth rate: newly born businesses in t as percentage of all active businesses in t
- Survival rates: percentages of businesses born in t that are still active in t+1, t+2, t+3, etc
- Death rate: businesses closed in t as percentage of all active businesses in t

Statistics & Research

Business demography statistics

Can be broken down by:

- Economic activity (ISIC)
- Legal form
- Size or rate of growth (employment or turnover)
- Region

Sole proprietorships/owner-occupiers:

- Can be analyzed by characteristics of the entrepreneur i.e. age, gender

Other groups of interest, i.e. “gazelles”

Statistics & Research

Business demography statistics

Populations used:

- All businesses ("business demography")
- Businesses with at least one employee ("employer business demography")
- Businesses with at least two employees ("economic business demography")

Using all businesses is most comprehensive, however excluding self-employed businesses increases international comparability

Requiring 2+ employees guarantees to exclude cases where the entrepreur is counted as an employee

Statistics & Research

Business demography statistics

Example of SBR-derived demographics from the UK

Figure 1: Birth and death rates of businesses

UK, 2017 to 2022

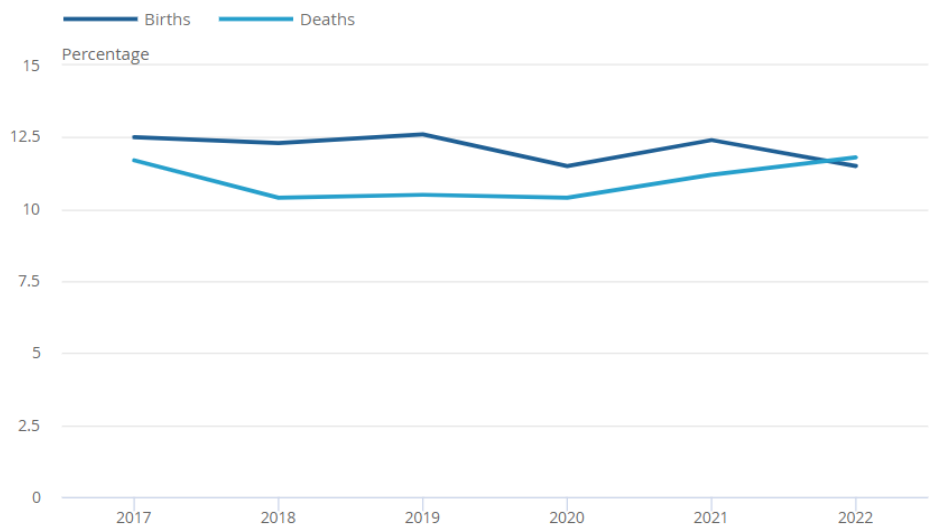
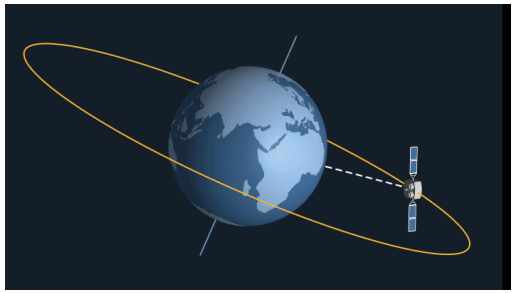


Table 3: Comparison of business births by industry and employee size bands

UK, 2022

	Business Demography	Employers Demography	2 or more employees
Production	15,325	13,060	4,420
Construction	49,390	44,295	13,355
Motor trades	7,570	7,025	2,095
Wholesale	10,765	9,800	2,160
Retail	29,420	27,700	8,410
Transport and storage (inc. postal)	36,460	20,760	6,955
Accommodation and food services	28,550	28,055	20,635
Information and communication	22,455	21,395	5,165
Finance and insurance (Excl 6420)	2,775	2,690	1,035
Property	11,825	11,350	3,270
Professional, scientific and technical	47,445	44,890	10,895
Business administration and support services	39,965	38,825	13,565
Education	5,000	4,785	1,795
Health	10,890	10,780	3,960
Arts, entertainment, recreation and other services	19,090	17,540	7,705
Total	336,925	302,950	105,420

Statistics & Research



Satellite approach

Issues

- Changes in concepts or coverage as a result of SBR maintenance can lead to changes in data unrelated to changes in the real world
- Implementing additional roles can lead to a complex network of databases and functionalities

Possible solution

- Frozen frames from the SBR are linked with other data sources and maintained separately in a **satellite register**

Benefits

- Reduced complexity of SBR
- Statistics can be produced by those outisde the SBR unit
- Can handle more data; not interfere with basic functions of SBR

Statistics & Research

Integration with domain-specific registers

More in-depth statistics can be produced by linking the SBR data with other domain-specific registers.

For example, in trade statistics, the concepts and classifications in external trade statistics differ from those in production statistics.

Coherent compilation of trade statistics by enterprise characteristics requires linkage of trade and business registers at the micro-level.

Combination of the key enterprise characteristics and the trade data offers opportunities for producing a better overview of the structure of both sectors.

Statistics & Research

Integration with domain-specific registers

Example of Tunisia

Customs data was linked to the SBR:

- Imports/exports by company
- Information on the products imported/exported, i.e. value, weight and destination

Also facilitates updates and estimations in the SBR, i.e.

- Estimate turnover based on value of exports for exporting companies
- Estimate main business activity based on most imported/exported products

Statistics & Research

Integration with domain-specific registers

Example of Tunisia

- Customs initially used their own company identifiers
- In 2010, adopted the identifiers used by the tax authorities
- Integration of files now automated

Statistics & Research

SBR as a direct source of micro-level data

Provision of SBR micro (individual) data as open data, publicly available for any individuals or organizations to use and licensed in a way that makes reuse possible

Scope of this role dependent on the regulatory framework:

- Confidentiality and privacy
- Legislative considerations

And dependent on available dissemination infrastructure:

- i.e. Geostatistical

Statistics & Research

SBR as a direct source of micro-level data

While confidentiality provisions must be observed, much of the enterprise data is public

Ideally the regulatory framework would allow dissemination of:

- Identification and stratification characteristics: enterprise name, denomination or corporate name, economic activity class, size class
- Geographical location characteristics: street, external and internal number, neighbourhood, postal or zip code, locality
- Geographical coordinates of the location: latitude and longitude
- Contact characteristics: phone, fax, email, and web page
- Date of creation of the unit

Statistics & Research

SBR as a direct source of micro-level data

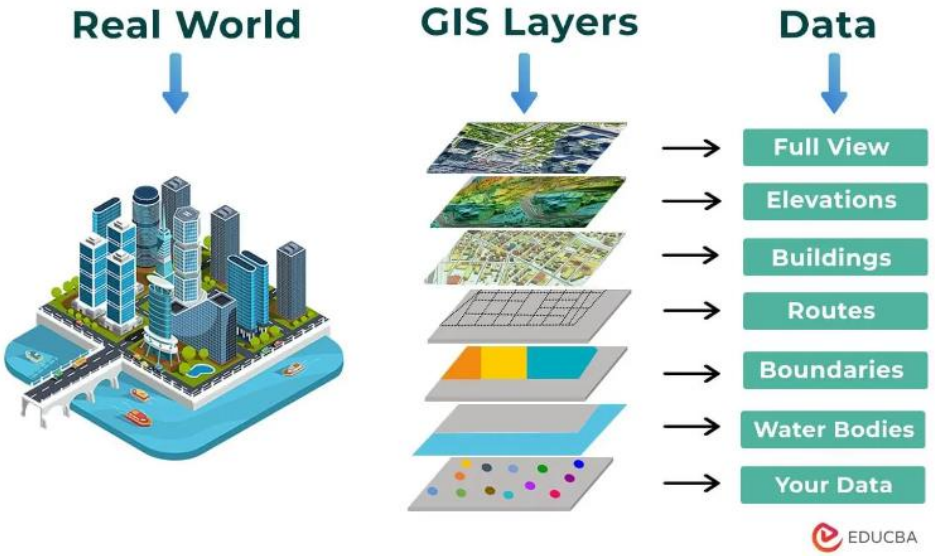
Geostatistical information

Growing interest in/availability of geographical information systems (GIS)

Coordinates can be assigned to addresses

Possible “information layers”:

- Urban services
- Natural resources
- Hydrographic networks
- Communication routes



Statistics & Research

SBR as a direct source of micro-level data

Geostatistical information

Example of Mexico

Box 2.6
Geostatistical information in Mexico

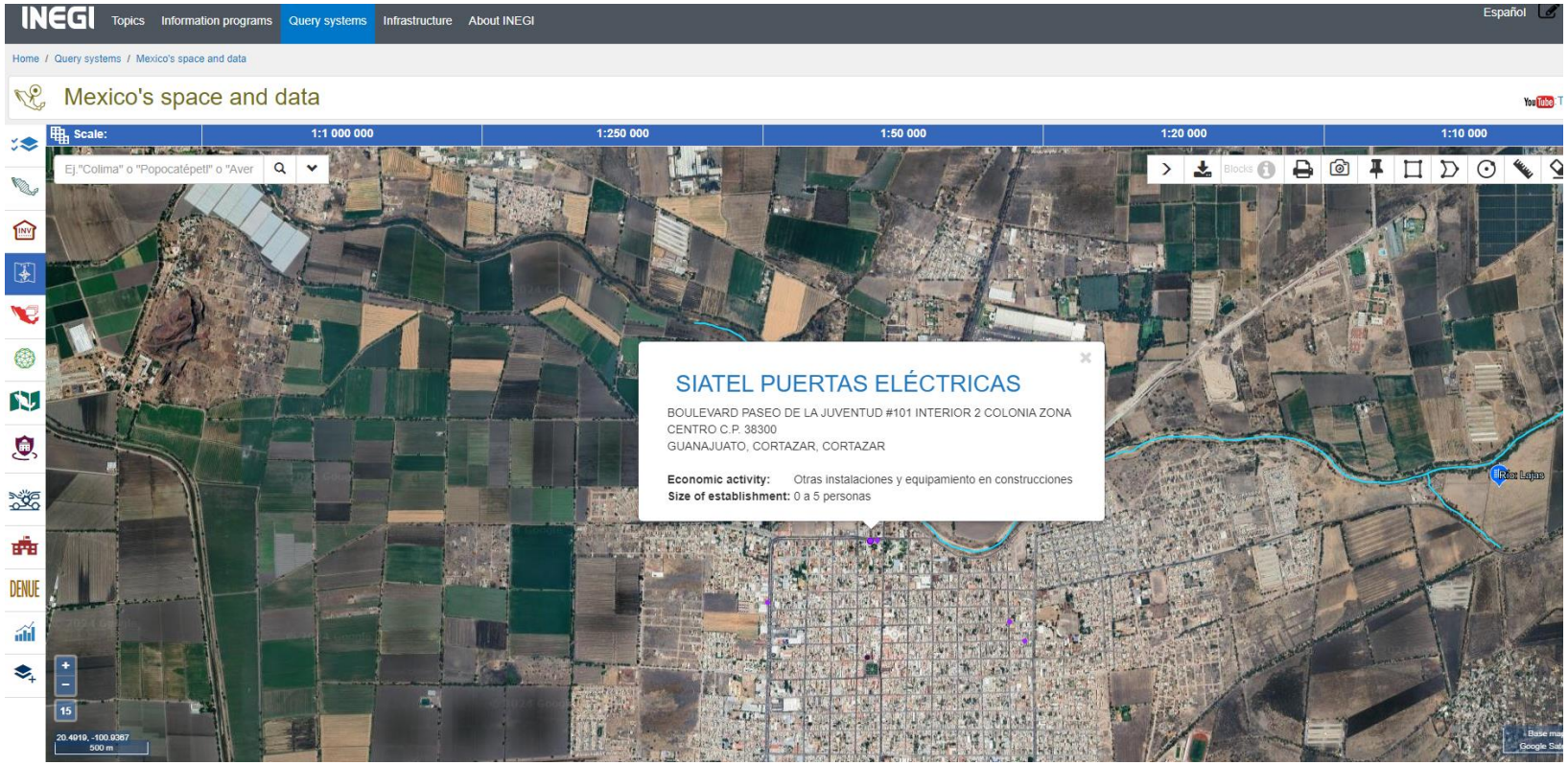
In Mexico, the National Statistical Directory of Economic Units is a part of the SBR that is available to any user through a free consultation system in INEGI (www.inegi.org.mx/app/mapa/denue/default.aspx). Its geostatistical features have broadened its role as a tool supporting public and private policy developers and decision makers, and also academics and researchers.

https://en.www.inegi.org.mx/siscon/

Statistics & Research

SBR as a direct source of micro-level data

Geostatistical information



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Other Roles of an SBR

International data exchange and comparability

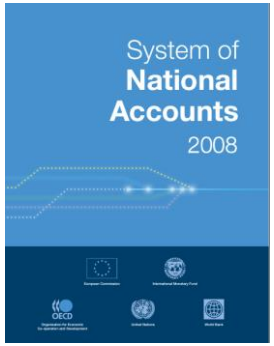
Can allow for harmonization of data to facilitate collaboration across regions

Modernization of statistical products and services

Other Roles of an SBR

International data exchange and comparability

- As globalization increases, the importance of internationally comparable data increases
- SBRs must maintain internal/external coherence



- EuroGroups Register (EGR): example of data exchange network between NSOs

Other Roles of an SBR

International data exchange and comparability

- Confidentiality
- No international standards
- Limited by requirements: data for statistical use only, cannot disclose data about individual units
- Countries responsible for compliance with their own regulations as well as those from sending countries

Other Roles of an SBR

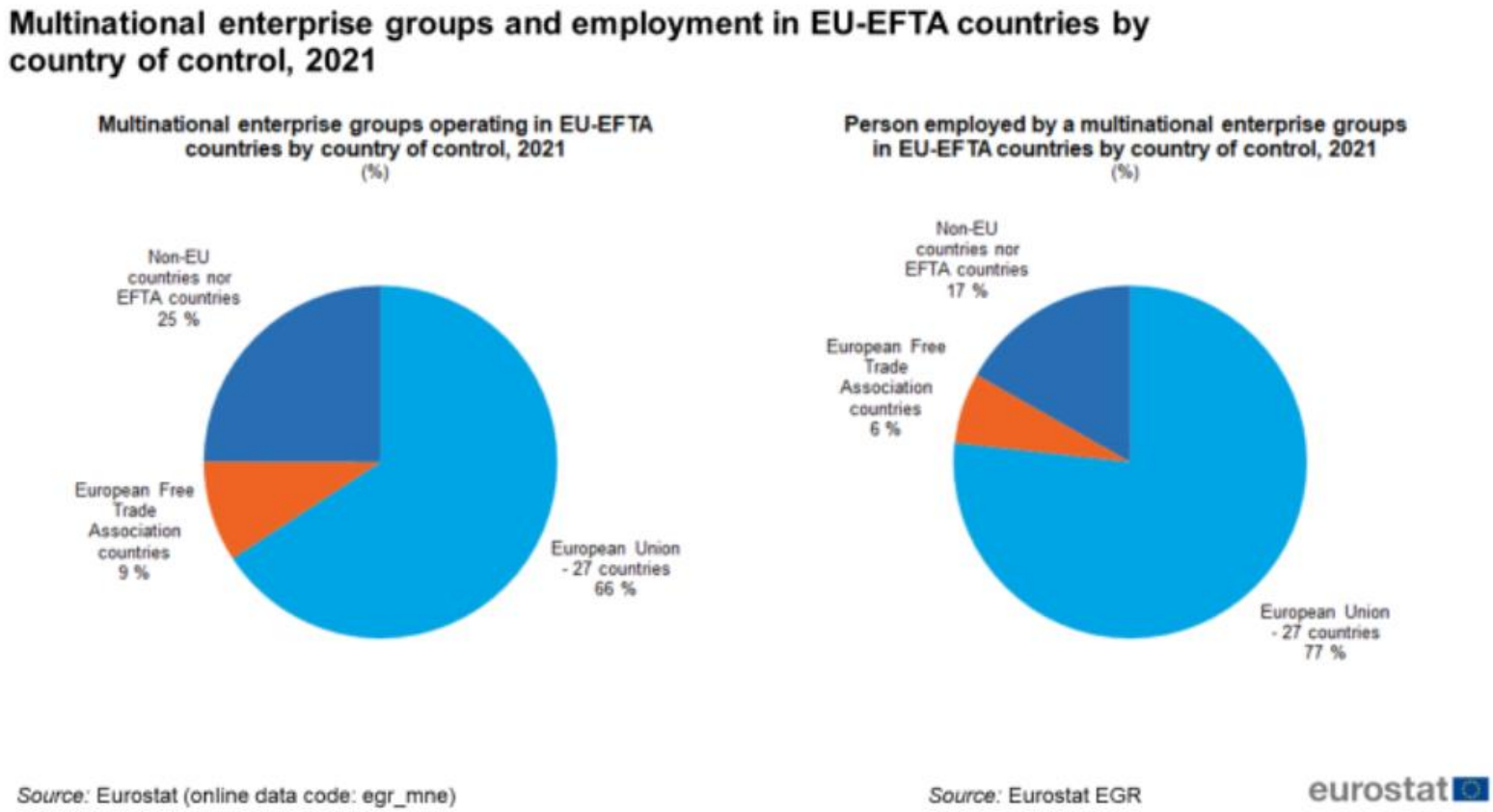
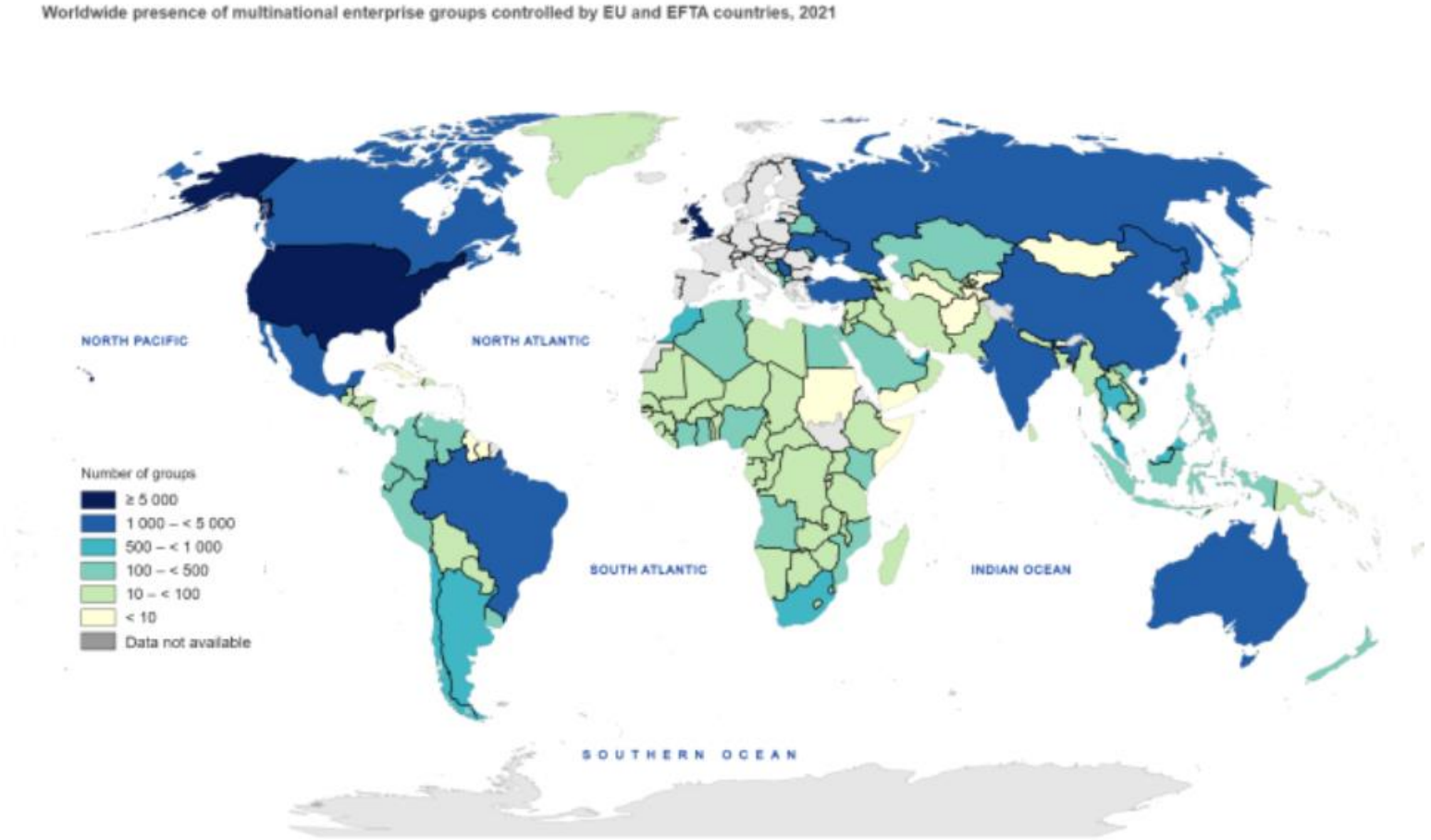


Figure 2: Multinational enterprise groups and employment in EU-EFTA countries by area of control, 2021

Source: EuroGroups Register

Other Roles of an SBR



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Other Roles of an SBR

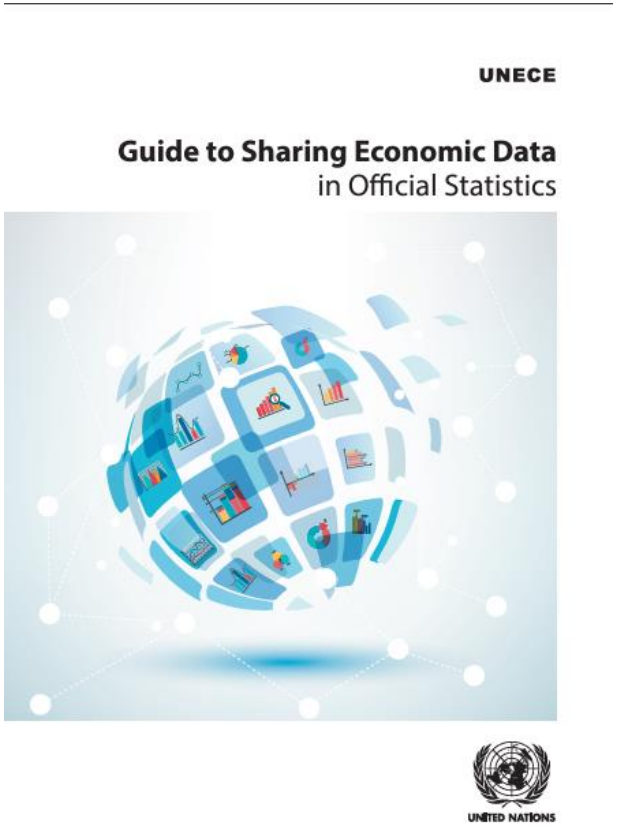
International data exchange and comparability

Cooperation and trust required

ECE Guide to Sharing Economic Data:

- Specific examples of sharing of economic data
- Identifies obstacles
- Provides guidance

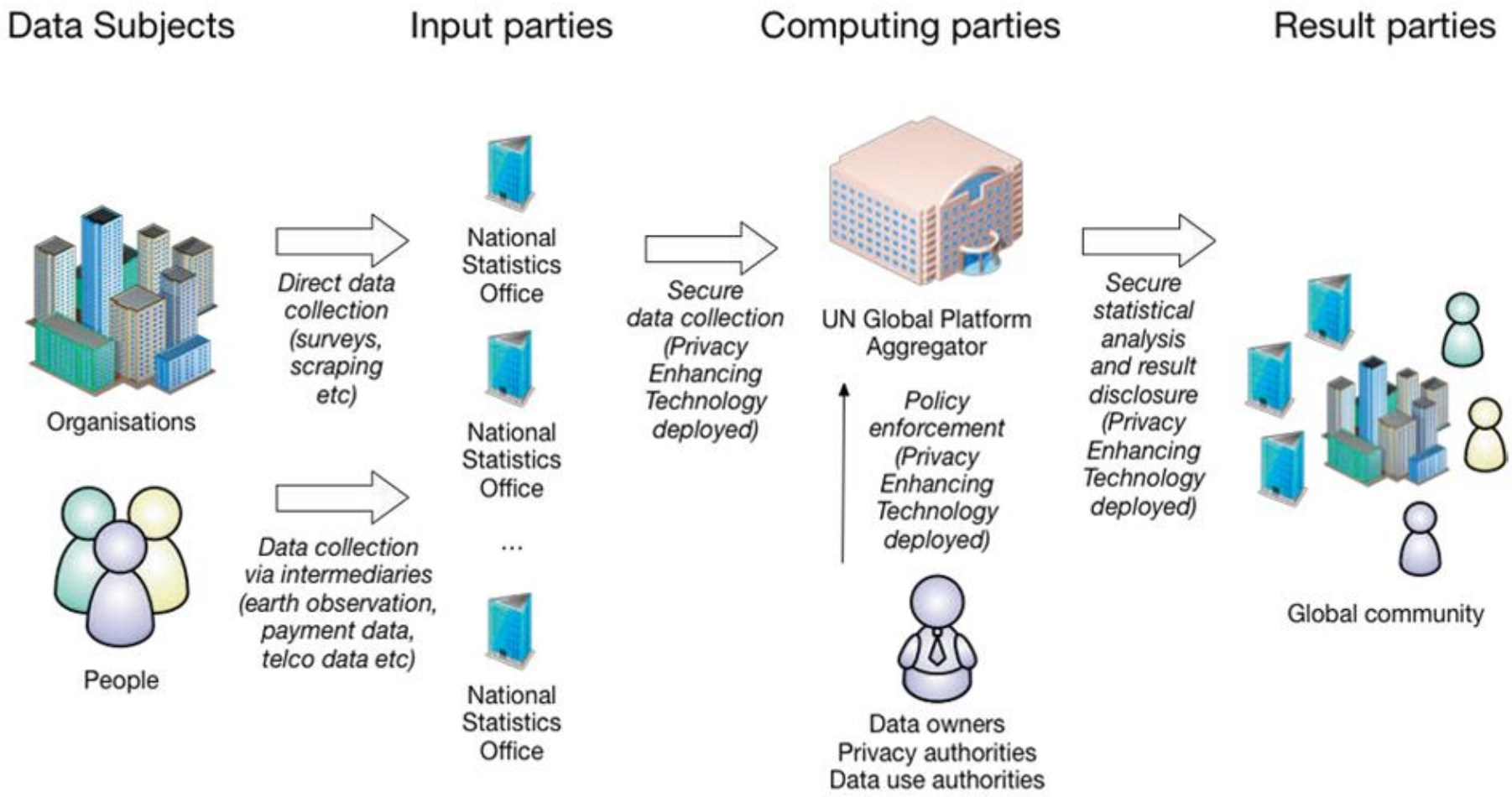
https://unece.org/sites/default/files/2021-02/Data%20sharing%20guide%20on%20web_1.pdf



Other Roles of an SBR

Figure 2.2

Privacy-preserving statistics workflow for the UN Global Platform



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Other Roles of an SBR

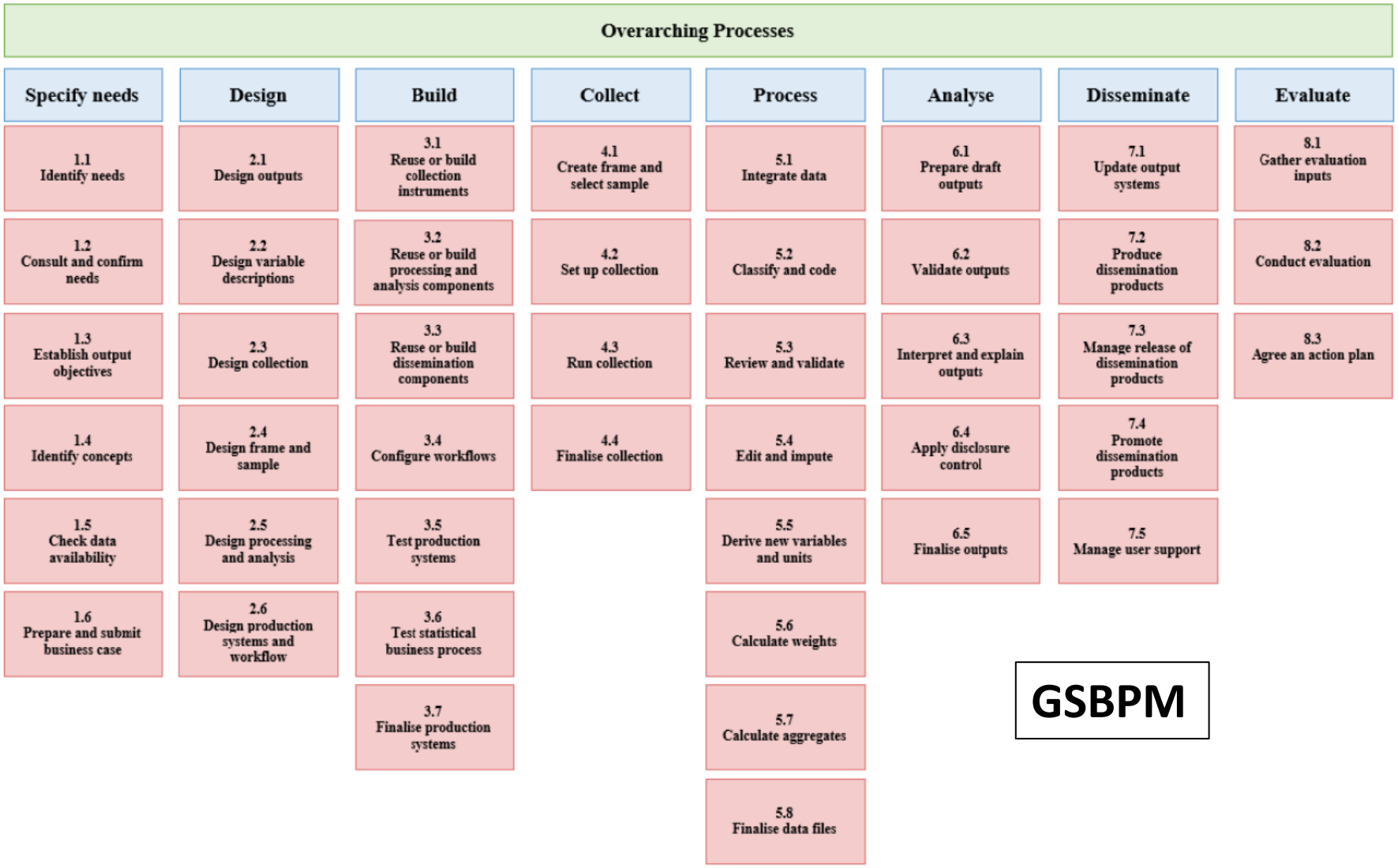
Modernization of statistical products and services

- Modernization:
  - Coordinating and linking different sources
  - Serving as “data warehouse”
  - Improved updated procedures throughout system
- Key elements: efficiency, coherence, interoperability and cooperation

- The Generic Statistical Business Process Model (GSBPM)
  A standard but flexible tool for describing and defining the common set of business processes that typically constitute statistical production

  https://statswiki.unece.org/display/GSBPM/

Other Roles of an SBR



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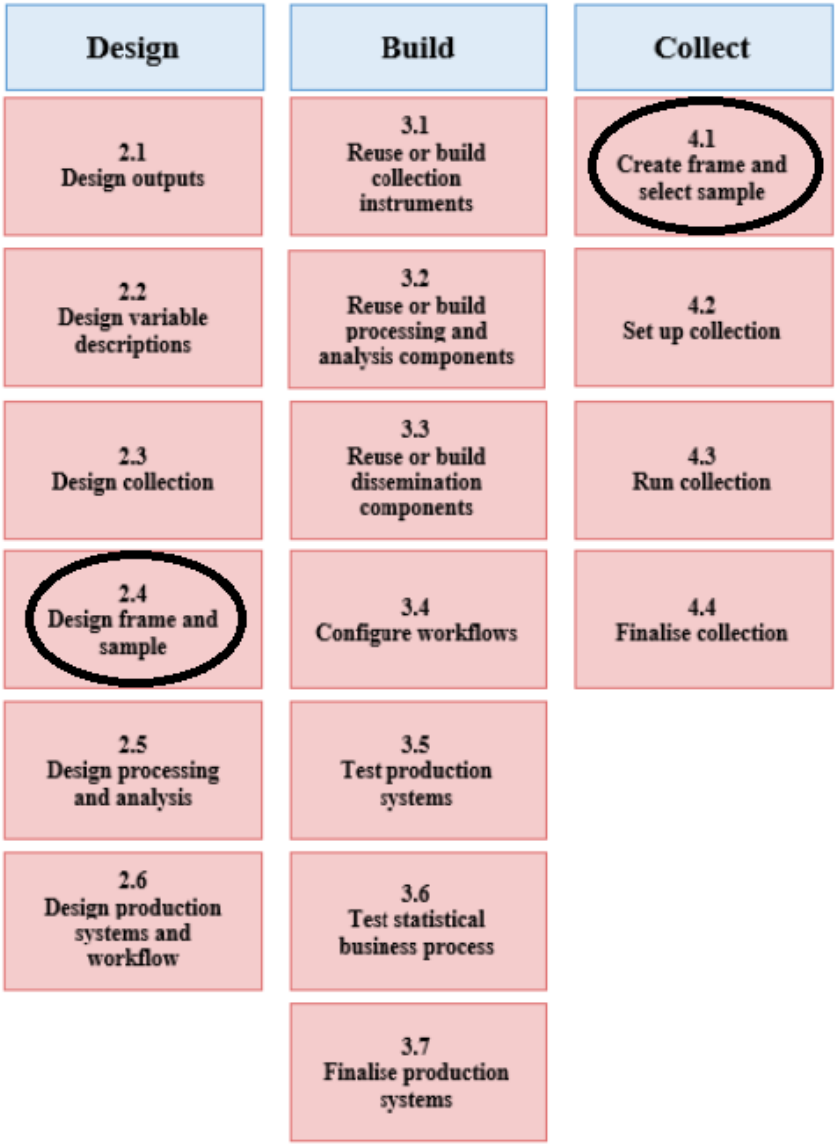
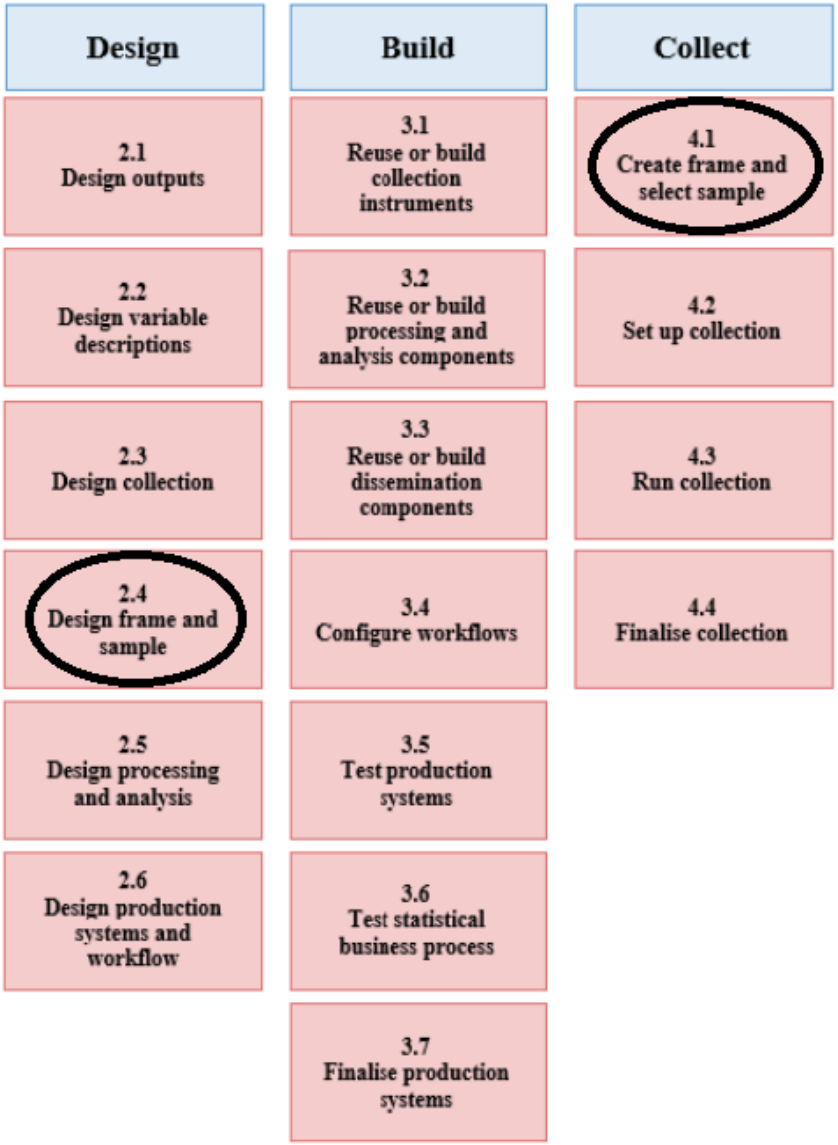
Other Roles of an SBR



Other Roles of an SBR

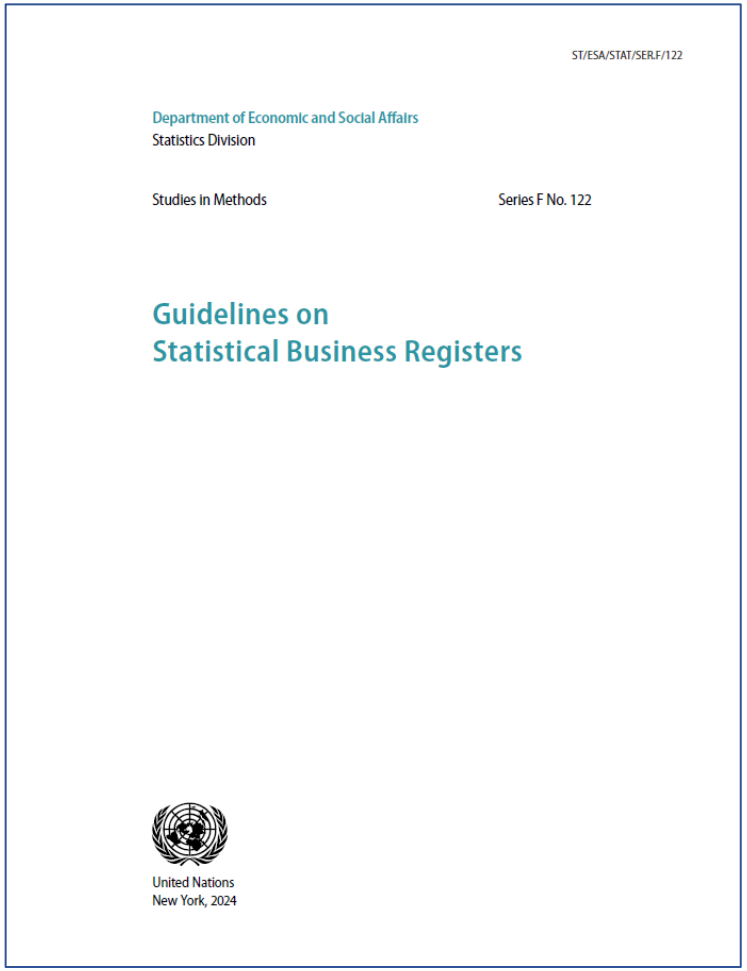


United Nations Guidelines on SBRs

- Publication in process:
  pre-edited version available on website

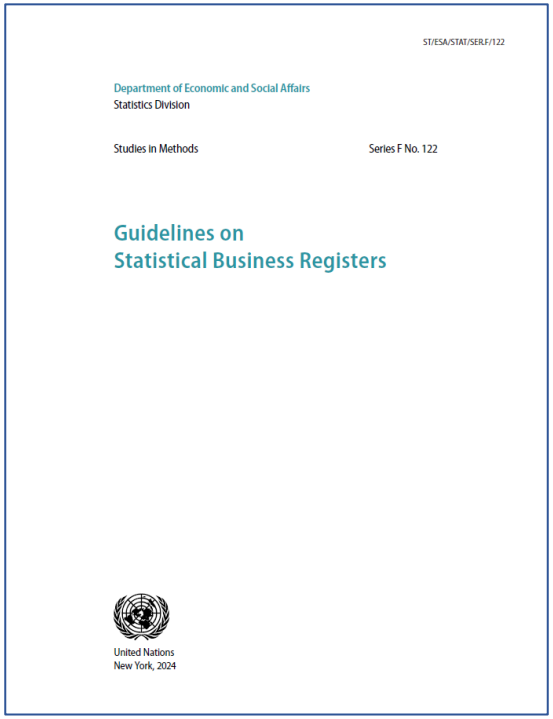
https://unstats.un.org/unsd/business-stat/SBR/Documents/UN_Guidelines_on_SBR.pdf

- Editing being finalized now
- Builds on ECE Guidelines, addressing the specific needs of countries with less-developed statistical system



UN Guidelines on SBRs

1. Introduction
2. Roles of the statistical business register
3. Coverage of the statistical business register
4. Units in the statistical business register
5. Characteristics of units
6. Data sources for the statistical business register
7. Maintenance of the statistical business register
8. Survey frame methodology
9. Dissemination
10. Quality
11. Key considerations in establishing a statistical business register
12. Topics for further work and research



UN Guidelines on SBRs

Questions/Exercise

UN Guidelines on SBRs

1. **Which roles does your SBR currently perform?**
   - A. Live register
   - B. Coordinating surveys
   - C. Business demographics
   - D. Integration with other domain-specific registers
   - E. Direct source of data
   - F. International data exchange
   - G. Modernization of statistical production

2. **Which of the above roles could your SBR possibly perform in the near future?**
3. **What would it take to achieve this?**

UN Guidelines on SBRs

Thank you!

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UN Guidelines on SBRs

1. Tell us your understanding of the key properties of an SBR. How can an SBR contribute to your work programmes of your office?

2. Does your office conduct business surveys? If not, does your office compile any data at all that are related to businesses (enterprise/establishment/legal units)?

3. Discuss the feasibility of using the following data sources to update the SBR in your country:

- Economic census
- Surveys
- Administrative data and tax registers
- Internet and big data

4. Is there any interest in your office to produce statistics on business demography?