# Guidelines on Statistical Business Registers

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# Overview

- Aim & Structure of the Guidelines
- Roles of the SBR
- Data Sources
- Endorsement by the Conference of European Statisticians
- Topics for further work and research
- UNSD projects and initiatives

# Aim of the Guidelines

o Provide practical guidance on core issues of establishing and maintaining the SBR.

o Clarify concepts and definitions, including for statistical units.

o Advise on use of administrative sources for SBR

o Use the SBR in its own right for production of business statistics

o Use the SBR combined with other statistical registers, administrative sources or surveys to produce new statistics.

o Clarify the role of SBRs in the modernisation of statistical production and services

# Structure of the Guidelines

Chapter 1      Introduction

Chapter 2      Roles of SBR

Chapter 3      Coverage of SBR

Chapter 4      Units in the SBR

Chapter 5      Characteristics of Units

**Chapter 6      Data Sources of the SBR**

**Chapter 7      Maintenance of the SBR**

**Chapter 8      Survey Frame Methodology**

Chapter 9      Dissemination

Chapter 10    Quality

Chapter 11    Key Consideration in Establishing an SBR

**Chapter 12    Topics for Further Work and Research**

# Structure of the Guidelines

Annex A   Characteristics of Units by Unit Type

Annex B   International Classifications

Annex C   Examples of Statistical Business Registers

Annex D   Examples Relating to SBR Quality Assurance

Annex E   Additional Concepts and Procedures

# Roles of SBR

| | Role | Goal |
|---|---|---|
| 1 | SBR Live Register | The gateway between (different) source(s) and the statistical units |
| 2 | SBR Backbone | Coordinate populations of statistical and administrative units in space & time through register snapshots and frozen frames |
| 3 | SBR Survey Frame | Provide set of administrative units valid for the reference period with all attributes to draw a sample |
| 4 | SBR Survey support | Control administrative burden and monitor survey response |
| 5 | SBR based statistics | Business demography statistics, business dynamics based on register snapshots, and integration with external trade register |
| 6 | SBR Information Source | Support market investigation performance |
| 7 | SBR International data exchange | Coherence in global statistics |

The main statistical units used internationally are:

> **Enterprise group**

> **Enterprise**

> **Establishment, also called local kind-of-activity unit (LKAU)**

> **Kind-of-activity unit (KAU)**

> **Local unit**

- For each of these types of units, a set of characteristics is held in the SBR, such as economic activity code, size code, geographic location, date of entry, foreign ownership, and trader or non-trader

- Guidelines recommend that four units – **enterprise group, enterprise, local unit and legal unit** –be maintained in SBRs

UNSD administered a global **Survey on national practices of linking trade statistics and business registers** in summer of 2015

94 economies responded
**28 OECD and 66 non-OECD**

**Statistical unit(s) used in SBR**
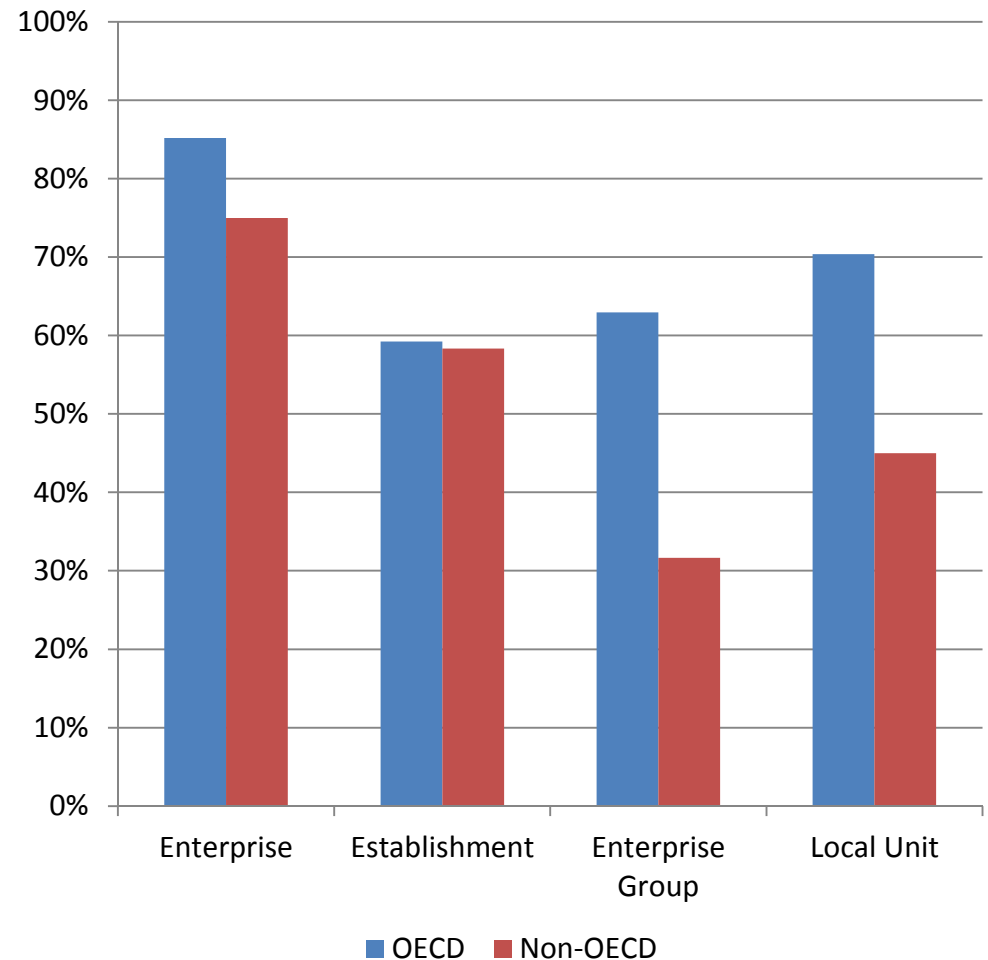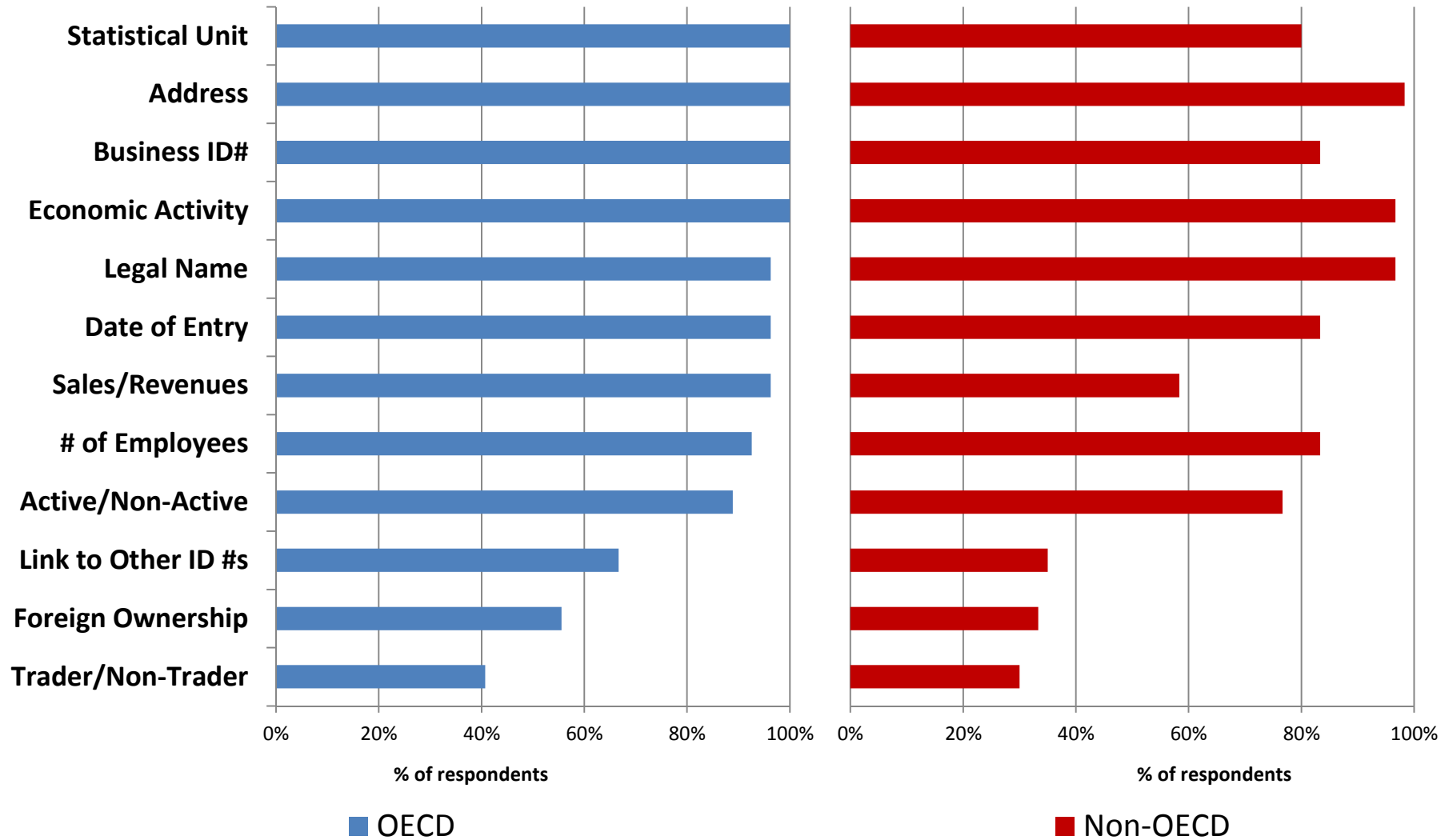
# Data sources for SBR

The Guidelines recommend that SBRs be created and maintained *primarily* using __Administrative Sources__ due to their high **coverage** and relatively **low cost and low response burden**.

- Business registration/license registers
- Tax registers
- Company/trade associations and chambers of commerce registers
- Social security registers
- Industry association registers
- Central bank
- Agricultural administrative registers
- Water supply and electric association registers

In practice, it is recommended to use a **combination of administrative and Statistical Sources**, which can offer additional or more detailed characteristics, or can be used to estimate characteristics missing from administrative sources.

> **Feedback from enterprise and establishment surveys** – useful for updating the SBR as it provides information on changes in contact address, changes in the economic stratification characteristics, deaths, etc.

> **SBR improvement surveys** – it is unlikely that all units in the SBR can be maintained equally. It is usually necessary to focus improvement surveys on specific strata to measure and improve coverage and quality.

> **Profiling** – using company accounts, often accompanied by interviews with senior enterprise officials, to build and define the structure of enterprises, mainly those involved in large complex enterprise groups

**Other data sources for updating the SBR:**

- ❖ **Telephone directories** – useful in adding or confirming SBR data

- ❖ **Payroll, taxation and accounting service providers**

- ❖ **Internet search** – information on the economic activity, on the production profile, on up-to-date addresses, etc.,

- ❖ **Commercial data providers**

- ❖ **Big Data** – so far no practical experience in their use in the SBR, but many possibilities

# Data sources for SBR
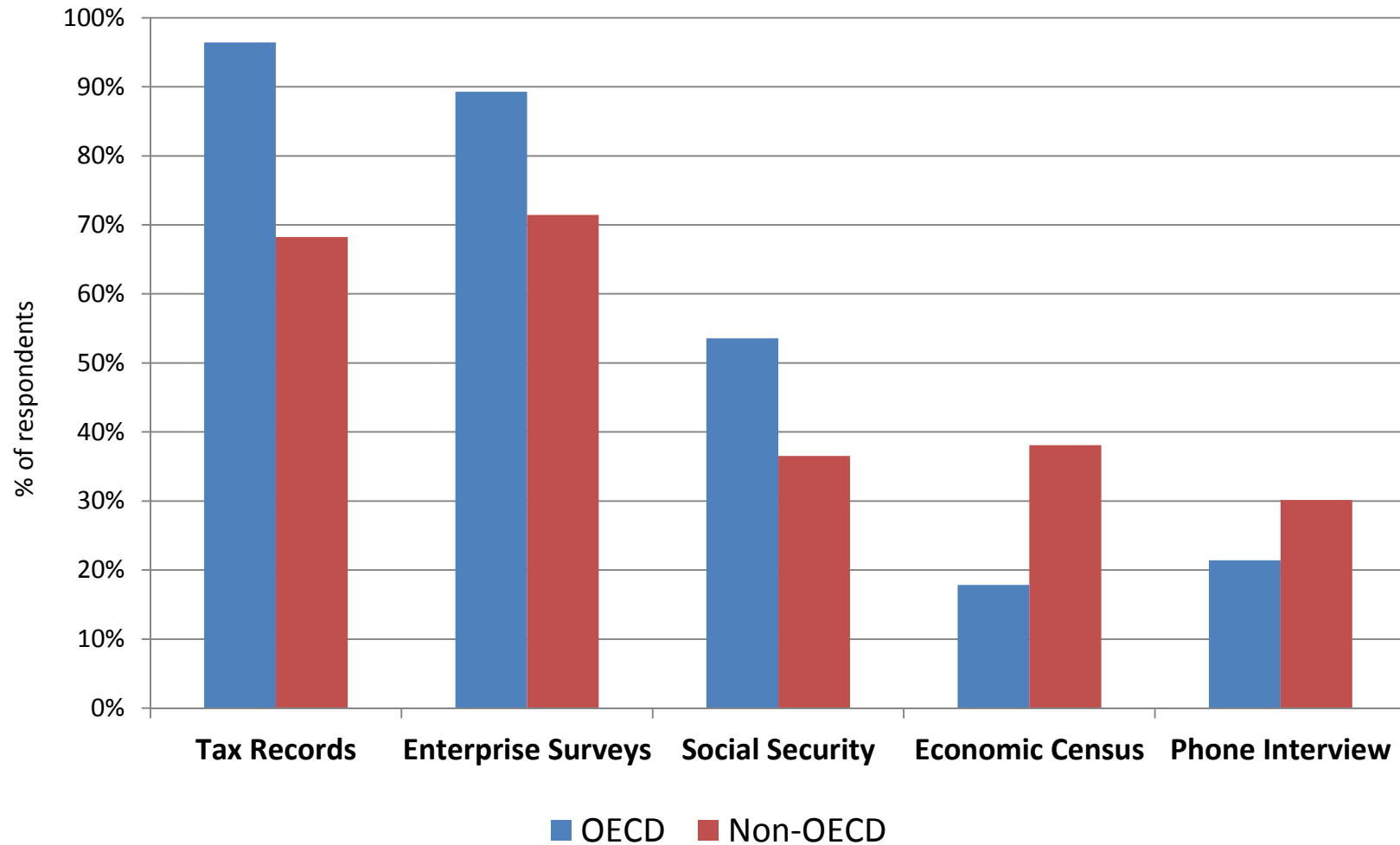
# Maintenance of the SBR

➢ Identify new statistical units without overcoverage, under-coverage, or duplication

➢ Identify values of the characteristics of existing statistical units

➢ Identify dates of changes

Taking into account the statistical unit's size and potential impact on published statistics, its propensity to change, and available sources. And:

❖ <u>Continuity rules</u>: whether a statistical unit has continued despite significant changes (e.g., of ownership, size, economic activity and/or location), or has died and been replaced by another unit

❖ <u>Stability rules</u>: weigh speed of incorporating changes with stability

# Maintenance of the SBR

**Frequency of update**
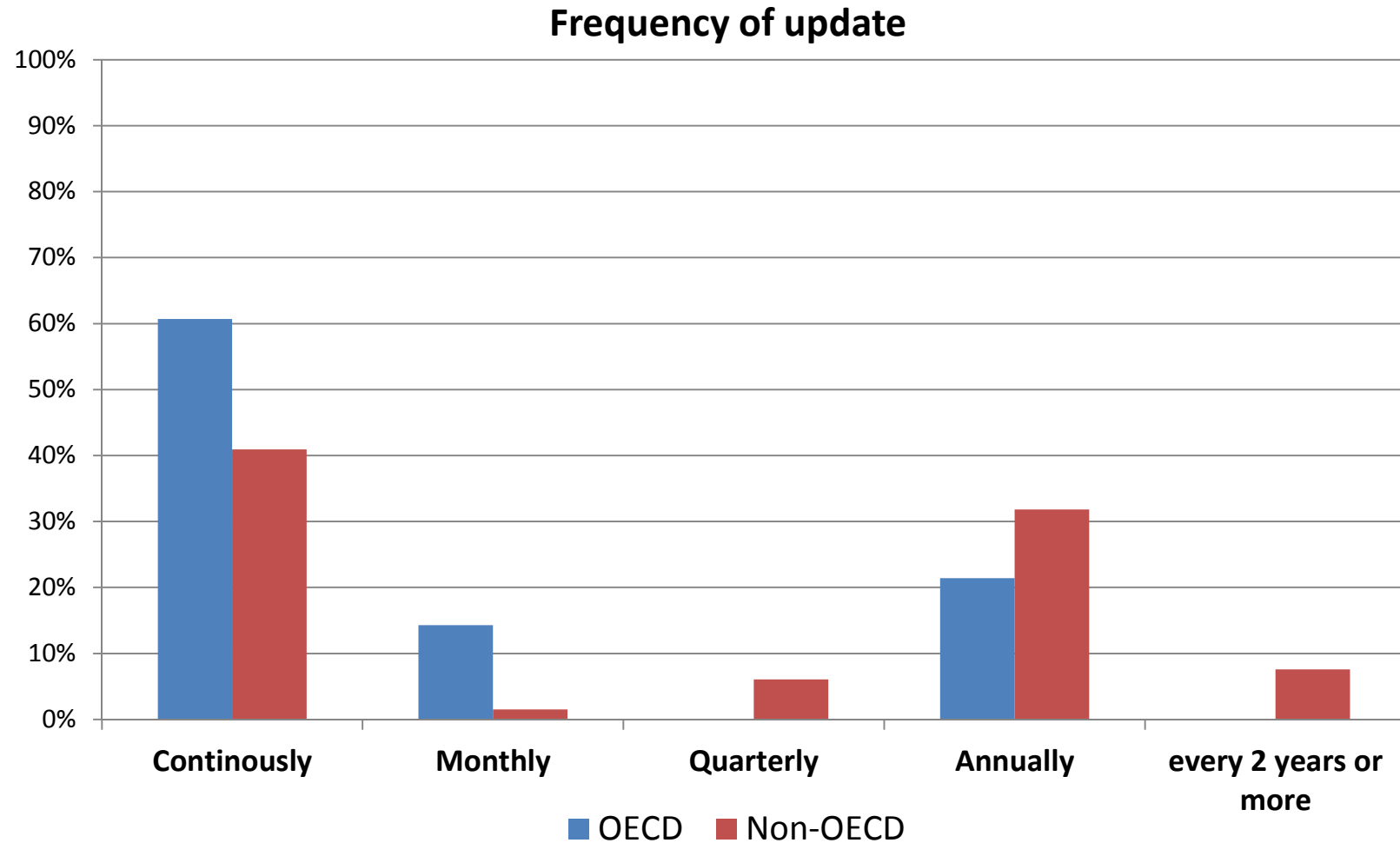
# Survey design frame methodology

- The live SBR is backbone for economic surveys
- First identify the survey's population of interest (e.g. manufacturing establishments, or enterprises with employees), a set of variables (e.g. turnover, employment, value added) and a reference period
- Snapshots of the live register are extracted containing all statistical units that are active, or have been active, within the past 12 months and their characteristics
- A survey frame is typically selected from a single frame population and consists of one type of statistical unit, e.g. enterprises for a financial survey or establishments for a production survey
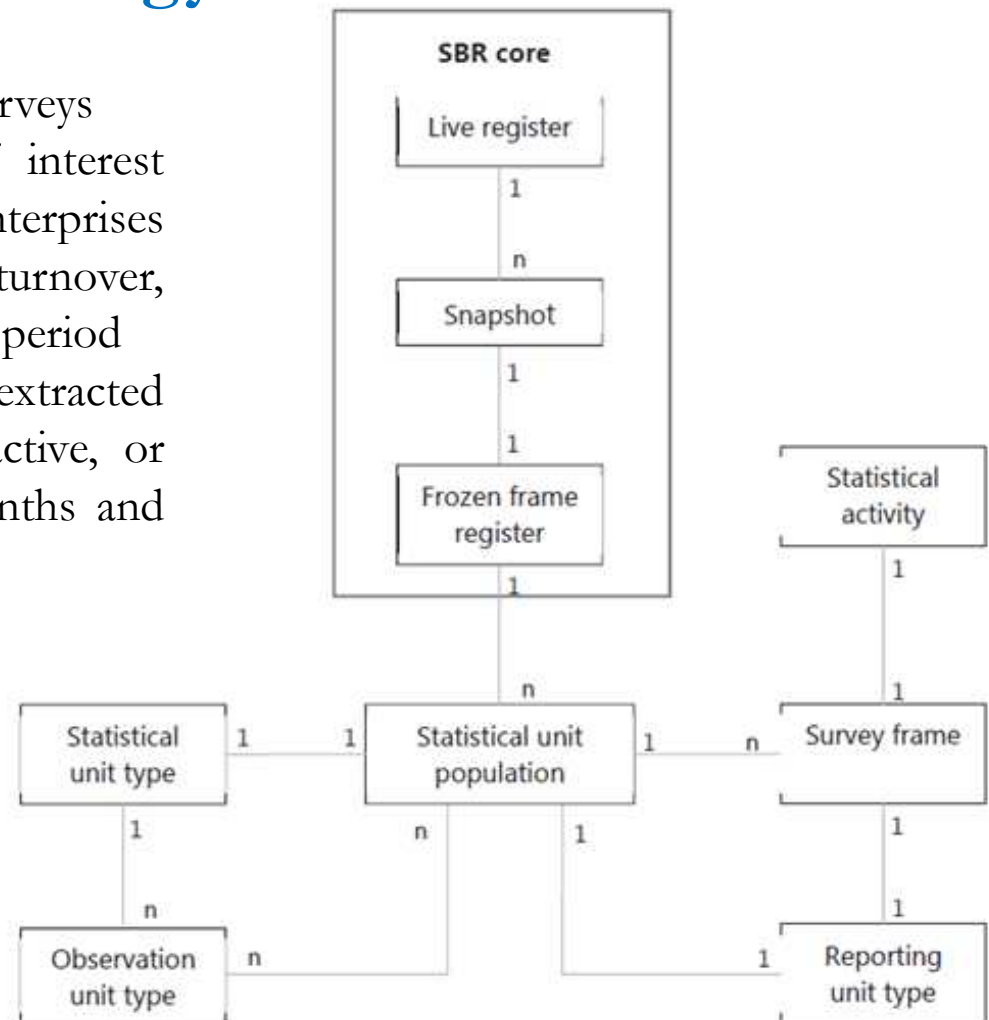
# Endorsement of Guidelines by the Conference of European Statisticians, Geneva, 15-17 June 2015

❖ The Guidelines were found comprehensive and helpful in supporting countries to maintain and improve SBRs;

❖ The Guidelines will be important for other regions; to be presented in Latin America in December; possibly translated into Spanish.

❖ Future work includes elaborating best practices for coordination with other organizations that provide data for business registers, such as Central Banks

# Topics for Further Work and Research

➢ **Statistical Units and Profiling**: best practices in profiling large and complex enterprises

➢ **SBR as a backbone of Integrated Economic Statistics**: multi-source datasets, single frame, harmonization of classifications

➢ **International Trade and Economic Globalisation**: micro-data linking, new global production arrangements (e.g. factoryless goods producers), supra-national SBR

➢ **Business statistics**: Linking, Business Demography, geo-coding of the SBR

➢ **Database software for SBR**

➢ **International Comparability**

# UNSD – Costa Rica INEC Project: Linking trade statistics to SBR

Policy questions:

- Understand the role Costa Rica currently plays in three high priority GVCs;

- Identify potential upgrading trajectories for Costa Rica to increase the value of its participation in these GVCs; and

- Based on these outcomes, identify the set of public policies that should be implemented to consolidate, increase and strengthen Costa Rica's integration in industrial GVCs

**Building on previous research** ➡
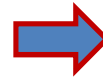
- Costa Rica: Trade Opening, FDI Attraction and Global Production Sharing (Monge, Jan 2011)
- Costa Rica's Global Value Chains in the Global Economy (Duke University, Jan 2012)
- Latin America's Prospects for Upgrading in Global Value Chains (Mexico, Mar 2012)

# Costa Rica's position in the Medical Devices Global Value Chain



| Research & Product Development | Components Manufacturing | Assembly / Production | Distribution & Marketing | Post-Sales Services |
|---|---|---|---|---|
| Prototype | Software Development | Assembly | Wholesale distributors | Training |
| Regulatory Approval | Electronics development | Packaging | Doctors & Nurses | Consulting |
| Process Development | Precision metal works | Sterilization | Hospitals (Public/Private) | Maintenance, Repair |
| Sustaining Engineering | Plastics extrusion & molding | | Individual Patients | |
| | Weaving/Knitting Textiles | | | |

**Input Suppliers**

| Resin | Metals |
|---|---|
| Chemicals | Textiles |

**Main Segments: Exports**

| Capital Equip. US$32.5 million | Therapeutics US$301 million |
|---|---|
| Disposables US$575.5 million | Instruments US$270.5 million |

**Number of Firms**

| | |
|---|---|
| | 0 - 5 |
| | 6 - 10 |
| | 11 - 15 |
| | 16 - 20 |

Local firms are mainly in packaging & support services (12 of 19) versus 4 in limited role in plastics molding & metal finishing

# Results of second linking exercise (June – December 2012)

| | Not linked | Linked | Total |
|---|---|---|---|
| Number of records | 20,934 | 355,960 | 376,894 |
| | 5.6% | 94.4% | 100.0% |
| | | | |
| Value in '000 USD | 130,354 | 3,248,470 | 3,378,824 |
| | 3.9% | 96.1% | 100.0% |
| | | | |
| Number of enterprises | n.a. | 1,903 | n.a. |
| Number of legal units | 764 | 1,958 | 2,722 |
| Number of establishments | n.a. | n.a. | n.a. |

| | Main activity | All Business Register | | Exporting enterprise | | |
|---|---|---|---|---|---|---|
| | | No. of firms | No. of employees | No. of firms | No. of employees | Value of exports (US$) |
| A | Agriculture, forestry and fishing | 3,791 | 87,982 | 294 | 40,283 | 216,690,448 |
| 01 | Crop and animal production | 3,608 | 85,069 | 279 | 38,698 | 210,146,426 |
| 02 | Forestry and logging | 132 | 1,567 | 8 | 688 | 5,289,339 |
| C | Manufacturing | 4,257 | 144,706 | 598 | 106,429 | 2,554,099,671 |
| 10 | Manufacture of food products | 1,078 | 48,328 | 137 | 34,661 | 447,071,957 |
| 14 | Manufacture of wearing apparel | 559 | 7,949 | 25 | 5,022 | 42,878,988 |
| 25 | Manufacture of fabricated metal products | 441 | 6,043 | 39 | 2,497 | 42,358,757 |
| 26 | Manufacture of computer, electronics | 40 | 6,531 | 21 | 6,369 | 787,049,178 |
| 27 | Manufacture of electrical equipment | 37 | 4,477 | 20 | 4,204 | 143,662,034 |
| G+H | Wholesale and retail trade; Transport, warehousing, and support activities | 18,668 | 201,935 | 739 | 55,190 | 387,741,850 |
| 46 | Wholesale trade, except motor vehicles | 2,471 | 58,966 | 591 | 30,086 | 349,309,112 |
| 47 | Retail trade, except of motor vehicles | 11,663 | 88,411 | 60 | 17,370 | 25,826,992 |
| | Other activities | 19,277 | 318,907 | 186 | 33,792 | 63,137,508 |
| | Hotel and Restaurants | 4,892 | | | | |
| | Professional and scientific services | 2,472 | | | | |
| | Social and Health services | 1,871 | | | | |
| | Unkown activity | 2,988 | 15,771 | 71 | 864 | 24,375,886 |
| | Non-matches | - | - | - | - | 131,689,763 |
| | TOTAL | 48,981 | 769,301 | 1,894 | 236,794 | 3,378,826,643 |

# ADB initiative on SBR for improved information on SMEs

- A 2009 regional survey: only 29 out of 45 ADB developing member countries had functioning SBRs
- With contributions from UNSD, ADB has launched a multi-year (2014-2017) technical assistance project with:
  - ❖ Bhutan, Cambodia, Lao PDR, Malaysia, Sri Lanka
- National strategic development plans developed to modernize and improve SBRs to improve the overall business environment and facilitate private sector development
- Training programmes and study visits designed and organized
- Strategies for continuing maintenance and improvement of SBRs
- UNSD providing capacity building in linking the SBRs to trade statistics

# Training on Linking the Malaysian SBR with Trade Statistics

- 17-23 September 2015, Putrajaya, Malaysia
- Training in collaboration with the Department of Statistics, Malaysia (DOSM) and UNSD on the concepts and methods for linking SBR and Trade statistics and corresponding IT tool requirements
- Presenting the type of data analysis that can be derived from linking the two datasets