

# **Business registers and profiling of business activity units**

**Norbert Rainer**

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# Relevance of statistical units (1)

The choice of the statistical unit determines the core of a business statistic:

- The classification by activity, by region and by size classes are dependent on the choice of the statistical unit
- Populations (coverage) and frames are mainly defined by means of classification and are thus dependent on the choice of the statistical unit
- The choice of the characteristics/variables and the values of the characteristics/variables depend on the choice of the statistical unit

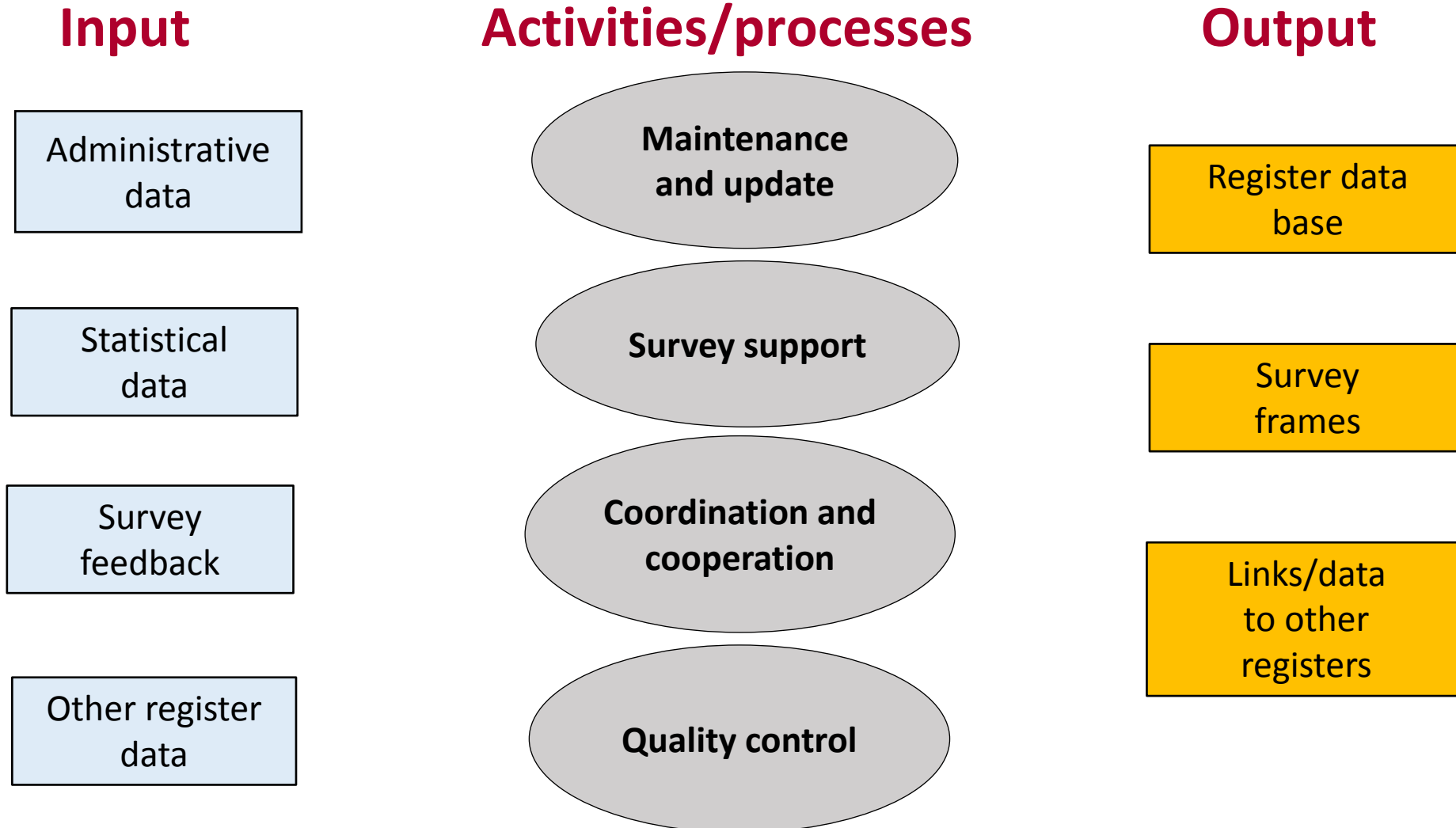
## Relevance of statistical units (2)

- Administrative or similar types of units are not viewed as being the adequate units for the concepts of the statistics that is to be produced
- Statistical units are some form of “constructs” which may not be given in the reality
- Exception: enterprises when they consist of only one legal unit which is not controlled by another unit

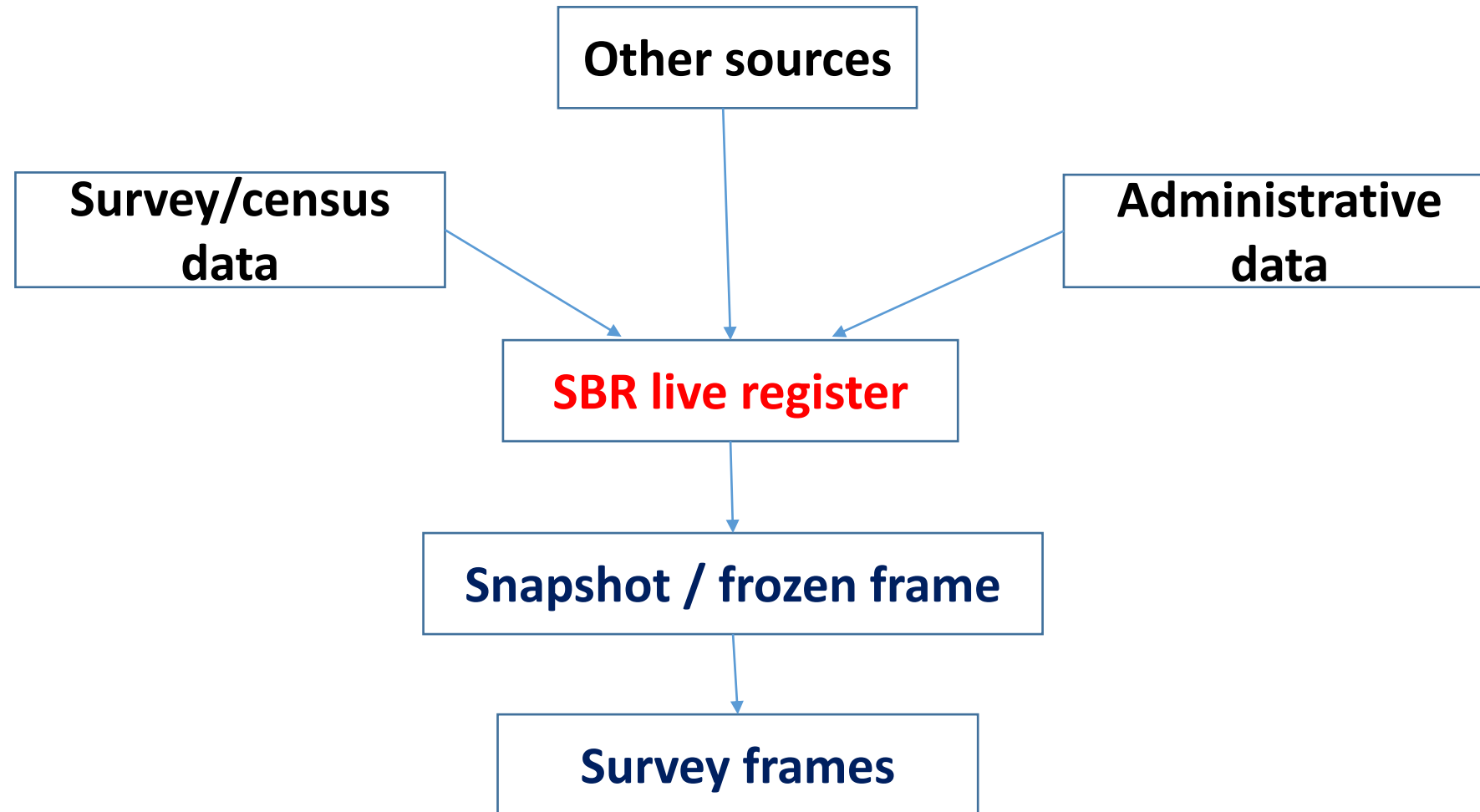
## Core importance of statistical business registers

- Provides statistical frame for business surveys and grossing-up
- Supports coherence between different surveys
- Operationalises model of statistical units
- Provides consistent reference point for all classifications
- Links with administrative and other data sources
- Provide a basis for non-response data editing
- Time series for business demography information
- Supports survey management and monitoring of response burden

# Statistical Business register activities



# Backbone role of SBR



# Business registers and statistical units

- Statistical units that are applied in business statistics should be incorporated in the statistical business register and appropriately maintained
- In addition, the statistical business register should cover the administrative/legal units in order to link with the data sources for maintaining the units and their characteristics
- The units should be assigned a unique identifier, that should not contain any content on the unit and should be stable over the life of the unit
- The relations between the units of a business should be represented by links and not by the identifier



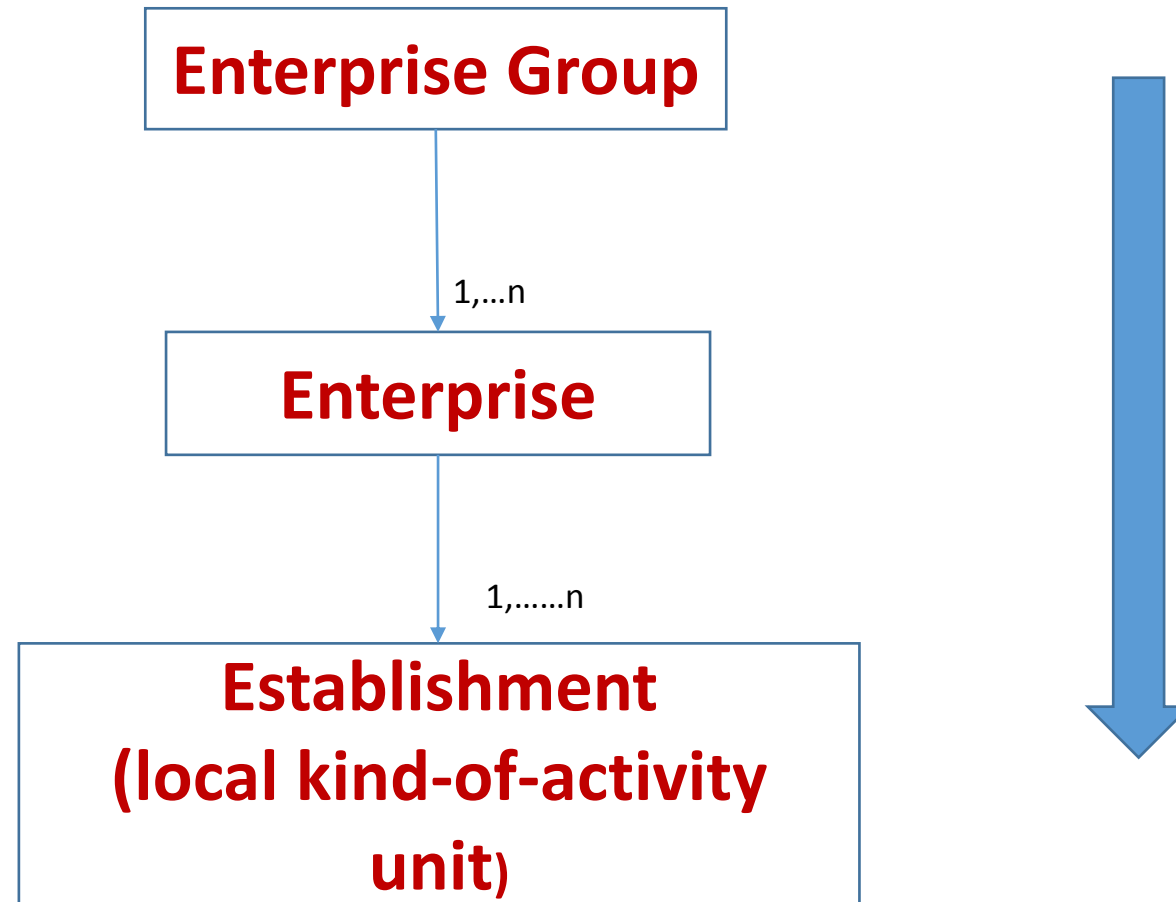
# Statistical units in industrial statistics

- The establishment is recommended as the statistical unit
- Analytical use of industrial statistics needs data structures such as kind of activity, geographical area and size
- In practice the concept of the ideal establishment cannot (always) be applied
- Two types of situations:
  - Single-establishments enterprises
  - Multi-establishment enterprises (= complex enterprises)
- Also stated approximation by local units or even enterprises
- Role of the enterprise as collecting unit and split of data between enterprises and establishments

# Relevant statistical units and their definitions and derivations/profiling

1. Enterprise groups
2. Enterprise
3. Establishment

# Relations between the three main units

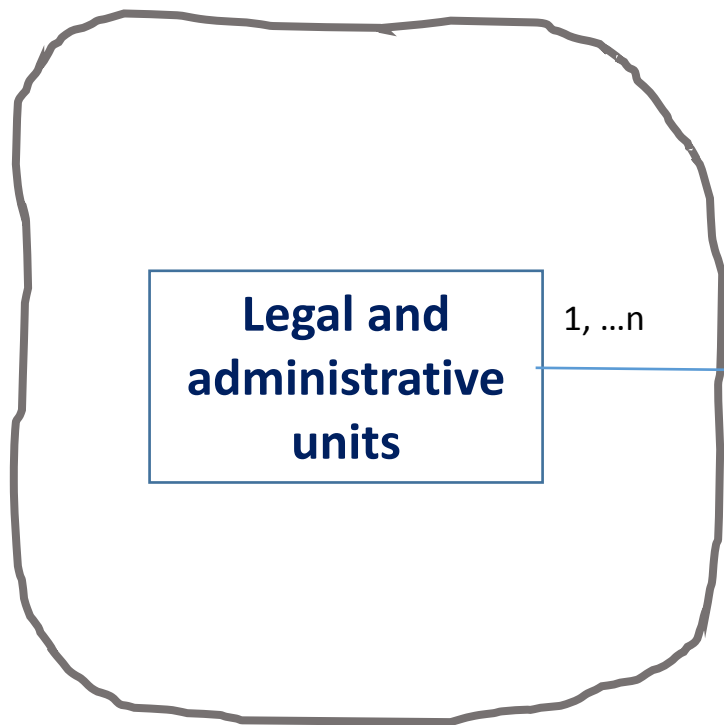


# Core Statistical unit model

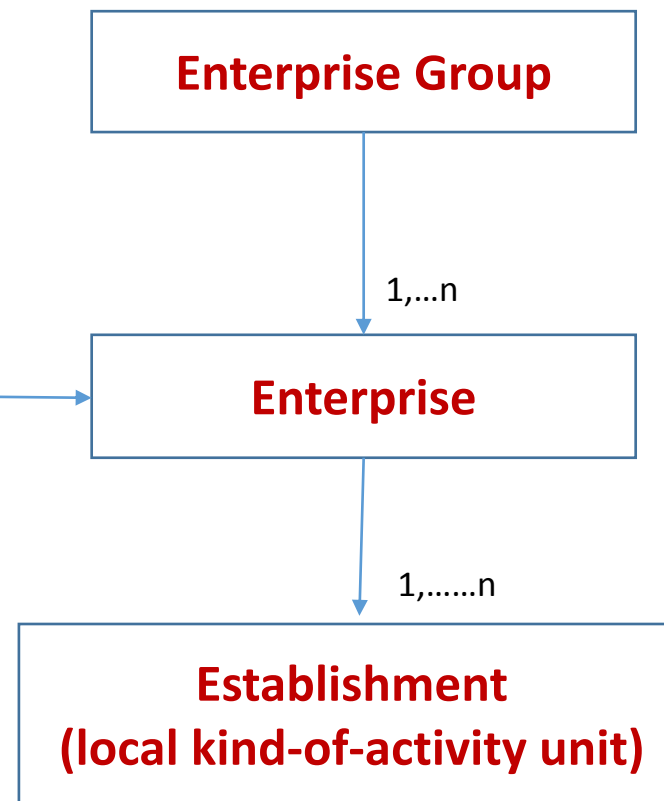
		Partition by location	
		No	Yes
Partition by activity	No	Enterprise	Local unit
	Yes	Kind-of-activity unit	Establishment (Local kind-of-activity unit)

# Legal/administrative units as basis

Administrative world



Statistical world

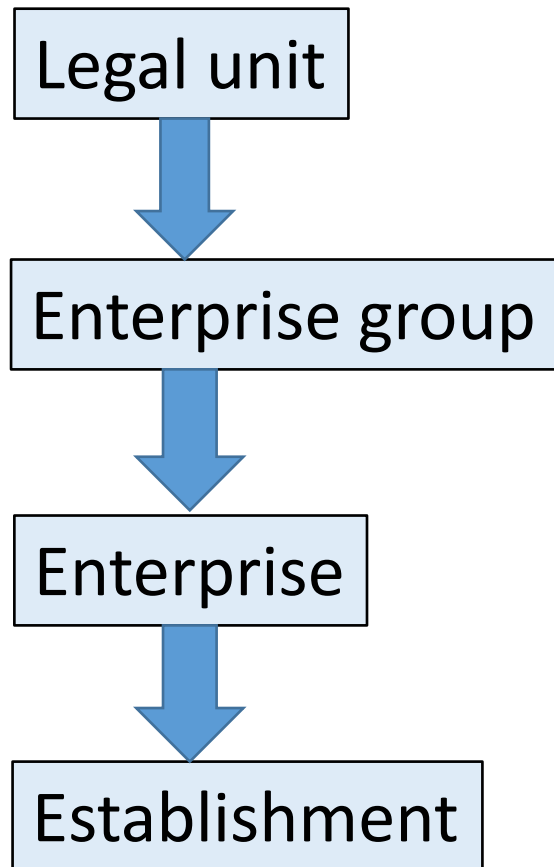


# Enterprise group (1)

## Relevance of enterprise groups in business statistics

- There is currently no regular statistics based on enterprise groups
- However, they are needed for foreign direct investment (FDI) and inward and outward foreign affiliate statistics (FATS)
- Furthermore, enterprise groups are important for delineating enterprises within a group:
  - Ideally, using a top-down approach
  - However, in case of multinational enterprise groups a top-down approach would need co-operation and data exchange between countries; thus, only a bottom-up approach might be feasible

## Relations between units in case of enterprise groups

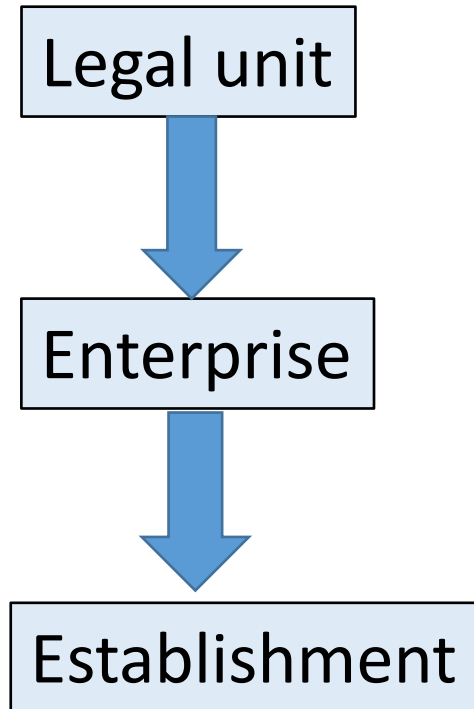


Two or more legal units which are under the same control form an enterprise group

An enterprise group may have one or more enterprises

An enterprise may have one or more establishments

## Relations between units in case independent legal units



A legal unit that is not controlled by another legal unit equates to an enterprise

An enterprise may have one or more establishments



## Enterprise group (2)

### Definition of an enterprise group:

An enterprise group is a set of legal units bound together by legal and/or financial links under the same control.

An enterprise group may consist of only one enterprise.

An enterprise group is controlled by its global group head (GGH). The GGH is defined as the unit (legal or natural person) which control all legal units of the group and is not controlled by any other unit.

## Enterprise group (3)

### Definition of control:

Control over a legal unit is defined as the ability to determine the general corporate policy. It can be exercised by

- owning more than half of the voting shares,
- having the right to appoint or remove a majority of the members of the management,
- having the right of dominance influence over it,
- controlling more than half of the shareholders' voting power of another legal unit directly or indirectly,
- proving that there is de facto control exercised.

## Enterprise group (4)

Three kinds of enterprise groups:

- **All resident enterprise group** (or domestic or national group)
- **Multinational** enterprise group
- **Truncated enterprise group**: the part of a multinational enterprise group that comprises only the legal units resident in a particular country

If the parent of a truncated enterprise group is non-resident, it is possible that the truncated enterprise group consists of several seemingly unlinked units and subgroups

A truncated enterprise group may comprise just one unit in the national territory

## Enterprise group (5)

### Global Group Head:

An enterprise group is always controlled by a single GGH

A GGH controls just one enterprise group, however, may control more than one

### Global Decision Centre (GDC):

The unit carrying out the actual management is named global decision centre

It is not necessarily identical with the GGH

### Highest Level Consolidating Unit (HLC):

It is not necessarily identical with the GGH

GGH is not necessarily subject of accounting obligations. Thus, the unit of the highest consolidation level is not in every case identical with the GGH

# Enterprise (1)

## Relevance of the unit enterprise:

- Often viewed as the core statistical unit in business statistics
- According to SNA 2008 and ISIC Rev. 4 it is the statistical unit at which all information relating to transactions, including financial and balance-sheet accounts are collectible
- The enterprise is the view of an institutional unit producing goods and services
- The enterprise is entitled to own goods or assets in its own right, it is therefore able to exchange ownership in goods or assets
- It is able to take economic decisions (autonomy)
- Usually a complete set of accounts does exist

## Enterprise (2)

### Definition of an enterprise according to ISIC Rev. 4:

An enterprise is an economic transactor with autonomy in respect of financial and investment decision-making as well as authority and responsibility for allocating resources for the production of goods and services. It may be engaged in one or more productive activities.

An enterprise may be correspond to a group of legal units. An enterprise may be a sole legal unit.

## Enterprise (3)

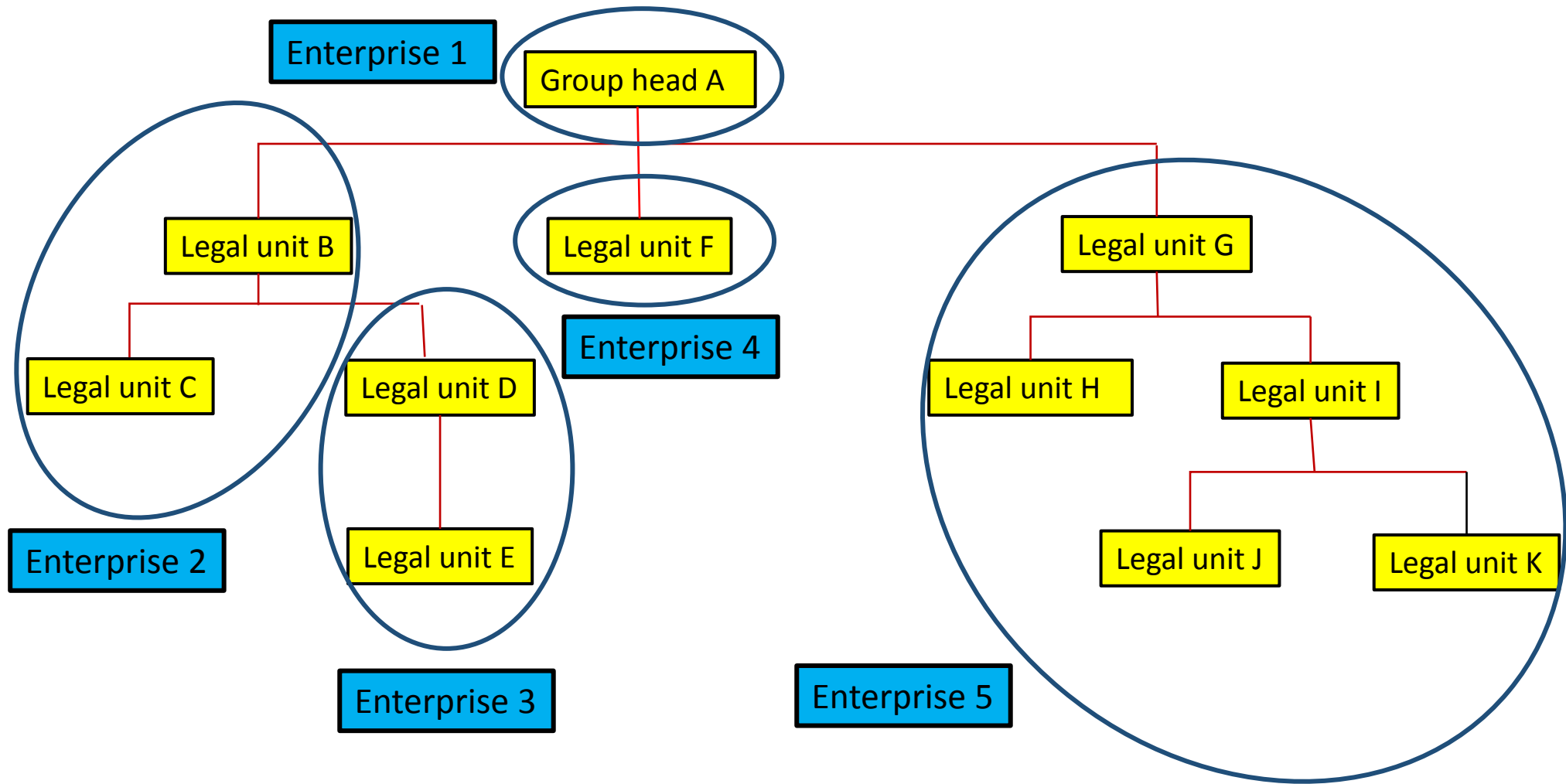
### Characteristics of an enterprise:

A unit is deemed to be an enterprise if it

- a.) operates the necessary **factors of production** (e. g. human resources, capital, technology, land and management) and
- b.) accesses the necessary **controlling systems** (e.g. integrated cost calculation, which cover the main, secondary and ancillary activities)
- c.) has adequate **managerial structure** (i.e. managers that can decide about the production process and about the economic transactions)

# Enterprise group (4)

Legal units as basis for enterprises:





## Enterprise (5)

### Identification of enterprises in case of an enterprise group:

Should in principle be made on the basis of the structure and the perimeter of the enterprise group based on the annual financial reports of the enterprise group:

- Each of the operating segments or profit-centres can be considered as a **starting point** for the identification of an enterprise inside the group
- An operating segment may consist of one or more legal units, or part of legal units
- An operating segment may be treated as one or more enterprises; an enterprise may cover more than one operating segments
- An operating segment is operated under an own management and does not carry out ancillary or vertically integrated activities

# Enterprise (6)

## Legal unit ≠ enterprise

Business A

Core business function:
– Production of goods for the market
– Production of services for the market
Support business functions:
– Distribution and logistics
– Marketing, sales services
– ICT services
– Administration and management
– Engineering and related technical services
– Research & Development
– Other support functions

Outsourcing in separate legal units

Legal unit 1

Distribution and logistics

Legal unit 2

Engineering services

Legal unit 3

Production of goods for the market

## Enterprise (7)

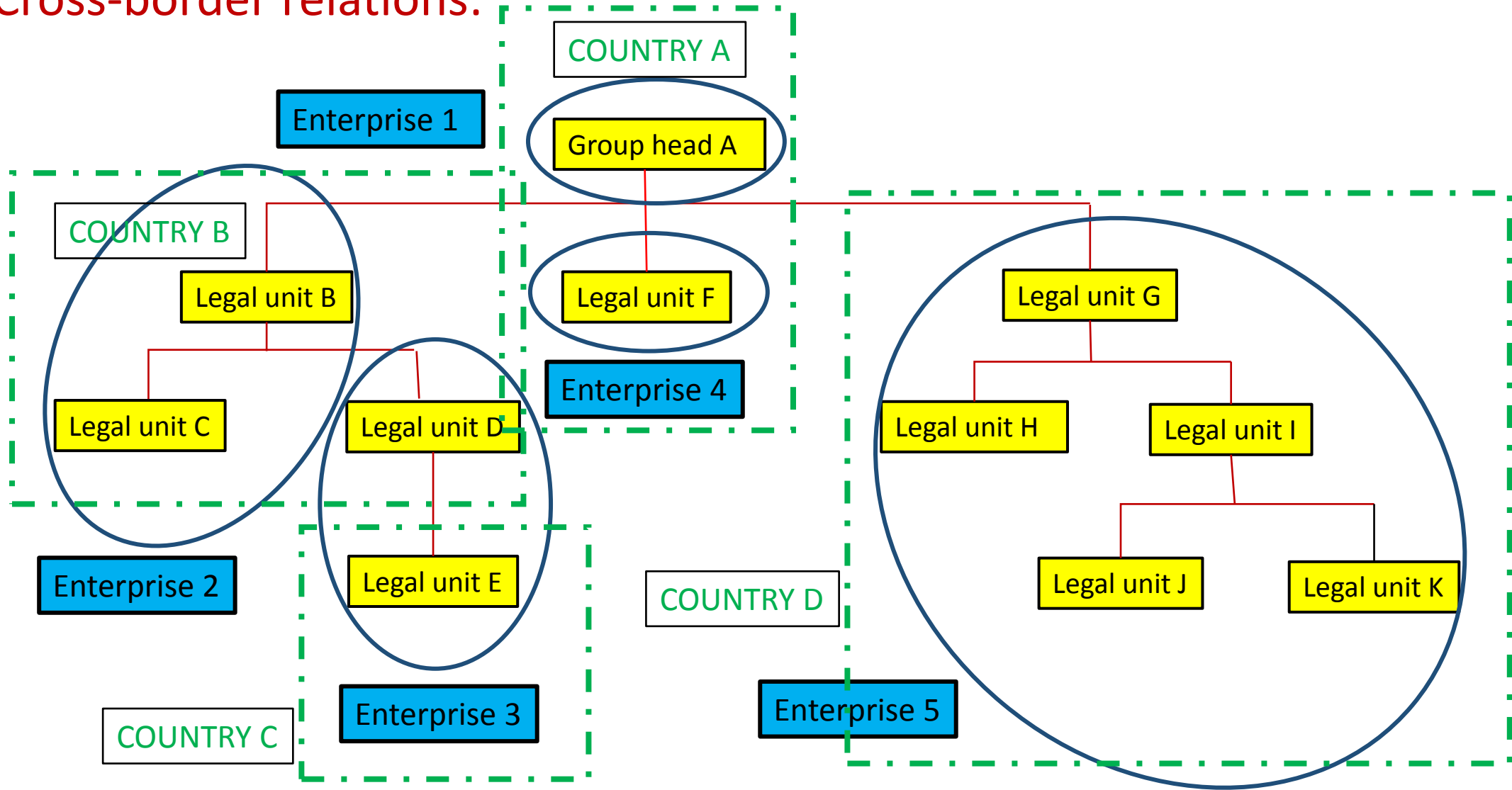
Cases where a legal unit within an enterprise group is not to be treated as an enterprise:

- Legal units that provide ancillary activities to the group
- Legal units that comprise a vertically integrated production process
- Legal units performing outsourced production activities solely to the group
- Special treatment: Head office, holding companies and special purpose entities

**However:** A legal unit located in one country performing ancillary services within the group to enterprises in other countries is to be treated as an enterprise

# Enterprise (8)

Cross-border relations:



# Establishment (1)

## Relevance of the unit establishment:

- Partitioning of an enterprise by economic activity and geography
- For national accounts purposes industries are defined in terms of establishments: an industry consists of a group of establishments engaged in the same, or similar, types of activity
- The establishment should be used for the analysis of transactions in goods and services and for the compilation of the production account
- In the EU the unit equivalent to the establishment is called local-kind-of-activity unit (LKAU)

## Establishment (2)

### Definition of an establishment according to ISIC Rev. 4:

The establishment is defined as an enterprise or part of an enterprise that is situated in a single location and in which only a single (non-ancillary) productive is carried out or in which the principal productive activity accounts for most of the value added.

## Establishment (3)

### Delineation of the unit establishment:

- Goal: partition of complex enterprises, having more than one activity at more than one location
- For an establishment data on value of production, intermediate consumption (except overhead costs), manpower costs, gross fixed capital formation of buildings, structures and machinery, and employment should be available
- Some of the data may also be estimated either by the respondents or by the statisticians
- General limitations: data availability and willingness of the respondents

## Establishment (4)

### Delineation of the unit establishment:

- The implementation of the current definition is quite difficult and partly unrealistic
- Only enterprise might be split into establishments that have significantly influence on the aggregated industry data
- Thus: the enterprises should be big of size and have either significantly high share of secondary output or multi-regional structures
- Thresholds on size and secondary output might be applied, in order to focus on the real significant cases (influence on aggregated industry data)
- Thresholds may be country and activity specific



## Establishment (5)

### Ancillary activities (according to ISIC Rev. 4):

- Ancillary activities are those that are undertaken to support the main production activities of an entity by providing goods and services entirely or primarily for the use of that unit.
- As production processes are not viable without the support of ancillary activities, these ancillary activities should not be isolated to form distinct entities,
- even if they are carried out by a distinct legal entity or at a distinct place, and even if separate accounts are kept.

## Establishment (6)

However, ancillary activities according to UN Recommendations on Industrial Statistics might be treated as separate establishment:

- Ancillary activities are part of the main establishment which they serve
- Should be disregarded when classifying a unit
- However, a unit undertaking ancillary activities may be a separate establishment, when
  - separate accounts exist
  - in a different geographical location
- Output of ancillary establishments measured on a sum-of-cost basis

# Profiling (1)

## Profiling as the proposed methodology to delineate the statistical units

- Enterprise groups can consist of dozens or hundreds of legal units
- Most enterprise groups are multinational ones and thus the group head may not be resident in the country
- Delineation should ideally be done on a top-down basis
- Starting point of profiling are the annual financial reports, income-and-loss accounts and similar closed accounts and company reports

## Profiling (2)

### Definition of profiling:

Profiling is a method to analyse the legal, operational and accounting structure of an enterprise group at national or world level in order to establish the statistical units within that group, their links and their most efficient structures for the collection of the statistical data.

# Profiling (3)

## Some main features of profiling

- Profiling will also collect the information needed for the updating of the statistical business register
- European profiling is focussed on the delineation of the enterprises and is organised in a cross-country cooperation as concerns the most important European enterprise groups
- Profiling needs a special team of experts, with knowledge on business accounts, business registers and business statistics
- Profiling results are documented in appropriate (standard) reports and related to the statistical business register
- Initial profiling and subsequent updates

# Profiling (4)

## Kinds of profiling

- Intensive (manual) profiling:
  - Includes visits or other direct contact with the group and their full involvement in the profiling process
- Light profiling:
  - Desk research (and other data sources)
- Automatic profiling:
  - Computer programme routines

## Profiling (5)

### Selection of the groups to be profiled

- Subdividing of the groups according to
  - Large groups
  - Medium groups
  - Small groups
- **Criteria for the split:**
  - Size of the group: employment, number of legal units, size within the country
  - Complexity of the group in terms of number of activities performed and intensive supply relationships within the group

## Profiling (6)

### Profiling recommendations:

Kind of profiling	Kind of enterprise group
Intensive profiling	Big and complex enterprise groups
Light profiling	Big and simple enterprise groups Small and complex enterprise groups
Automatic profiling	Small and simple enterprise groups



# Resume (1)

## Issues relevant for statistical units not dealt here:

- Classification Concepts and methodology of the classification of the statistical units
- Determining the activity status of enterprises
- Characteristics of the statistical units
- Demographic events and their treatment in SBR
- Special types of units, such as holding companies, head offices and special purpose entities
- and other aspects

## Resume (2)

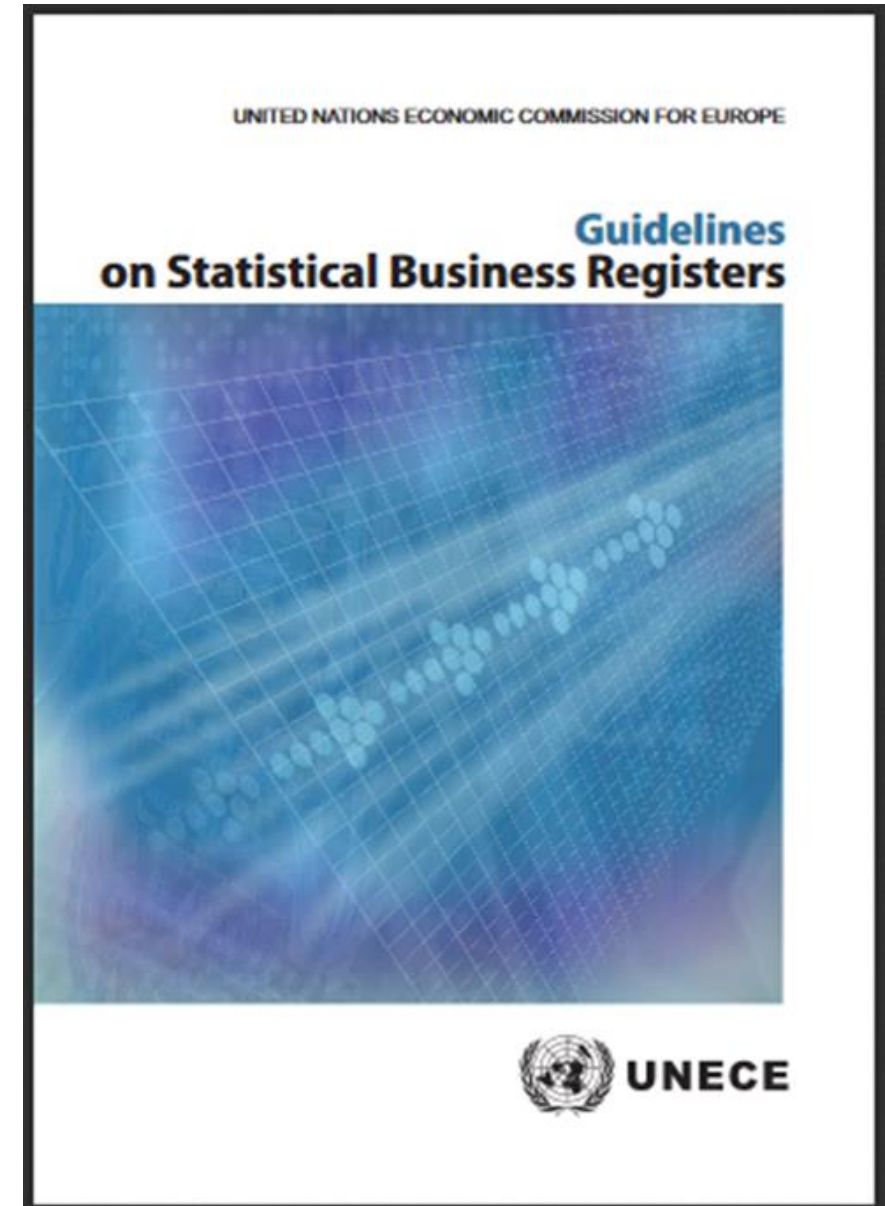
- Due to the crucial role of statistical units for the harmonisation and quality of industrial statistics, appropriate attention has to be given to the delineation of the statistical units and their maintenance
- All delineation results should be integrated into the statistical business register
- The statistical business register should also cover the unit enterprise group: all resident groups and the part of a multinational group that is resident in the country (truncated group)
- Profiling methodology should be applied for the delineation of all statistical units

## Resume (3)

- Profiling needs specific expertise and is a considerable workload
- All business statistics domains and national accounts profit from the efforts on statistical units and a high quality statistical business registers
- Maintain and/or intensify the general coordination role of the statistical business register, especially with respect to the backbone role as well as coordination of administrative data
- Have a good cooperation inside the NSO, especially between the statistical business, the business surveys and the national accounts statisticians

# Excursus: Guidelines on Statistical Business Registers

United Nations Economic  
Commission for Europe  
(UNECE)  
New York and Geneva 2015  
ECE/CES/39, 233 pages  
English and Russian  
<https://www.unece.org/index.php?id=40574>



# Structure of the Guidelines (1)

- Chapter 1 - Introduction
- Chapter 2 - Roles of SBR
- Chapter 3 - Coverage of SBR
- Chapter 4 - Units of SBR
- Chapter 5 - Characteristics of units
- Chapter 6 - Data sources for SBR
- Chapter 7 - Maintenance of SBR
- Chapter 8 - Survey frame methodology
- Chapter 9 - Dissemination
- Chapter 10 – Quality of SBR
- Chapter 11 - Key considerations in establishing SBR
- Chapter 12 - Topics for further work and research

## Structure of the Guidelines (2)

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
Glossary	
References	

**Thank you very much  
for your attention!**

**Norbert Rainer**

**norbert\_rainer@aon.at**