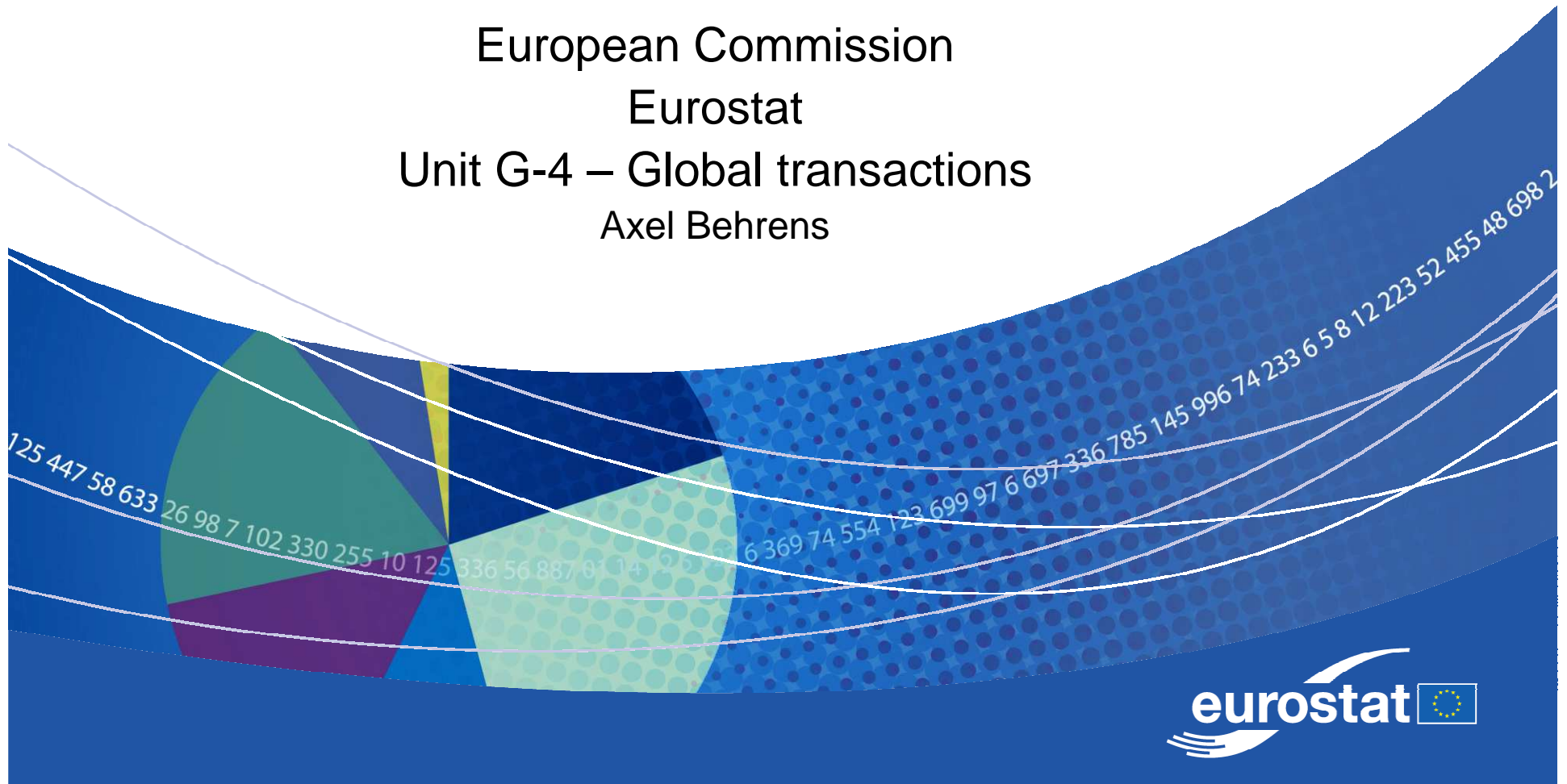# Integrating trade and business statistics

European Commission

Eurostat

Unit G-4 – Global transactions

Axel Behrens

Outline

- Background

- Why

- How

- Trade by Enterprise Characteristics (TEC)

- Future activities: Services trade by enterprise characteristics (STEC)

Trade statistics vs. business statistics (1)

- Statistics on trading of goods describe trade flows between countries with a breakdown of products
  - Monthly statistics
  - Detailed breakdowns of products (HS/CN) with a correspondence to other product classifications like CPA/CPC
  - Detailed breakdown of partner countries
  - Data expressed in value and quantity of products traded
  - Administrative data sources or basis => "input oriented statistics"
  - Complete data collection
  - **No information on traders: "who is trading?"**

eurostat

Trade statistics vs. business statistics (2)

- Business Statistics describe the structure and evolution of activities of businesses
  - Annual (SBS) or monthly (STS) statistics
  - Many variables
    - Demographic (number of enterprises / local units)
    - Production (turnover, production value)
    - Consumption (purchases)
    - Employment (number of employees)
    - Productivity (value added)
  - Basic breakdown according to the economic activity (NACE/ISIC)
  - Various data sources (surveys and administrative/register data) => "output-oriented statistics"
  - No distinction between domestic and foreign activities like sales and purchases => limited, if any, information on the cross-border movements

eurostat

The role of international trade statistics

- International trade statistics belongs to the "family" of business statistics: enterprises are trading, not countries:
  - To large extent, international trade statistics reflect commercial decisions taken by enterprises on their purchases (imports) or sales (exports)
  - Data are collected from businesses through Customs declarations or by using other means like Intrastat

- International trade and business statistics are, however, based on different concepts and classification, thus using them separately may provide incoherent basis for analysing the effects of international trade on production, employment and enterprises' performances.

eurostat

Why to integrate trade and business statistics (1)?

- To respond to new user needs to know the impact of trade on employment, production and value-added:
  - What are the characteristics of trading enterprises?
  - What is the employment effect?
  - Trade in value-added
- To understand more some specific trade flows in order to respond to needs of other statistics (BoP, NA)
  - Trade in goods for processing
  - Re-exports/Re-imports
  - Intra-group trade
- To improve data quality
  - More information on the traders allows better data validation
  - Coherence between statistical domains

eurostat

Why to integrate trade and business statistics (2)?

- Additional efforts are needed to cover areas where data are not available
  - Specific transactions like intra-group trade
  - Specific goods like ships, aircraft, electricity
- To respond to removal or simplification of Customs procedures: Intrastat
  - Although Intrastat is closely related to administrative data sources (VAT), it is by nature a business survey
  - It relies on the identification of traders and monitoring of their reporting

eurostat

How to integrate trade statistics with business statistics?

Macro or micro approach?

■ Macro approach: use product correspondence tables or input-output tables to associate products to manufacturing origin or to final use

■ Micro approach: link trade registers/data with business register, which is based on the systematic recording of identification codes in the trade transactions and in the business register

■ The two sources can be linked by identifying pairs of records which belong to the same entity with the help of identification codes

eurostat

Benefits of a micro data linking

- Based on the real information rather than theoretical assumptions
- The link between traders and businesses is required by Business Register Regulation
- Can re-use the data which already collected
- Consistent and coherent definition of statistical units
- Detailed level of trade data can be maintained
- The most important economic characteristics are available (economic activity, number of employees, turnover)
- Can be extended to cover all statistics related to businesses

eurostat

Trade by enterprise characteristics:
project history in brief

- In order to address the needs to link trade statistics with business statistics, the project "Trade by enterprise characteristics" was started
- First discussions started already in late 1990s; more concrete objectives and methodological development during last 6-7 years
- Methodology and indicators developed by Eurostat in co-operation with the EU Member States
- Several centralised data collection rounds undertaken since 2002
    - Reference years: from 1999 onwards
- The revised Intrastat and Extrastat Regulations include a module on TEC
    - Mandatory compilation from reference years 2009 (Intrastat) and 2010 (Extrastat onwards)
    - 2009 data need to be transmitted to Eurostat by 30 June 2011
    - 2008 data collected on voluntary basis
    - NACE Rev 2 and CPA 2008 applicable from 2008

eurostat

Methodology in a nutshell

- Linkage of micro data at national level: Trader identification numbers (VAT number, Customs identification number) are linked with business register identification numbers

- Statistical unit: Enterprise

- Annual trade data is reconciled according to enterprise characteristics

- Aggregated results (no micro data) delivered to Eurostat

- Eurostat processes and publishes harmonised data

eurostat

Link between trade operators and statistical units
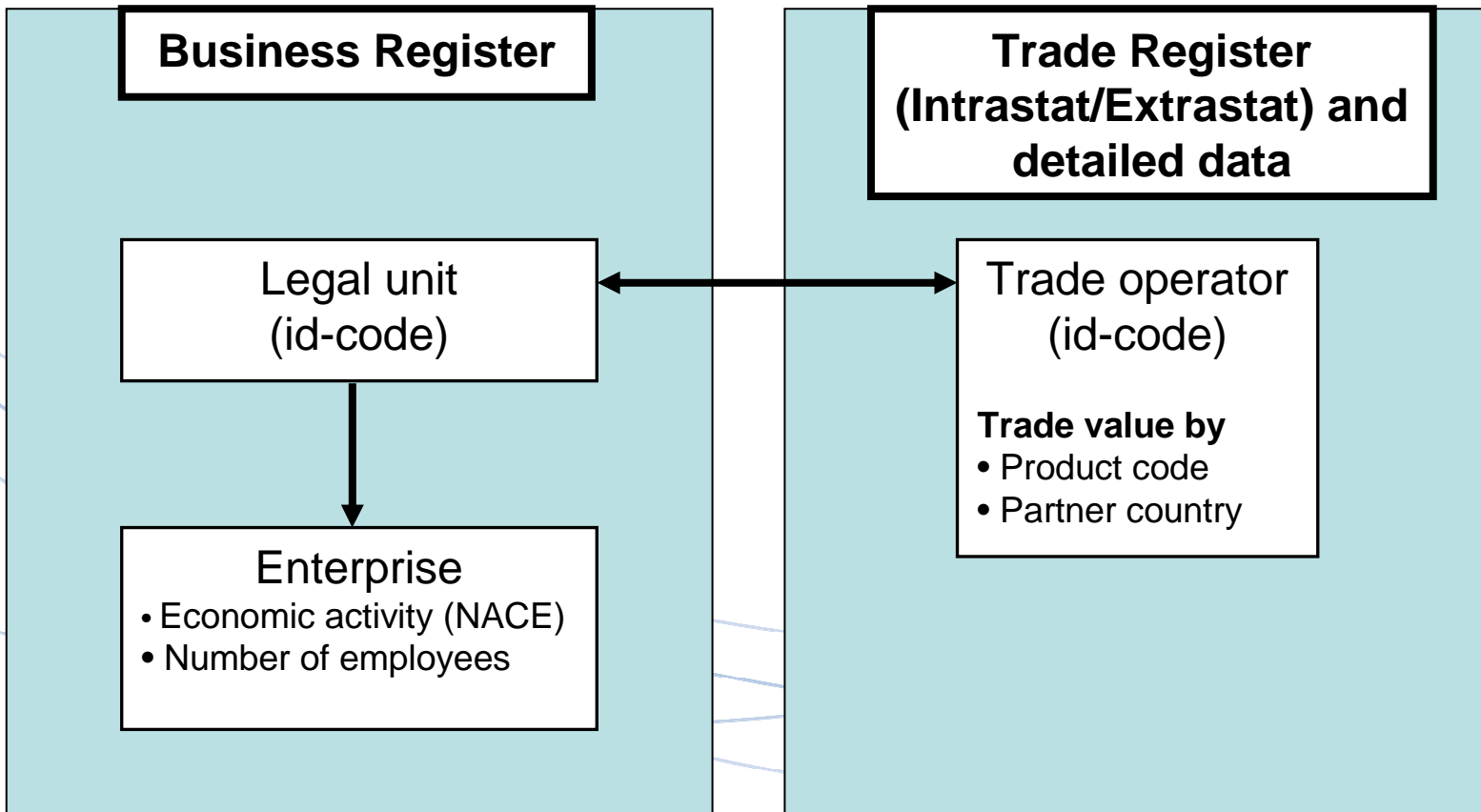
Business statistics - **Trade Statistics**

NACE/ISIC   CPA/CPC

…

24.1 → goods (24.1, 24.2) → domestic

non-domestic = **ITGS**

…

… → services (71.1, 71.2) → domestic
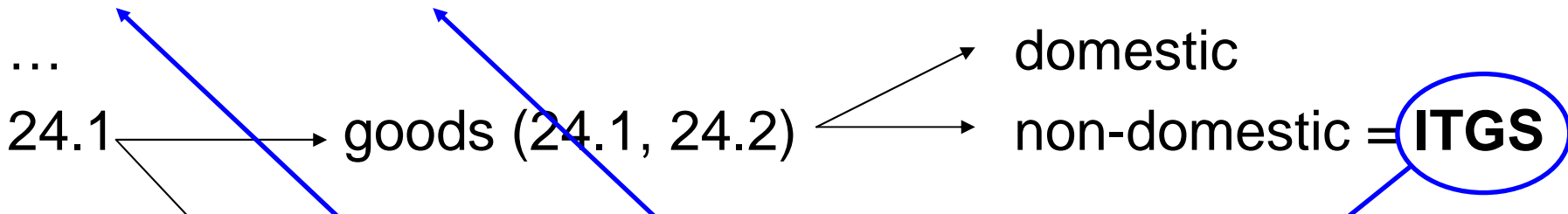
non-domestic = **ITSS**
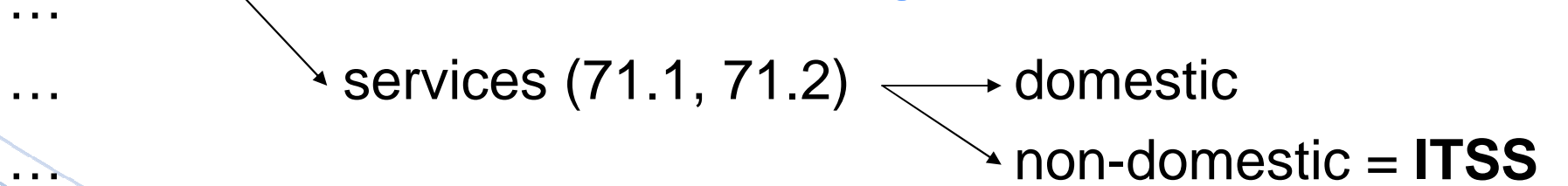
…

29.5

…

65.2

…

72.1

…

Business statistics - **Trade Statistics**

NACE **CPA**

...

24.1 → goods (24.1, 24.2) → domestic

→ non-domestic = **ITGS**

TEC

...

... → services (71.1, 71.2) → domestic

→ non-domestic = **ITSS**

...

29.5

...

65.2

...

72.1

...

eurostat

International trade statistics by enterprise characteristics (TEC) : indicators

- Trade by activity and enterprise size class

- Concentration of trade by activity

- Trade by partner country and activity

- Trade by number of partner countries and activity

- Trade by commodity and activity

eurostat

Dissemination

- Statistics Explained article:
  http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/International_trade_by_enterprise_characteristics

- Data in Easy Comext:
  http://epp.eurostat.ec.europa.eu/newxtweb/

eurostat

Intra-EU imports by main activity sectors (industry, trade, others), share of total value

Legend: C-E | G | Other | Unclas & unkn

eurostat
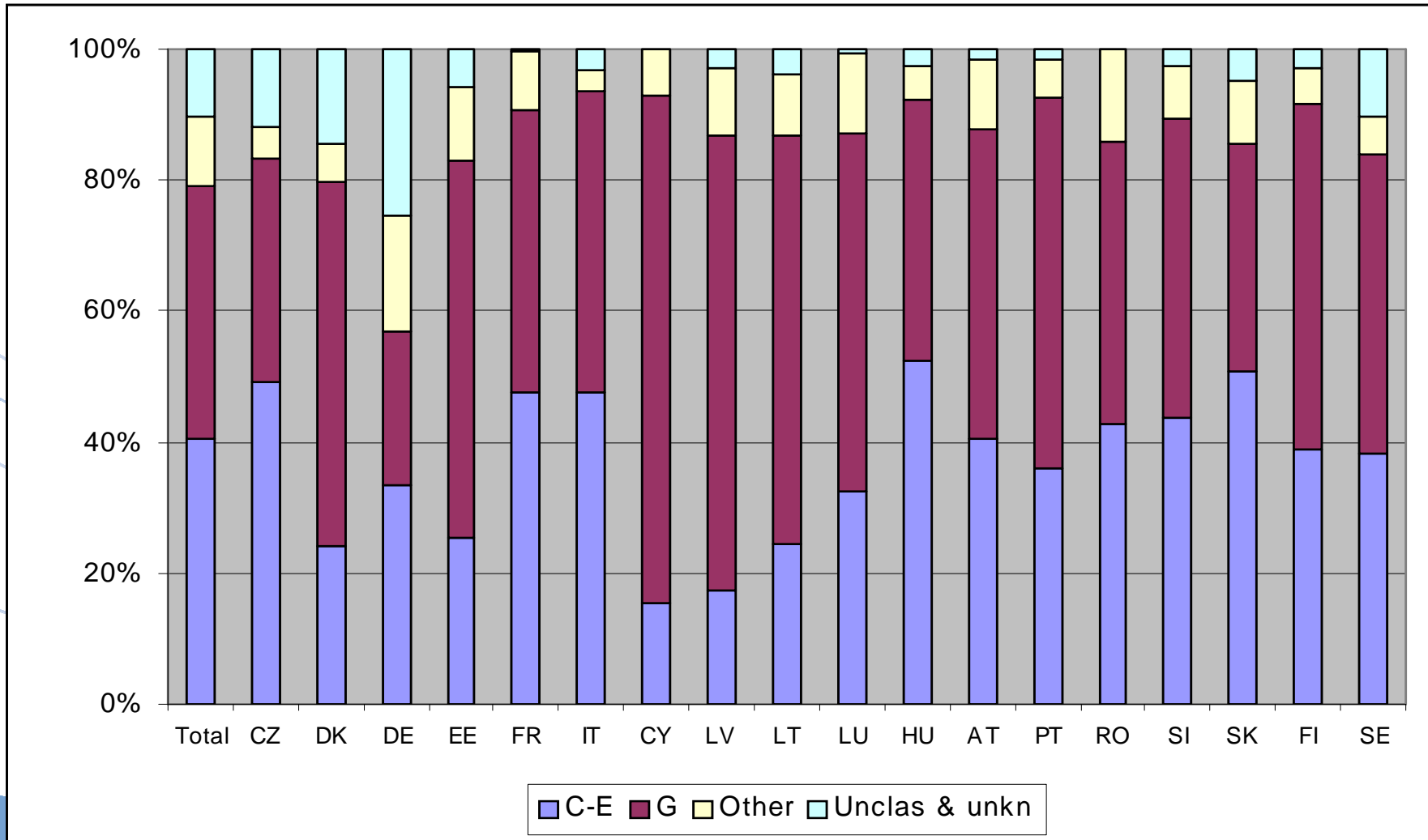
Intra-EU exports by main activity sectors (industry, trade, others), share of total value
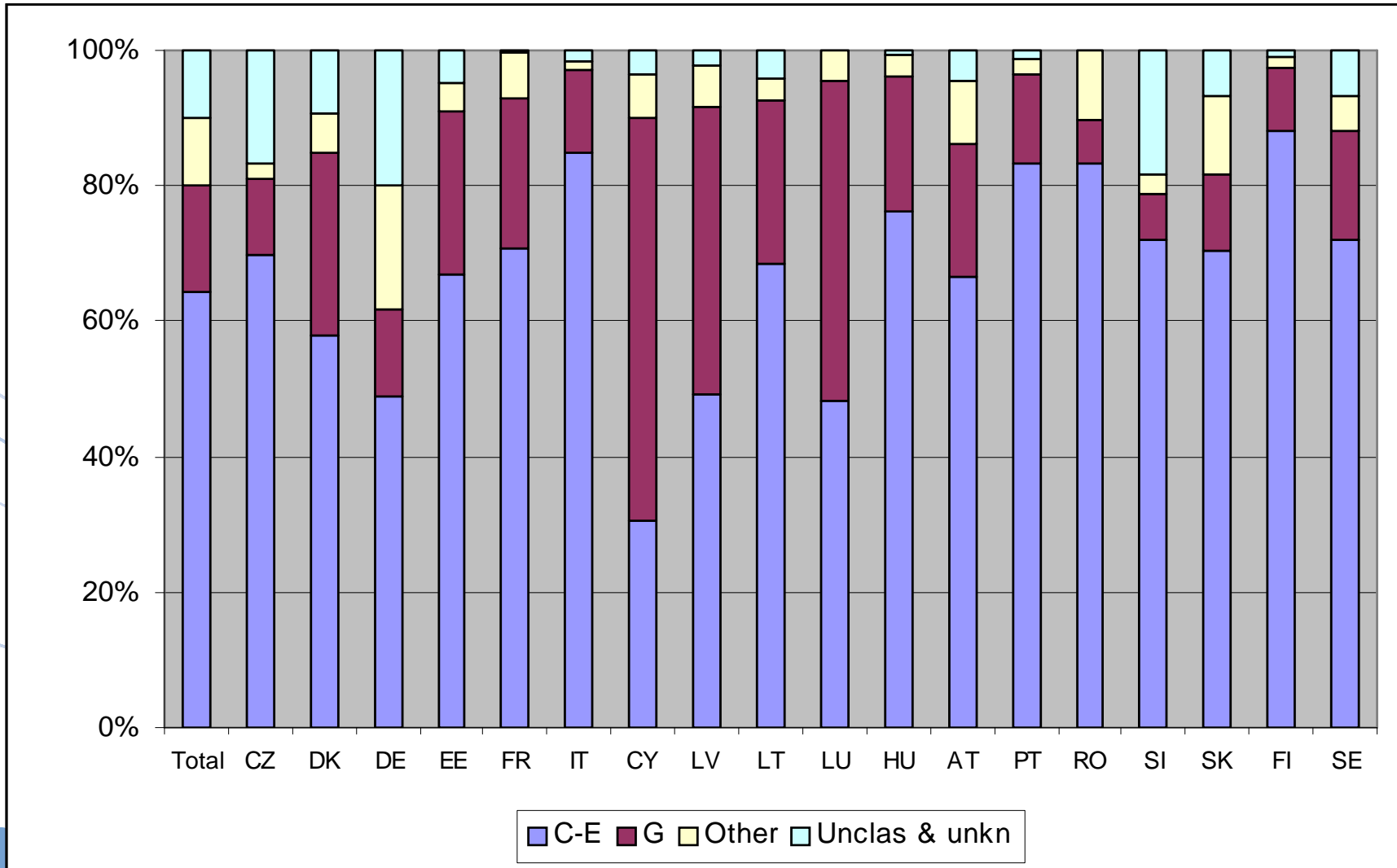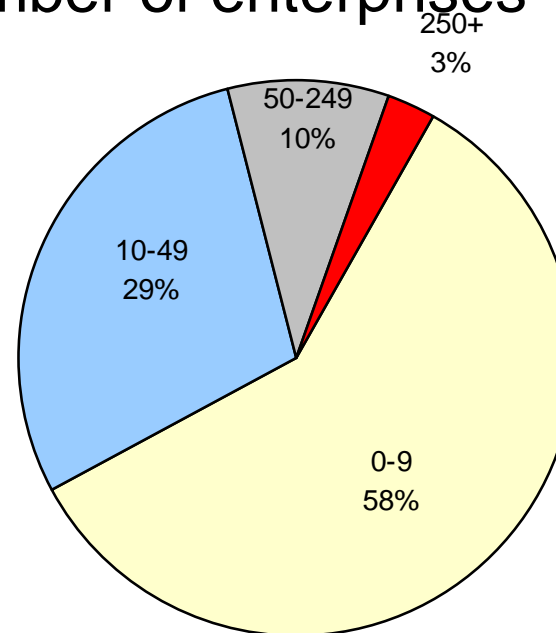
Total intra-EU exports by enterprise size, % in value and number of enterprises (2009)
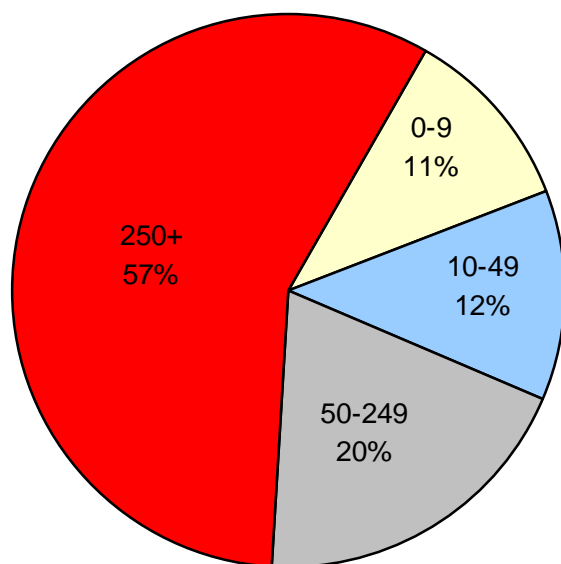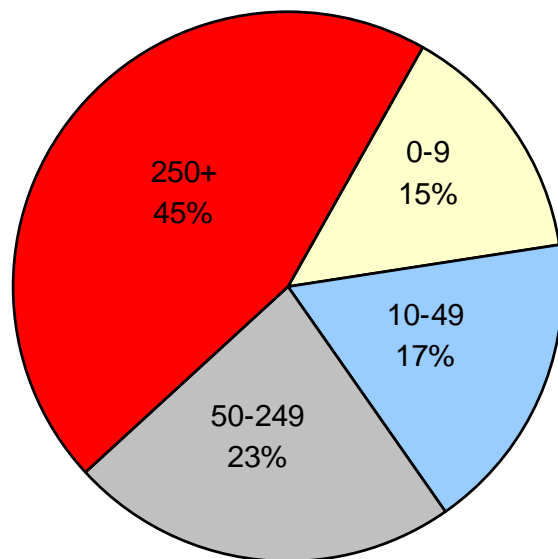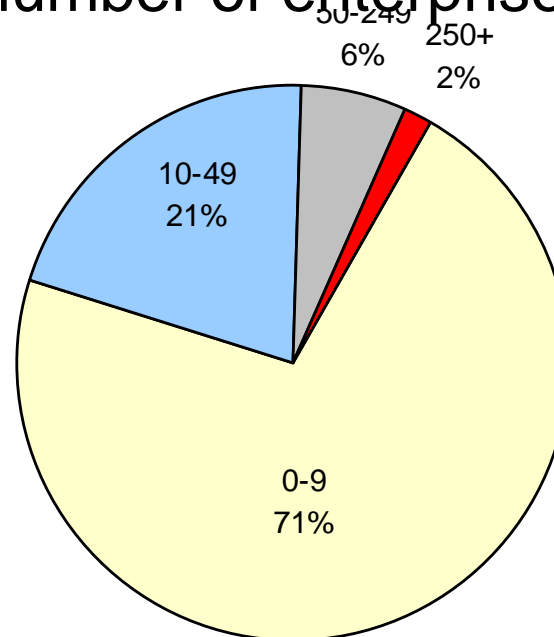

value

number of enterprises

eurostat

Total intra-EU imports by enterprise size, % in value and number of enterprises (2009)

value

- 250+ 45%
- 50-249 23%
- 10-49 17%
- 0-9 15%

number of enterprises

- 50-249 6%
- 250+ 2%
- 10-49 21%
- 0-9 71%

eurostat

Further Eurostat activities on TEC

- Other extentions currently under discussion with OECD
- EU activities to integrate international trade in goods and in services into one legal framework
- Use one common denominator in that framework, CPA/CPC
  - => international trade in services should move from EBOPS to CPA/CPC in the long run
  - => further integration of services in the shorter run
  - => new data collection difficult
  - => Services trade by enterprise characteristics (STEC)

eurostat

What do we have in ITSS?

- For international trade in services (ITSS), we have trade flows in EBOPS, which **cannot** be aggregated easily into **CPA/CPC**

- From business statistics, we are not able to make **the split** between goods and services and between domestic and non-domestic sales and purchases

- There is, therefore, no common denominator (NACE/ISIC or CPA/CPC) between ITSS and ITGS or ITSS and SBS and **the link cannot be made**

eurostat

Bridging the gap - options

1. Convert the ITSS, collecting data on CPA/CPC, that implies new surveys (long run target)

2. Approach the issue from structural business statistics, that implies new surveys (difficult)

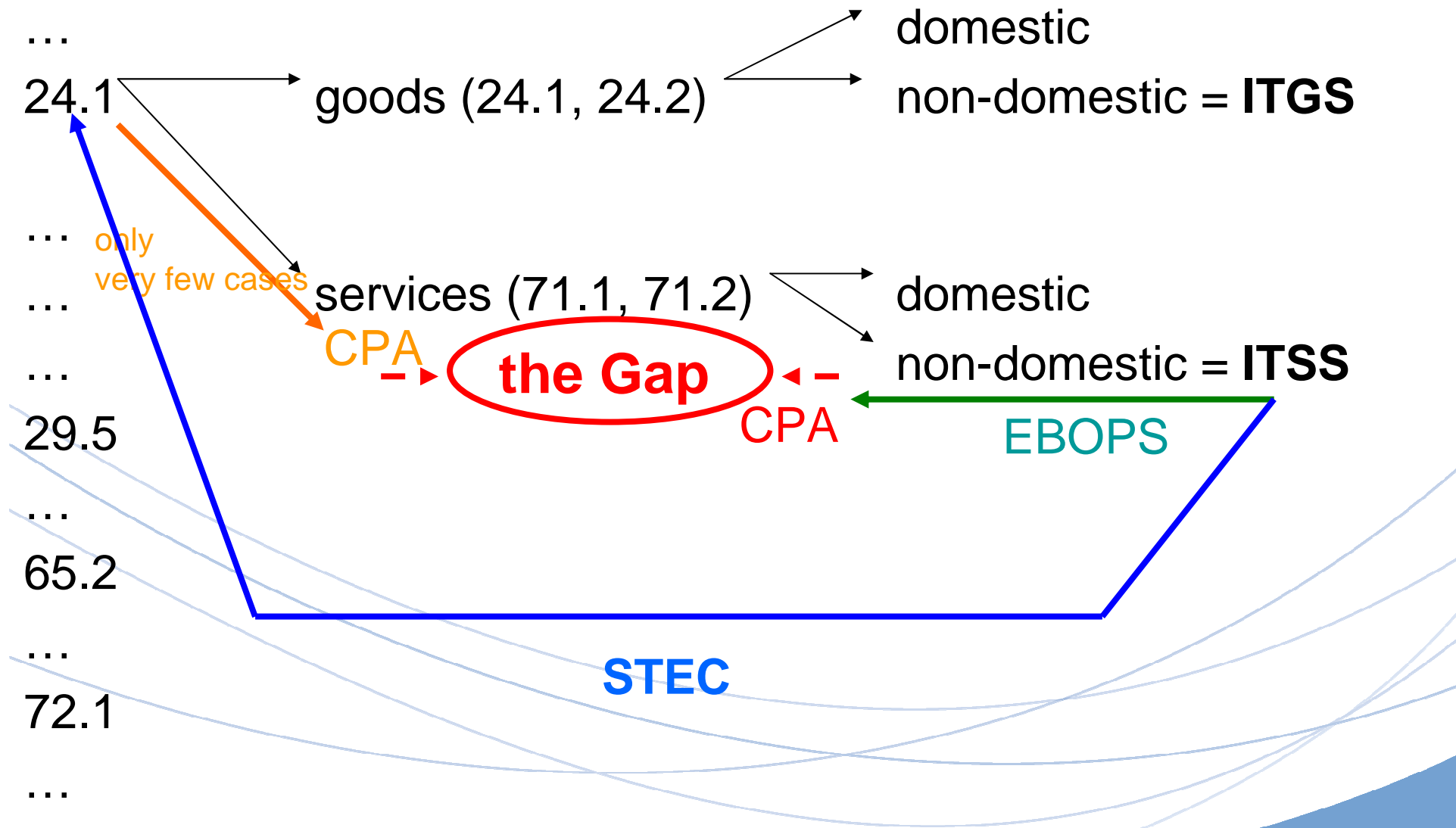3. Data linking at micro level, according to the model of TEC (STEC = ITSS by NACE/ISIC)

eurostat
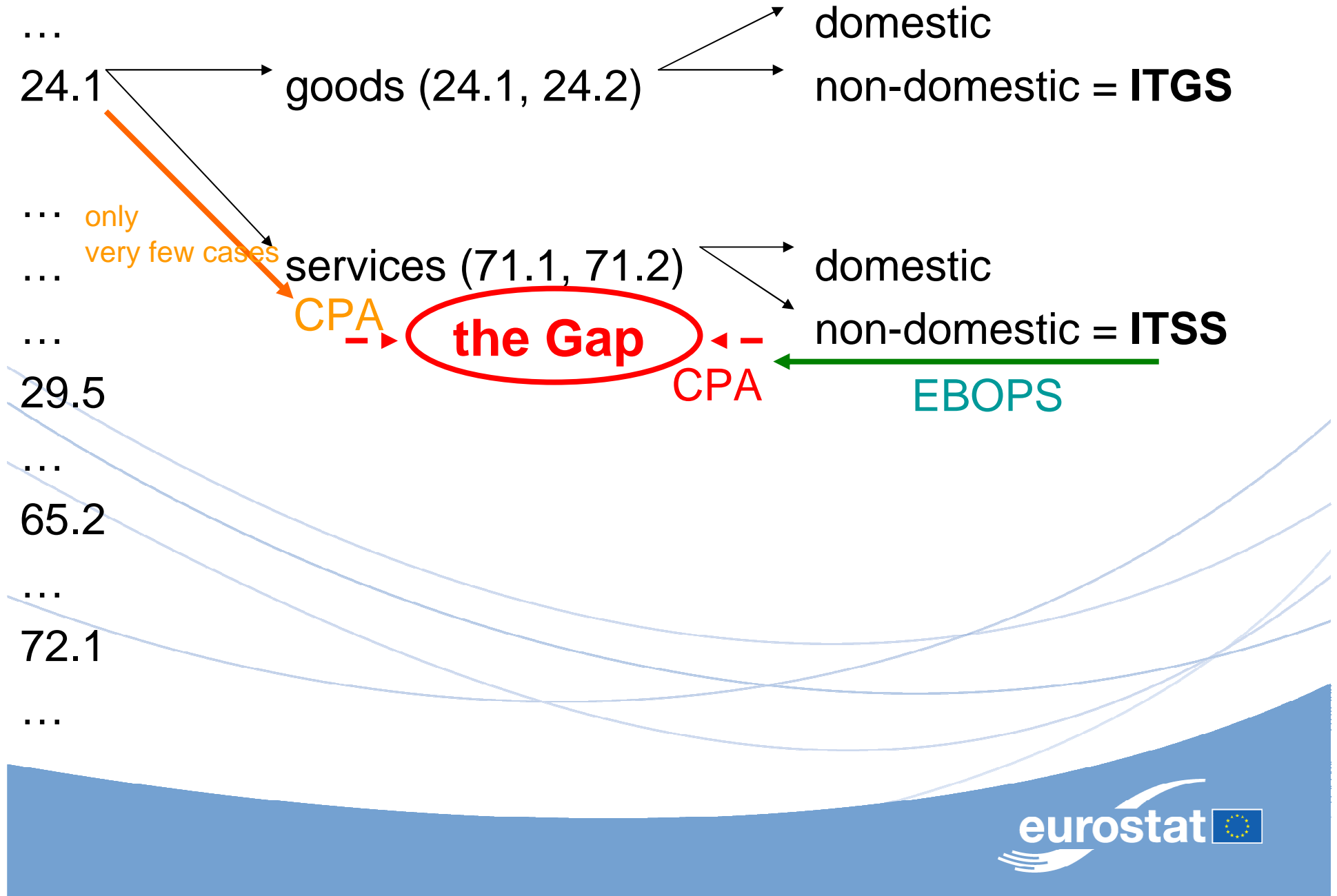
The way forward is a two-step approach:

- as a first step, **micro data linking with business registers** to compile statistics on international trade in services by economic activity (**STEC = services trade by enterprise characteristics**) is pursued. This step should be completed by 2015.

- as a second step, after BPM6 has been fully implemented and experiences of STEC have been gained, **testing the feasibility** of closing the gap between STEC and a full integration of ITSS. The final target in 2020 would be to get international trade in services on the basis of CPA.

eurostat

Thank you very much for your attention