



31<sup>st</sup> January, 2017  
Technical Workshop, Skopje

# Support to the State Statistical Office for capacity building and improving compliance of statistics

## The EU Regulation for an STS framework

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This project is funded by the European Union





## Outline

1. FRIBS (**F**ramework **R**egulation **I**ntegrating **B**usiness **S**tatistics) regulation
2. FRIBS and the “STS PACKAGE”
3. STS PACKAGE and Services Sector
4. Services Sector: **I**ndex of **S**ervice **P**roduction (ISP)





## FRIBS Regulation - 1

As stressed in Riga Memorandum “Towards better measurement of the globalised economy” adopted by the ESSC on 26th September 2014

“..... that **the main enhancements in terms of availability of new statistical information are related to the measurement of trade in value added**; income and employment generated from intermediate production in global value chains; .....; **and to the short-term measurement of output and production in the sectors of trade and services, all in a National Accounts framework**;





## FRIBS Regulation - 2

The DGINS, in line with the current five year ESS statistical programme and the Vision 2020

- confirm the need for business statistics to be regularly kept under review, bearing in mind comparability of results in order to align them with the evolution of businesses organisation and their internationalisation pattern, thus staying relevant and to continuing to provide meaningful statistical information; investigating the cost-effectiveness and practicalities of the integration of international trade and business statistics is considered a promising way forward;
- underline the importance of enhancing the coverage of statistics on the services sector;





## FRIBS Regulation - STS

FRIBS components of particular relevance for STS

- Infrastructure component:
  - Statistical Units (SU) and Business Register (BR)**
  
- Methodological component:
  - Definitions of statistical variables
  - Quality reports
  - Other, domain-specific technical arrangements





## FRIBS Regulation - General Issues

1. The use of the KAU as only statistical unit (SU) in STS (**i.e. move from enterprise for trade and services**) to avoid discrepancy between STS (adopting the KAU), SBS (adopting the enterprise) and the National Accounts.
2. The current BR regulation (177/2008) does not include any provision on the KAU. Two alternative options:
  - to record certain characteristics of the KAU under the statistical unit “enterprise”
  - to record the KAU as self-standing statistical unit (accompanied by certain characteristics) for those KAUs that are part of an enterprise with a significant influence on the aggregated national data.





## FRIBS Regulation - General Issues 2

1. The **turnover definition** updated from the current STS definition (e.g. as regards to subsidies). It maybe difficult for countries using administrative sources (VAT data) to meet the new definition even if the discrepancy could be in practice not relevant
2. The current STS Regulation allows to update the weights used for calculation of indices in STS every five years or more frequently (e.g. yearly in combination with annual chain-linking). **The recommendation is to update the weights annually**





## FRIBS Regulation - Services sector

European short-term business statistics (STS) provide a comprehensive set of indicators for the European economies covering industry, construction, trade and business service industries.

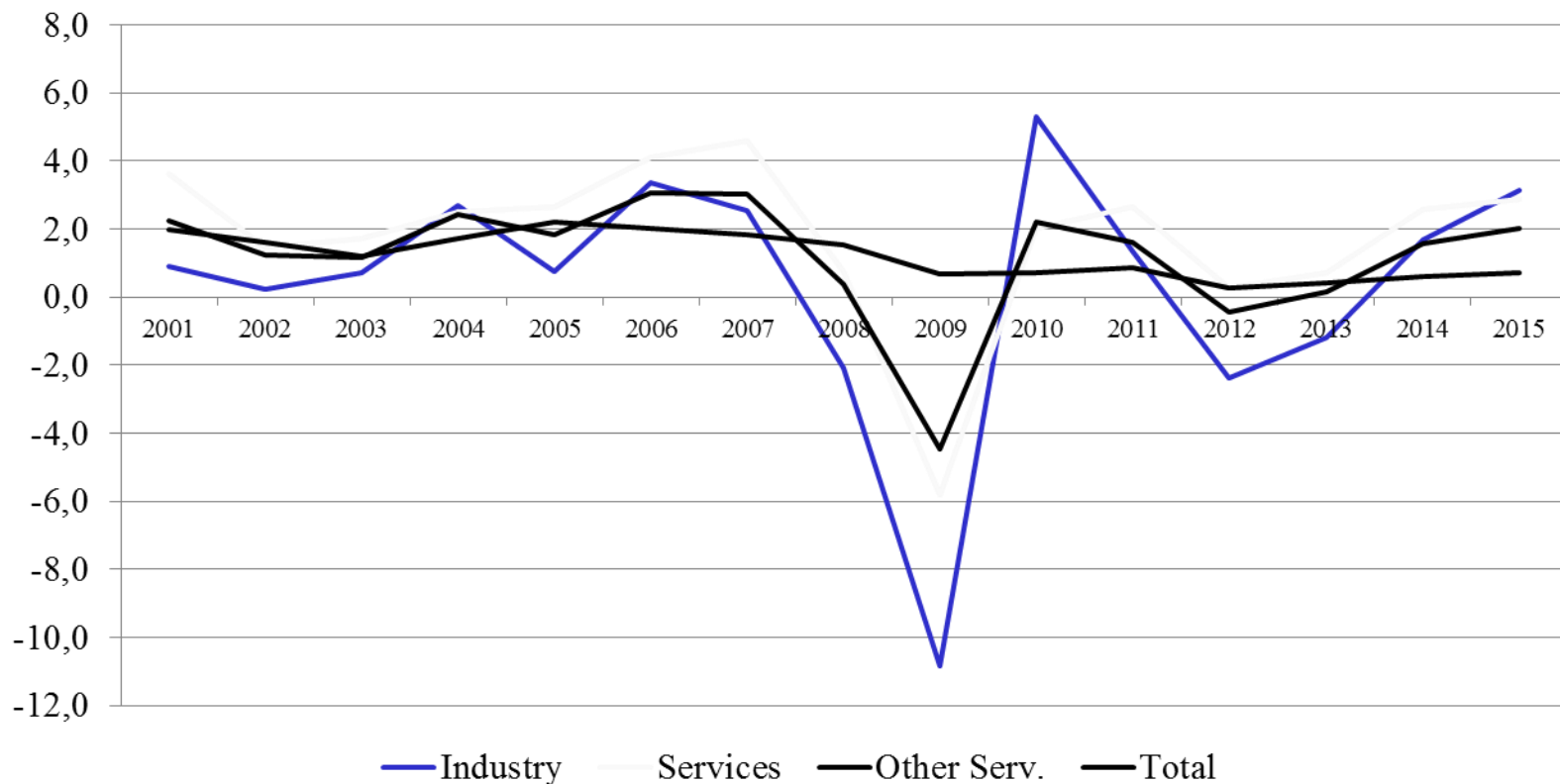
- The economic weight of service industries has increased in absolute and relative terms over the last decade. Between 2000 and 2015 the gross value added produced by the Euro Area economy in trade and non-financial business services increased by 24.5%.
- In the "traditional" sectors (agriculture, industry) the growth rate was only 5.1%.





## Gross value added EU15

### Growth rates on chain linked volumes (2010), billion euro





## Gross value added EU15

### Shares on current prices - billion euros

Sector	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Agriculture</b>	2,0	2,0	1,9	1,8	1,8	1,6	1,5	1,5	1,5	1,4	1,5	1,5	1,5	1,5	1,4	1,4
<b>Industry</b>	27,5	27,0	26,5	26,1	25,9	25,8	26,0	25,9	25,5	23,9	24,3	24,4	24,1	23,9	23,7	23,9
<b>Services</b>	33,8	34,4	34,4	34,4	34,2	34,1	34,0	34,1	34,4	34,2	33,9	34,1	34,0	34,1	34,5	34,8
<b>Other Serv.</b>	36,6	36,7	37,2	37,7	38,1	38,6	38,5	38,5	38,7	40,6	40,3	40,1	40,4	40,4	40,4	40,0

Other services: financial and non market





## SSO - Press Release Calendar

24.01.2017	Average monthly net wage paid per employee, November 2016
18.01.2017	Business tendencies in manufacturing industry in December 2016
16.01.2017	Business tendencies in retail trade, fourth quarter of 2016
16.01.2017	Turnover indices in industry, November 2016
16.01.2017	Price index in agriculture, December 2016
13.01.2017	Industrial producer price indices, total, November 2016
13.01.2017	Industrial producer price indices on the non-domestic market, November 2016
13.01.2017	Issued building permits, November 2016

### ➤ Upcoming news releases:

27.01.2017	Industrial producer price indices on the domestic market	12.2016
30.01.2017	Farm Structure Survey	01.06.2015 - 31.05.2016
30.01.2017	Industrial production volume indices	12.2016
31.01.2017	Indices of employees in industry	12.2016
31.01.2017	Turnover indices in the Trade sector - preliminary data	12.2016





# SSO - Database

## MakStat database

Subcomponent 2.1 Produced indicators for services according STS methodology Annex D: "Other Services"

- 📁 Agriculture
- 📁 Business Entities

### Business Tendencies

- 📄 Business Tendencies in construction ( Balances of weights by months) 📄
- 📄 Business Tendencies in manufacturing industry ( Balances of weights by months) 📄
- 📄 Business tendencies in retail trad ( Balances of weights in quarter ) 📄

### Construction

- 📁 Monthly data on construction
- 📁 Issued Building Permits
- 📁 Completed Construction Works
- 📁 Completed Construction Works Abroad
- 📁 Data for Dwellings Finished Average Prices Unfinished and Demolished
- 📁 Spent Building and Power Materials

Subcomponent 2.6 New methods for calculation of production index in construction introduced

- 📁 Culture
- 📁 Economic Accounts for Agriculture
- 📁 Education and Science
- 📁 Energy
- 📁 Environment
- 📁 Foreign Trade
- 📁 Gender Statistics

### Gross Domestic Product

- 📁 GDP quarterly data
- 📁 GDP and GFCF annual data
- 📁 Supply and use tables and input-output tables

- Subcomponent 2.2 New methods for calculation of turnover index in industry introduced  
- Subcomponent 2.5 New methods for calculation of industrial production index

### Industry

- 📄 Indices of industrial production, on average 2010, by months by Sector/Division/Main industrial groupings
- 📄 Turnover indices in industry on domestic market, on average 2010, by months 📄
- 📄 Turnover indices in industry on average 2010, by months 📄
- 📄 Turnover indices in industry on non-domestic market, on average 2010, by months 📄
- 📄 Indices of industrial production, by months, previous year =100 📄
- 📄 Indices of industrial production, by months, previous month =100 📄





# SSO - Monthly Statistical Bulletin

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## Actual STS Regulation

- STS indicators foreseen in the STS regulation **38**:
  - 5** trade and **5** more cover other services
- Service sector is also comparatively badly covered regarding **periodicity** of the indicators, their **timeliness** and **coverage** of economic activities
- Production measure for services missing compared to the production indicators for industry and construction (indicator would be of very high value for business cycle analysis in general and for the regular monitoring of the service industries)





# FRIBS Regulation: STS services

## 1. Planned improvements in FRIBS:

- New monthly Index of Services Production (ISP)
- Services turnover indicators with monthly frequency
- Additional SPPIs (where needed for deflation)

## 2. ISP Task Force





## ISP Task Force: Mandate

Task force "Index of Services Production" was established in December 2011 with the mandate:

1. Take stock of available data
2. Run test calculations
3. Take stock of available methodological information and update if necessary
4. Investigate current gaps in STS and other data that hinder the production of an ISP and advise how to close these gaps
5. Recommendations for different service areas how to produce an ISP





## ISP Task Force: Activities

- 4 meetings (2012 – 2015)
- Results partially based on OECD *Compilation manual for an index of service production*
- Additional analysis (e.g. need for monthly frequency, temporal disaggregation of deflators, ...)
- 21 service industries covered in special chapters





## ISP Task Force: Outcome

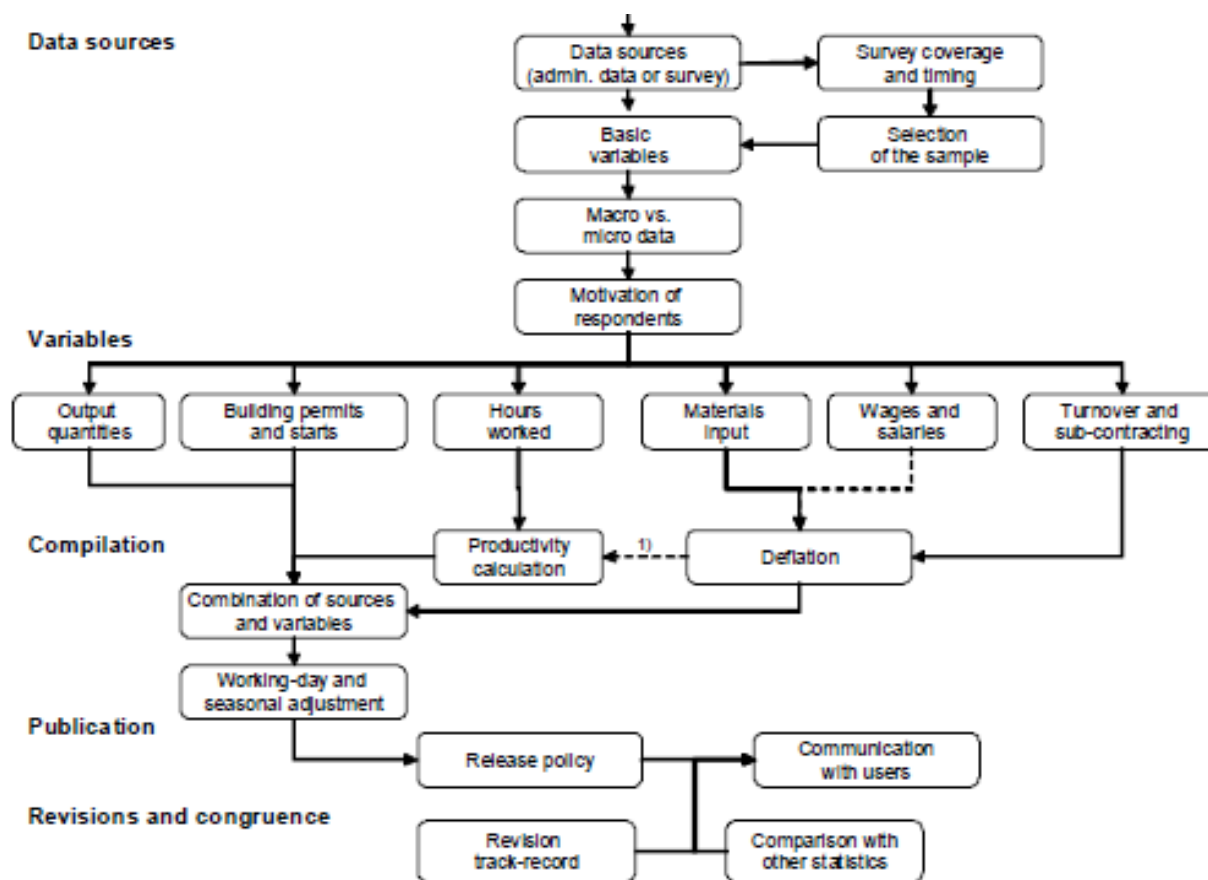
The ISP TF prepared a first draft of its complete report in September 2015:

- The first part of the report outlines general principles for the compilation of an ISP
- The second and largest part provides descriptions for the different service industries covered by STS (at NACE Rev. 2 division level). In many cases these chapters also contain calculations of volume indices for services





# Index of Production



Notes: 1) Productivity calculation follows deflation for wages and salaries only





## ISP Methodology

- Generally, an ISP for a specific service industry will be produced by deflating a turnover index with an appropriate SPPI index.
- For several service activities quarterly turnover data and corresponding quarterly SPPIs are already mandatory. (Air transport, Telecommunication, Computer programming, consultancy etc, Information services, Architecture, engineering, technical testing, Advertising and market research, Employment activities, Security and investigation).
- For these areas quarterly ISPs could already be produced by NSIs.





## ISP Methodology without SPPI

- Currently the STS regulation does not foresee, for example, the production of SPPIs for section Accommodation and Restaurant and there will also be no obligation in the future to produce SPPIs for I55 and I56.
- However, it will be necessary to produce deflators for turnover figures to calculate ISPs in this area.
- Data available from consumer price statistics without an additional data collection.





## ISP: Turnover and SPPI

- Ultimately, FRIBS will require the production of a monthly ISP for all service areas
- For this, in the majority of cases, a monthly turnover indicator will be necessary
- SPPI are quarterly collected and they need temporally disaggregated at monthly frequency





## ISP: Sweden

### Turnover

Sampled based survey on a monthly basis with coverage NACE 45 - 96 (excl 64-66)

### Deflator

- Producers price index in the service sector (SPPI) produced on quarterly basis
- Forecasting of SPPI is done for the present month by a forecasting model, *exponential smoothing*
- Consumer price index (CPI), wage index (WI), producers price index in industry (PPI), import price index (IMPI) produced on monthly basis

### Weights

Value added weights (from SBS survey) updated every year





## ISP: Sweden Index of Total Production

	2016M01	2016M02	2016M03	2016M04	2016M05	2016M06	2016M07	2016M08	2016M09	2016M10	2016M11
<b>B-S exkl K+O business activities excluding finance and insurance activities</b>	113.3	112.4	113.9	115.1	114.6	114.6	116.2	113.1	115.9	115.3	115.7
<b>B-D exkl 35.2-35.3 mines and quarries, manufacturing industry, and electricity supply excluding gas, steam and air conditioning supply</b>	99.6	99.6	100.2	100.0	97.3	96.3	97.7	93.8	101.0	98.1	99.2
<b>E+G-S exkl K+O service sector including water supply, sewerage, waste management and remediation excluding finance and insurance activities</b>	118.7	117.6	119.3	121.5	121.6	121.8	122.7	121.3	121.9	121.8	122.2
<b>F construction</b>	115.3	113.5	116.0	114.8	116.2	117.8	125.0	112.3	117.8	120.7	119.1





## ISP: UK

[Home](#) > [Economy](#) > [Economic output and productivity](#)

### Economic output and productivity

Manufacturing, production and services indices (measuring total economic output) and productivity (measuring efficiency, expressed as a ratio of output to input over a given period of time, for example output per person per hour).

#### In this section

##### Output

Economic output, including manufacturing and production (Index of Production) and services (Index of Services).

##### Productivity measures

Economic productivity measures, including output per hour, output per job and output per worker for the whole economy and a range of industries; productivity in the public sector; and ...

##### Public services productivity

Output, inputs and productivity estimates for public services in the UK, including estimates of healthcare and education productivity.





## Conclusions

1. STS oriented towards business cycle analysis and STS indicators represent an important input for the compilation of Quarterly National Accounts (QNA)
2. Alignment of STS variable definitions with Structural Business Statistics (SBS)/European System of National Accounts (ESA)
3. Choice of the KAU as the statistical unit for trade and services in STS appears obvious
4. Users, as ECB, make use of the IPI and IPC in their early estimates of quarterly GDP: need for a monthly ISP

