



HELLENIC STATISTICAL AUTHORITY - ELSTAT

Hellenic Statistical Programme 2020 – 2022

Special bilateral event and Workshop ELSTAT – Statistics Poland

Piraeus, 29 March 2019

Vassiliki Benaki

General Directorate of Statistical Surveys



Hellenic Statistical Programme, 2020 – 2022

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- ▶ Hellenic Statistical Programme, 2020 – 2022
 - ▶ Objectives
 - ▶ ELSTAT's strategy
- ▶ ELSTAT's Statistical Work Programme for the period 2020 – 2022
 - ▶ ELSTAT's Official Statistics by domain
 - ▶ Production of new and revised statistics



Hellenic Statistical Programme, 2020 – 2022

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► Objectives

The objectives of the Hellenic Statistical Programme for the three-year period 2020 – 2022 are to **ensure and further improve the quality of the statistics produced** by the Hellenic Statistical System (ELSS), by following the highest European and international statistical standards, fully implementing the existing rules, fulfilling the undertaken obligations, focusing on enhanced exploitation of human and financial resources while reducing the burden on respondents through the use of administrative data.





ESS Vision 2020

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ELSTAT as a member of the European Statistical System (ESS) has adopted a strategy which is in line with the European strategy ESS Vision 2020.

The ESS Vision 2020 is the response of the ESS to the challenges that official statistics are facing and it has been developed in order to modernize the ESS.

ESS Vision 2020 was adopted by the ESS Committee in May 2014.





ESS Vision 2020

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The ESS Vision 2020 identified five key areas:



Focus on users



Strive for quality



Harness new data sources



Promote efficiency in production processes



**Improve dissemination and
communication**

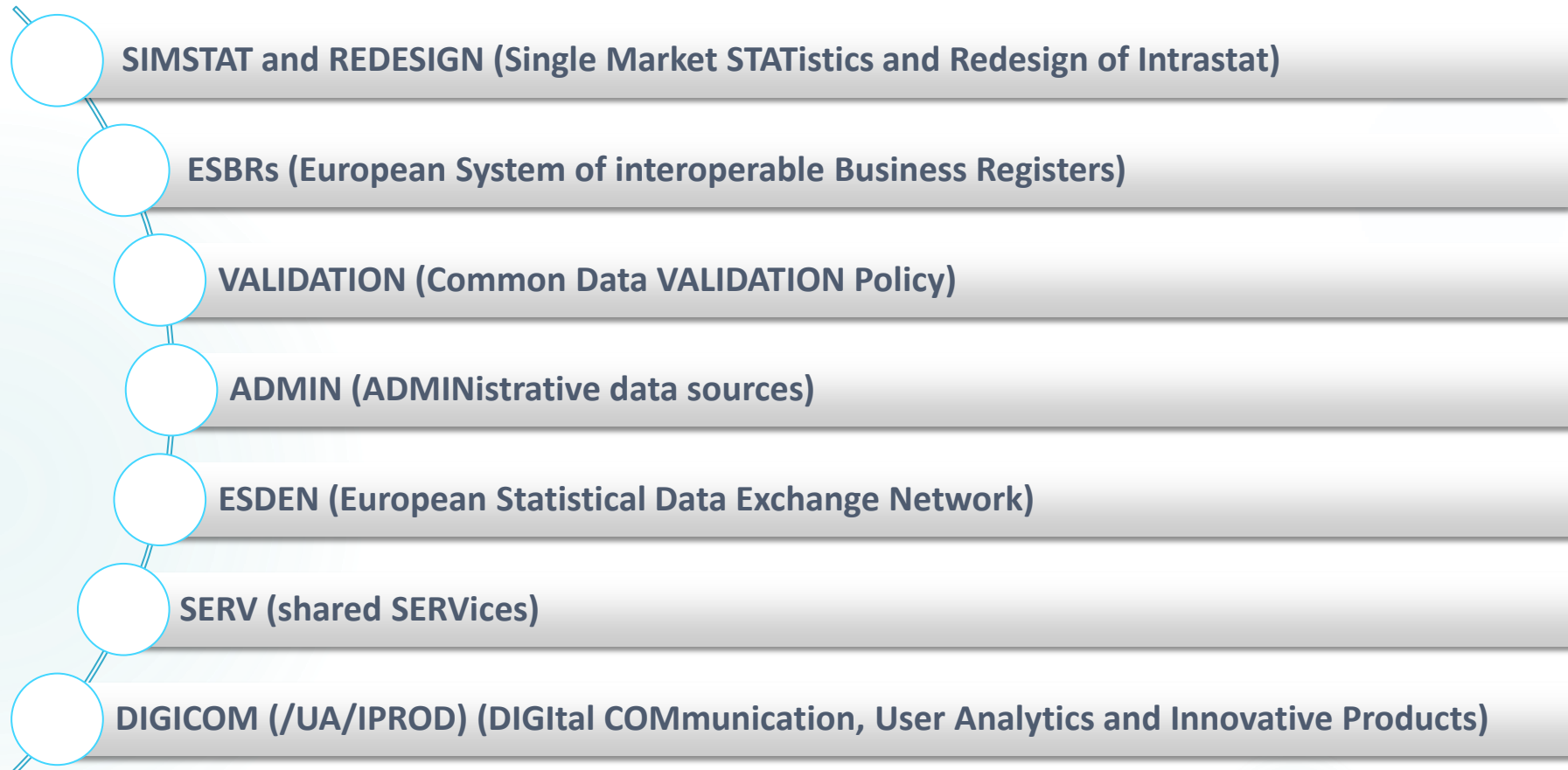
ESS Vision 2020



ESS Vision 2020

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The ESS Vision 2020 portfolio:



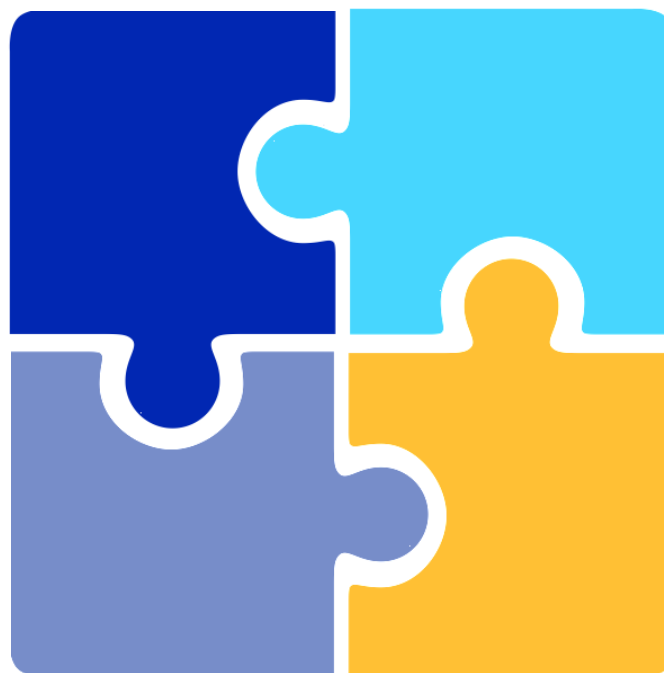


► ELSTAT's Strategy

ELSTAT's strategy to improve the quality of the produced statistics pertains four pillars:

**1 . Enhanced use of
administrative data sources**

**2 . Use of technology to
upgrade data collection**



**4 . Enhanced accessibility
of produced statistics**

**3 . Reduction of the burden
on respondents**



Hellenic Statistical Programme, 2020 – 2022

ELSTAT's Strategy

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1. Enhanced use of administrative data sources



Recognizing the benefits of using administrative data sources instead of surveys, ELSTAT focused its efforts during the previous programming periods 2011 – 2013, 2014 – 2016 and 2017 – 2019, on better utilizing the available data in the administrative sources of Greece.

- In this context, ELSTAT signed memoranda of cooperation with ELSS agencies and developed close cooperation with administrative data sources.
- In 2016 the main goal of ELSTAT, i.e. to activate the memorandum of cooperation pertaining to the provision of tax data to ELSTAT for the updating of the statistical business register, the production of structural business statistics and the needs of the national accounts of Greece, was accomplished.





ELSTAT's Strategy, 2020 – 2022

1. Enhanced use of administrative data sources *(continued)*

ELSTAT seeks to continue and further develop its cooperation with administrative data sources for the new programming period 2020 – 2022.

Aim

The enhanced use of administrative data sources aims at:

- ✓ Improving quality of produced statistics
- ✓ Improving timeliness of produced statistics
- ✓ Reducing burden on respondents
- ✓ Producing new statistics that meet users' growing needs
- ✓ Reducing production cost

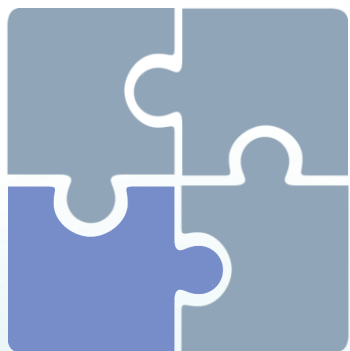




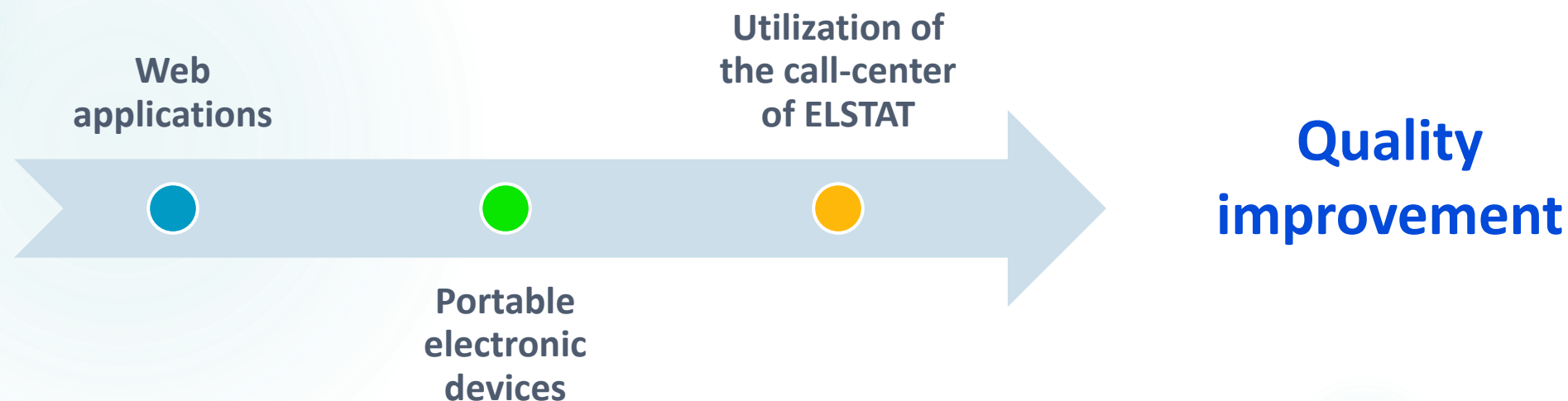
ELSTAT's Strategy, 2020 – 2022

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2. Use of technology to upgrade data collection



ELSTAT carries on the efforts for upgrading data collection for the production of its statistics, aiming at taking full advantage of the possibilities offered by the new technologies for data collection in order to optimize the relevant procedures, especially as regards saving time and resources.

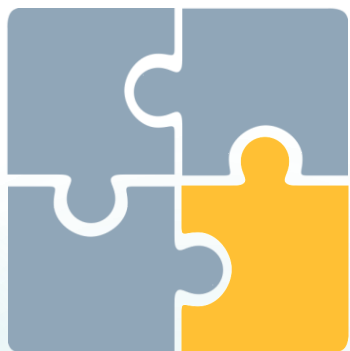




ELSTAT's Strategy, 2020 – 2022

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3. Reduction of the burden on respondents



Further to the use of administrative data sources ELSTAT continues its efforts to reduce the response burden through the active participation in relevant EU projects:

- ✓ ESS.VIP.SIMSTAT pilot project (June 2012 – December 2015)
- ✓ ESS.VIP REDESIGN (December 2014 – April 2016)
- ✓ 'Modernisation of the system of compiling intra-EU trade in goods statistics' (since May 2016)
- ✓ ESSnet BIG DATA I (February 2016 – May 2018)
- ✓ ESSnet BIG DATA II (November 2018 – December 2020)





ELSTAT's Strategy, 2020 – 2022

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- ✓ The objective of the **pilot project SIMSTAT** and the **Re-design of Intrastat project** was to introduce an innovative approach for modernizing Intrastat (the EU data collection system on intra-EU trade in goods).

The exchange of micro-data on intra-EU exports between Member States and the use of mirror data for compiling intra-EU imports statistics could reduce the administrative burden on Intrastat reporters on the imports side while maintaining data quality.





ELSTAT's Strategy, 2020 – 2022

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Following the successful implementation of the projects ESS.VIP.SIMSTAT and ESS.VIP REDESIGN and after reviewing the relevant outcomes, the ESSC acknowledged the need for a more innovative, flexible and less burdensome compilation system of intra-EU trade in goods statistics.

To this end a new project has been launched in May 2016, namely

- ✓ **“Modernisation of the system of compiling intra-EU trade in goods statistics”**

This project is ongoing.





ELSTAT's Strategy, 2020 – 2022

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✓ **Project ESSnet BIG DATA I** (February 2016 – May 2018)

The main purpose of this project was the investigation of Big Data sources for their integration in the production of official statistics in the ESS.

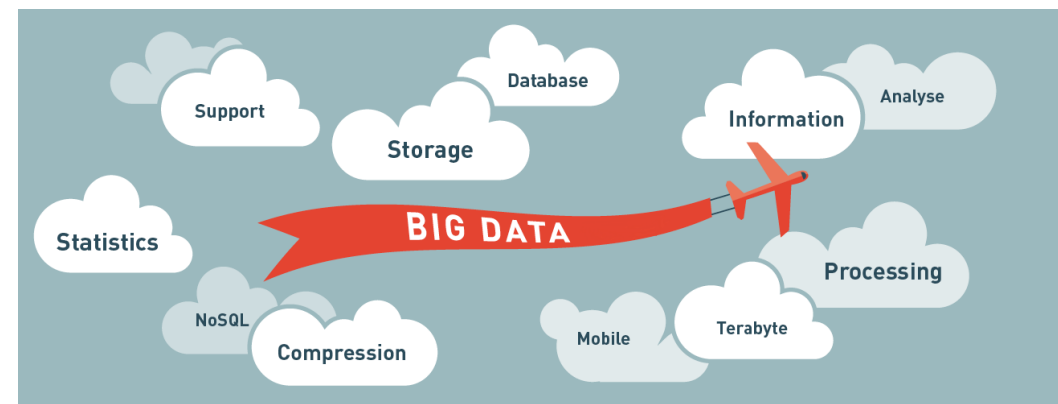
The project was finalized in May 2018 and ELSTAT participated to the following two WPs of the project:

❖ *WP1 Web Scraping Job Vacancies*

Partners: UK (WP leader), DE, EL, IT, SE, SI, BE, DK, FR, PT.

❖ *WP4 AIS Data*

Partners: NL(WP leader), DK, EL, NO, **PL**.

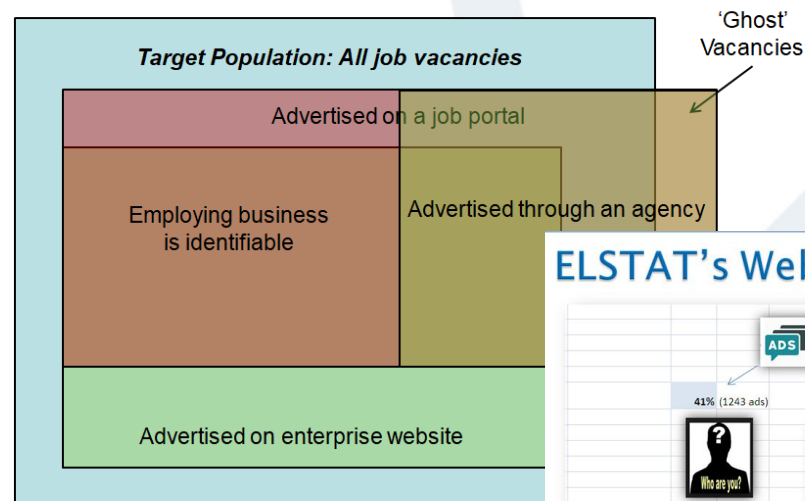




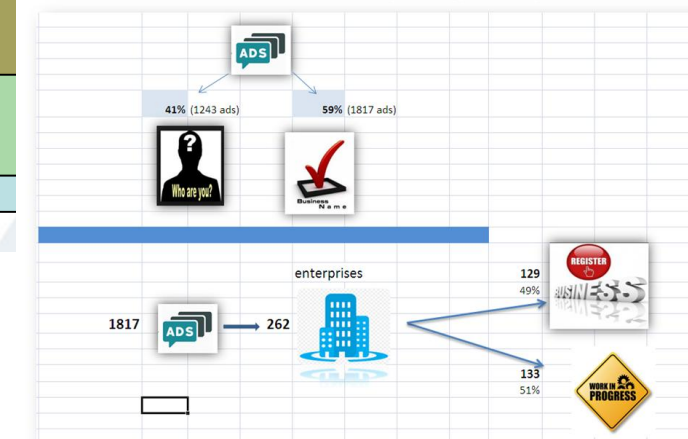
✓ Project ESSnet BIG DATA I – WP1 *Web Scraping Job Vacancies*

The aim of this pilot was to demonstrate by concrete estimates which approaches (techniques, methodology etc.) are most suitable to produce statistical estimates in the domain of job vacancies and under which conditions these approaches can be used in the ESS.

Conceptual model for measuring job vacancies from on-line sources



ELSTAT's Web Scraping Experiment



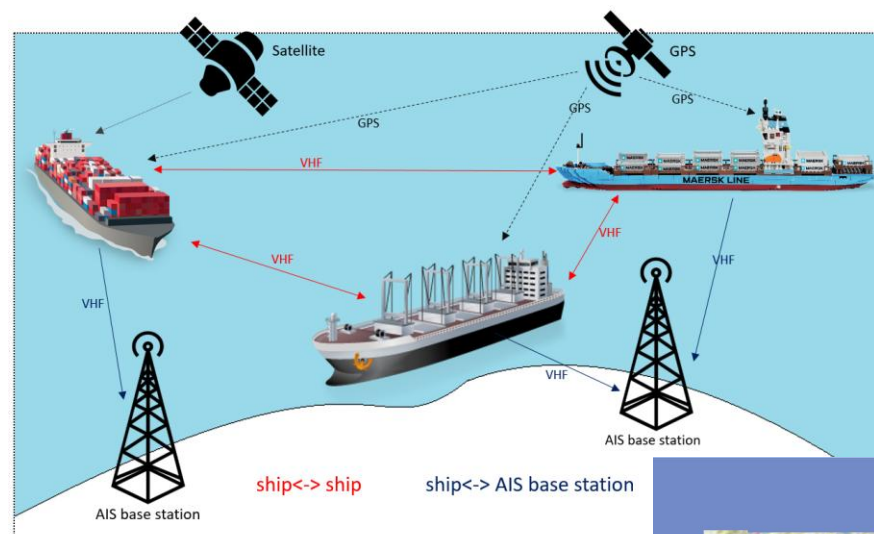


ELSTAT's Strategy, 2020 – 2022

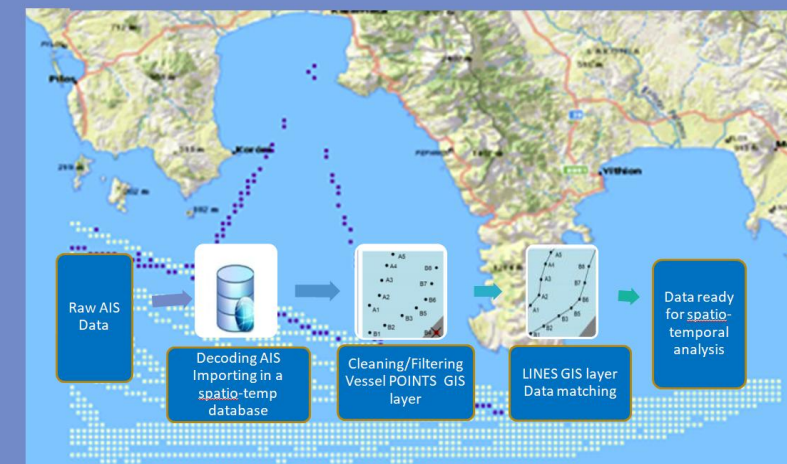
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✓ Project ESSnet BIG DATA I – WP4 AIS Data

The main aim of the specific work package was to explore the potential use of AIS (Automatic Identification System) data in the production of official statistics, due to their advantage of being generic worldwide and obtainable at European level.



Define ship's journey





✓ Project ESSnet BIG DATA I – WP4 AIS Data

Paper written based on the results of the work within WP 4.

- ❖ Comparison of national public AIS data to privately held AIS data, in terms of quality and metadata – Polish and Hellenic experiences.
- ❖ Main conclusion: AIS is a big data source with great potential to improve official statistics, however more work is needed in the area of ensuring transparency and soundness of methods and processes for the privately held data to be incorporated in the statistical production.

2018
European Conference
on Quality in Official Statistics

Coverage of AIS data: comparison of private held to national datasets - Polish and Hellenic experiences.

Anna Biliska, Statistics Poland
Michał Bis, Statistics Poland
Eleni Bisioti, Statistics Greece
Christina Pierrakou, Statistics Greece

29.06.2018 Session 32



ELSTAT's Strategy, 2020 – 2022

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✓ **Project ESSnet BIG DATA II** (November 2018 – December 2020)

Following the successful implementation of ESSnet Big Data I a new project has been launched in November 2018.

The overall objective of the ESSnet Big Data II is to further prepare the ESS for integration of big data sources into the production of official statistics, through pilots exploring the potential of selected big data sources as well as developing concrete applications.

ELSTAT participates:

- ## WP E Tracking Ships

Partners: NL (WP leader), EL, **PL**

- WP J *Innovative Tourism Statistics*

Partners: **PL (WP leader)**, BG, DE-Hesse, EL, IT, NL, HR, PT



ELSTAT's Strategy, 2020 – 2022

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✓ Project ESSnet BIG DATA II

❖ WPE Tracking Ships

The aim of this WP is to develop functional production prototypes including setting up procedures and developing technical solutions, to promote and support the collection, processing and analysis of (big) data from AIS for statistical production related to statistics on maritime, inland waterways and environmental statistics.

❖ WPJ Innovative Tourism Statistics

The main objective of the package is to address the need of a conceptual framework and setting up a smart pilot Tourism Information System that will support statistical production in the field of tourism by integrating various big data sources with administrative registers and statistical databases using innovative statistical methods.





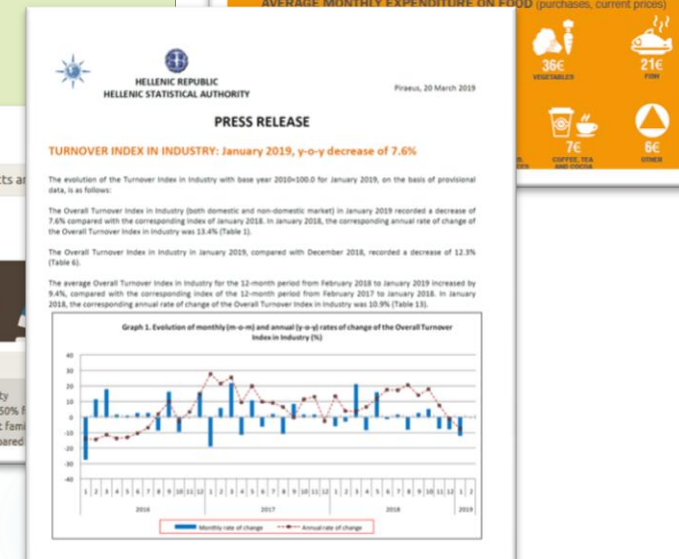
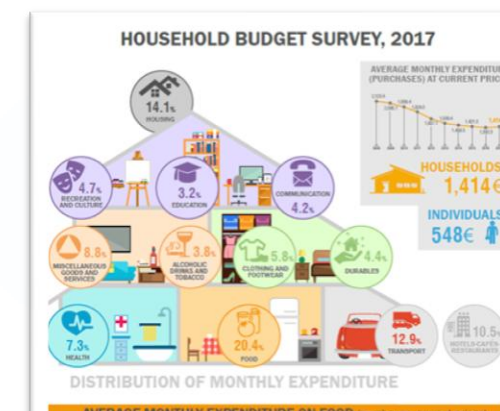
ELSTAT's Strategy, 2020 – 2022

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4. Enhanced accessibility of produced statistics

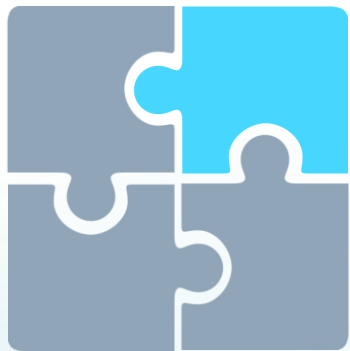
ELSTAT disseminates the produced official statistics in the following formats:

- ❖ **Data tables** accompanied by relevant **Metadata** and **Quality Reports**
- ❖ **Anonymised microdata** files for scientific purposes
- ❖ **Press Releases** in accordance with the press releases' calendar
- ❖ **Infographics** for the dissemination of survey results in a simple and user-friendly way
- ❖ **e-Publications** and leaflets
- ❖ **Ad hoc users' requests**





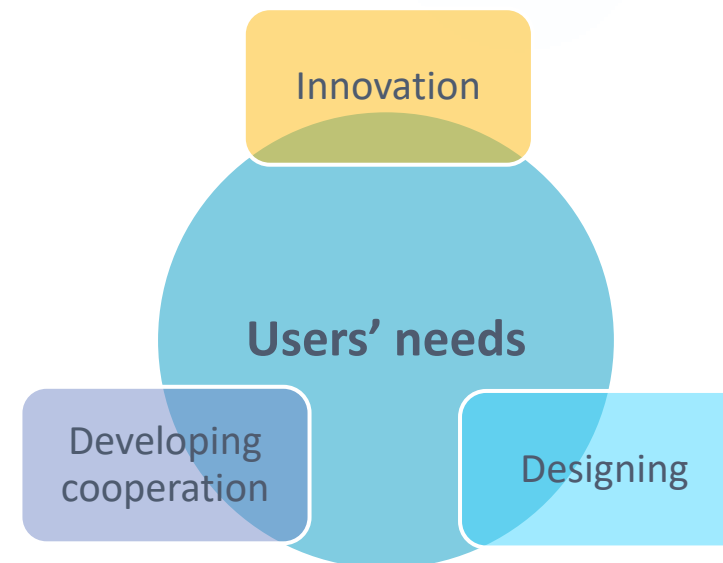
4. Enhanced accessibility of produced statistics



ELSTAT's strategy for the period 2020 – 2022, ELSTAT puts users at the heart of its activities.

Aim

- ✓ Full exploitation of digital tools in order to create innovative products in the framework of the implementation of the DIGICOM project (ESS Vision 2020 portfolio).
- ✓ Deliverables for the 4 Work Packages will be developed and finalized till the end of 2022.





ELSTAT's Strategy, 2020 – 2022

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4. Enhanced accessibility of produced statistics

Actions

- ✓ Further improve the format and content of ELSTAT's portal and of other means of dissemination of official statistics
- ✓ Further enrich the portal with public use files and anonymised microdata files for scientific purposes
- ✓ Continuation of ELSTAT's works for the development of “safe centres” (until the end of 2022) for researchers to have access to confidential data for scientific purposes
- ✓ Fostering statistical literacy in Greece
- ✓ Use of social media for the promotion of ELSTAT's statistical work





ELSTAT's Statistical Work Programme, 2020 – 2022

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ELSTAT systematically produces official statistics regarding varying aspects of private and public sector activities

Economy

**Industry
Trade
Services**

**Agriculture
Livestock
Fishery
Environment**

**Population and
Social Conditions**



ELSTAT's Official Statistics Economy

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National Accounts

- Annual and quarterly GDP
- Input-Output tables
Supply-Use tables
- Regional Accounts
- Annual and quarterly Non-Financial Sector Accounts
- Annual and quarterly Non-Financial Accounts of General Government



ELSTAT's Official Statistics

Economy

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GREEK ECONOMY

GROSS DOMESTIC PRODUCT AT CONSTANT PRICES

in million € (reference year 2010)

	2005	2010	2015	2017
	153,952	156,803	127,020	127,132
+	46,692	50,188	40,975	39,947
+	48,389	38,534	20,006	24,860
+	48,553	49,958	57,008	59,759
-	68,099	69,452	60,327	64,819
=	229,784	226,031	185,046	187,089

CONSUMPTION
(final consumption expenditure of household and NPISH)

CONSUMPTION OF GENERAL GOVERNMENT
(final consumption expenditure of General Government)

INVESTMENT
(gross capital formation)

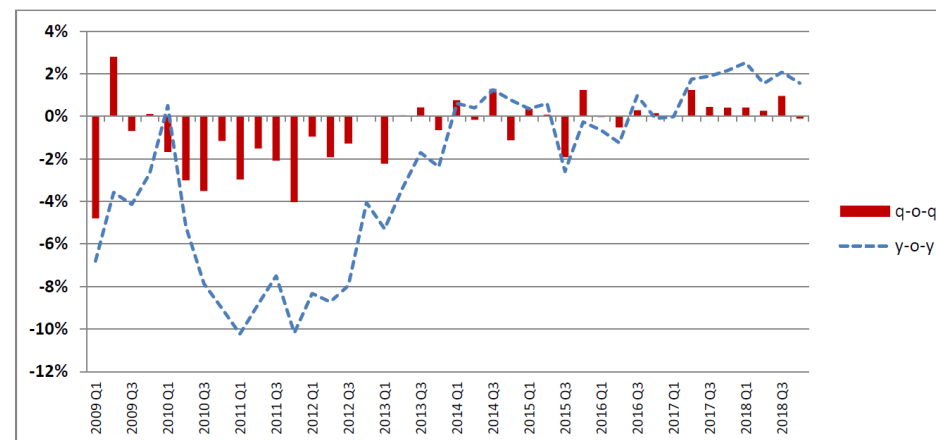
EXPORTS
(of goods and services)

IMPORTS
(of goods and services)

GDP at constant prices

*Any minor differences between totals are due to methodological reasons.

Graph 1: Gross Domestic Product in Volume Terms
Seasonally and calendar adjusted figures (Reference Year: 2010)
Changes (%) by quarter (q-o-q³) and year (y-o-y⁴)
2009-2018



GENERAL GOVERNMENT REVENUE, EXPENDITURE AND OVERALL BALANCE

in billion €





ELSTAT's Official Statistics

Industry · Trade · Services

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Business Statistics • Structural Business Statistics

2016 Results

Aggregated results

- Turnover
- Value added

225.9 billions EUR
Turnover

Inputs

- Number of persons employed
- Total purchases

2,366,199
Number of persons
employed

Business demography

- Active enterprises
- Enterprise births and deaths

793,946
Active enterprises



ELSTAT's Official Statistics

Industry · Trade · Services

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Business Statistics • Short - term statistics

STS

- ✓ Price
- ✓ Turnover
- ✓ Cost
- ✓ Production
- ✓ Employment
- ✓ Building activity
- ✓ International Trade in Goods

Retail trade, 2018

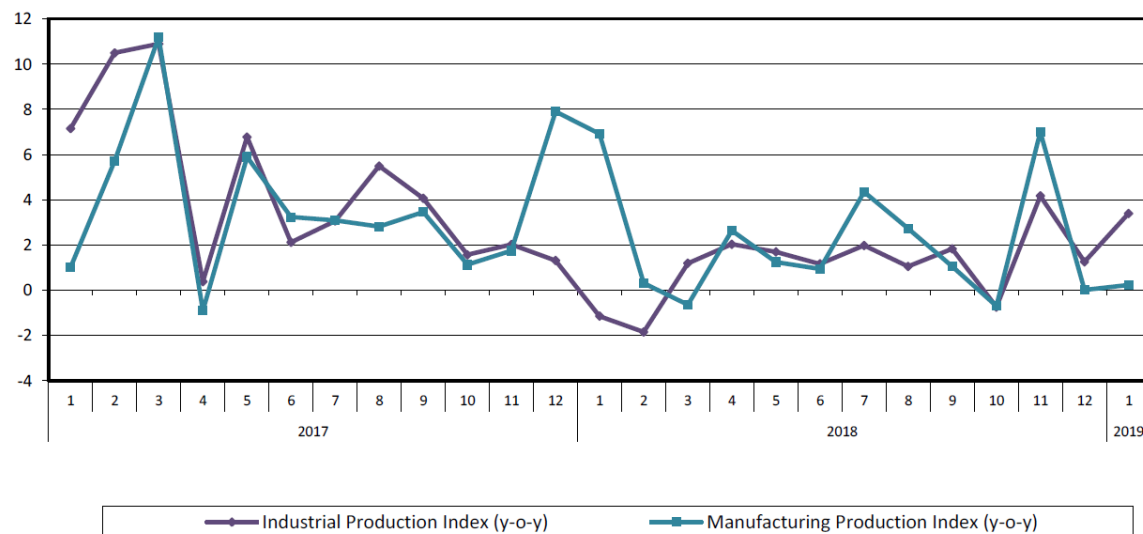
SALES VOLUME CHANGES



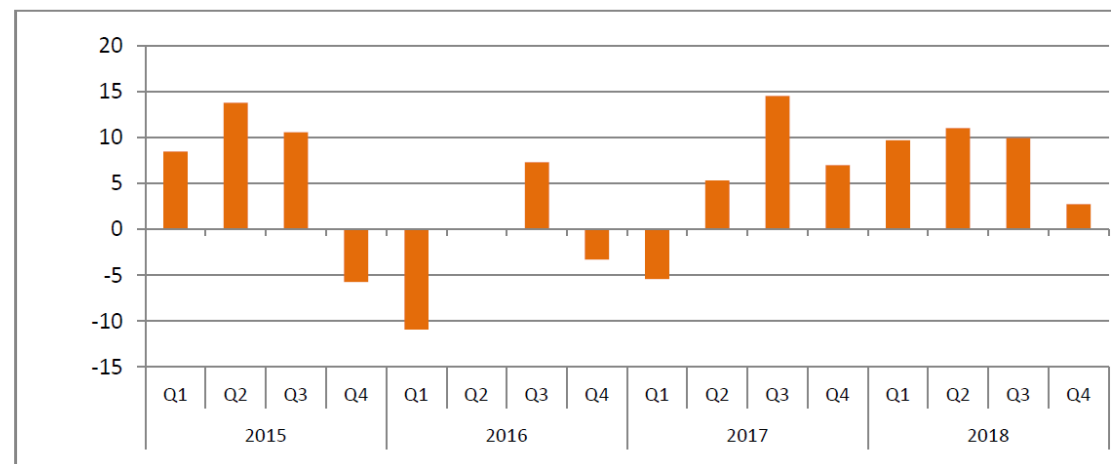


Business Statistics • Short - term statistics

Graph 1. Evolution of annual rates of change (y-o-y) of the Industrial Production Index and the Manufacturing Production Index (%)



Graph 2: Year-on-Year growth (%) of the Turnover Index in Accommodation and Food Service Activities Sector (divisions 55, 56 of Nace rev.2)
Base year: 2015=100.0





ELSTAT's Official Statistics

Industry · Trade · Services

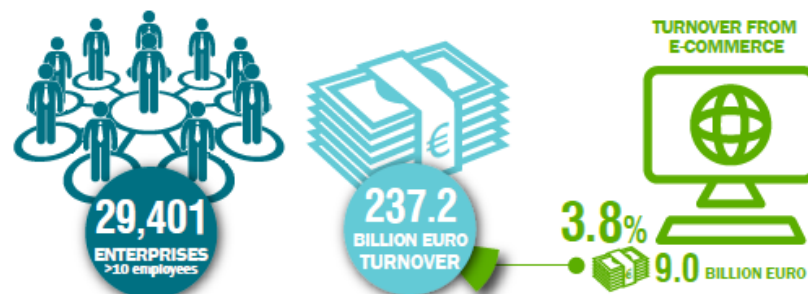
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Business Statistics • ICT

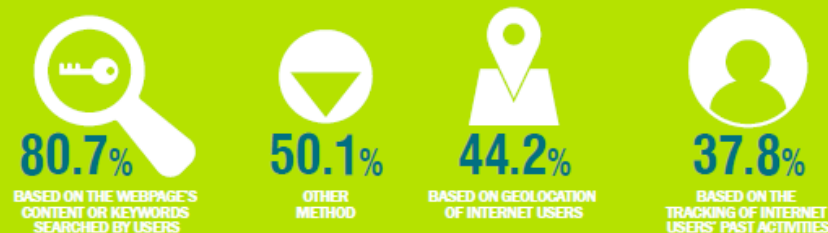
ICT

- ✓ Use of ICT and e-commerce in enterprises

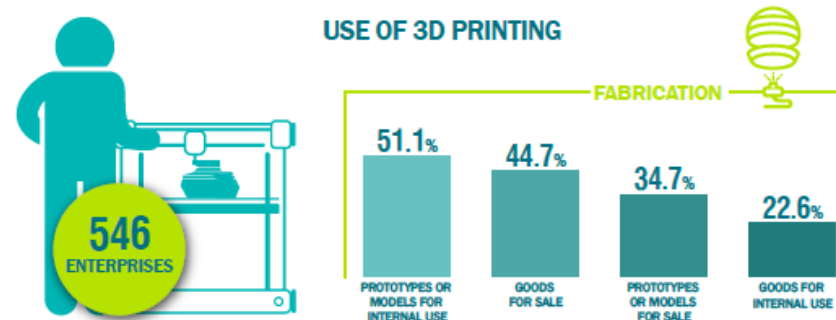
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES AND E-COMMERCE IN ENTERPRISES, 2018



USE OF TARGETED ADVERTISING METHODS THROUGH THE INTERNET



USE OF 3D PRINTING





ELSTAT's Official Statistics

Industry · Trade · Services

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Industry

Manufacturing products
(PRODCOM)

International Trade in Goods

Imports - Exports

International Trade in Goods
by Enterprise Characteristics

International Trade in Goods
with third Countries by
Invoicing Currency

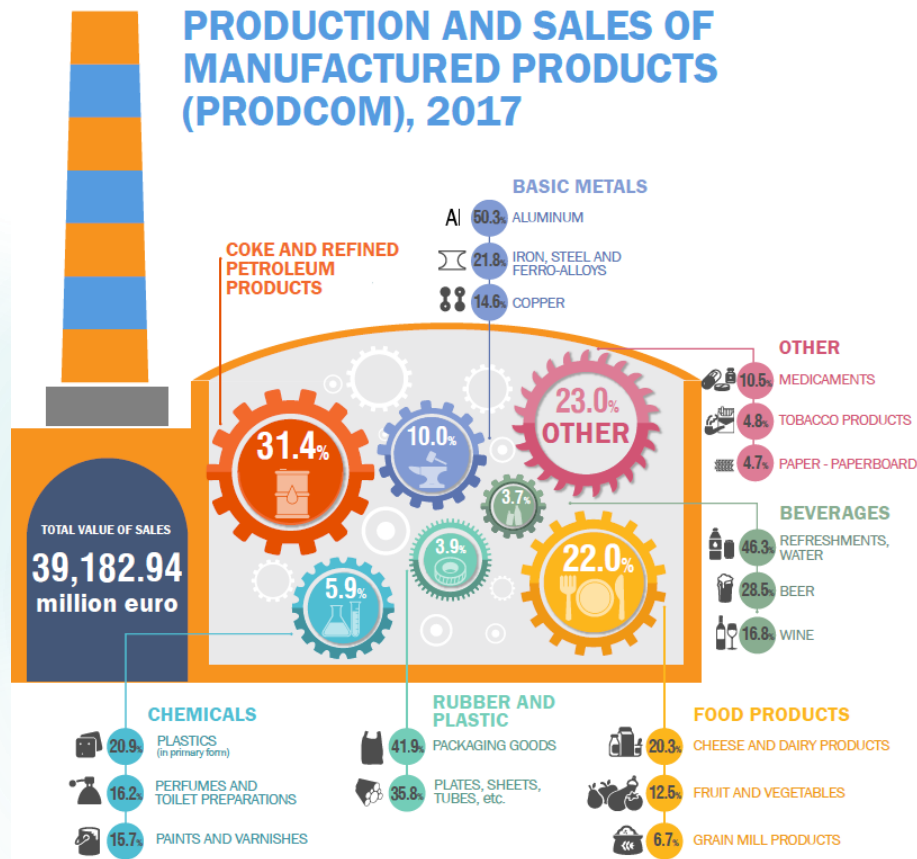


ELSTAT's Official Statistics

Industry · Trade · Services

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PRODUCTION AND SALES OF MANUFACTURED PRODUCTS (PRODCOM), 2017



Εξαγωγές, Εισαγωγές, Εμπορικό Ισοζύγιο Ελλάδας-Πολωνίας

Eksport, import, bilans handlowy Grecji-Polonii
σε εκατ. ευρώ/w milionach euro



Εισαγωγές/Import 2017

σε εκατ. ευρώ/w milionach euro



Εξαγωγές/Eksport 2017

σε εκατ. ευρώ/w milionach euro





IMPORTS - EXPORTS, 2018

IMPORTS: MOST IMPORTANT GOODS (VALUE)

(million euro)



10,530.3
CRUDE OIL



3,822.5
PETROLEUM PRODUCTS



2,119.5
MEDICAMENTS (INCL. VETERINARY)



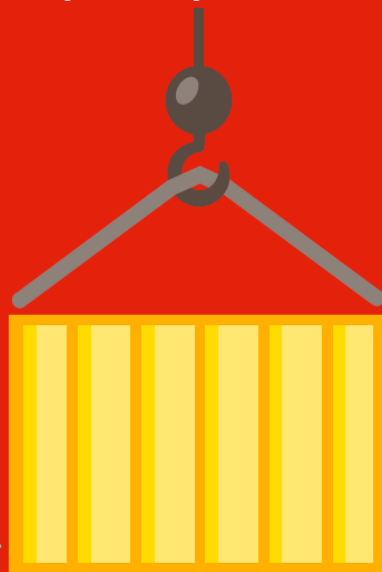
1,375.2
MOTOR VEHICLES



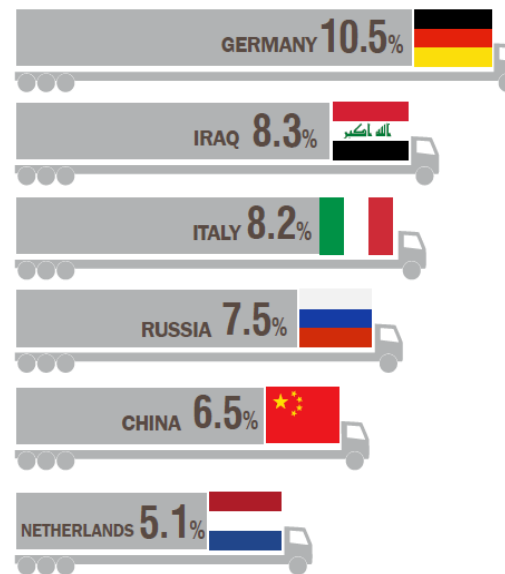
1,301.9
SHIPS, BOATS AND FLOATING STRUCTURES



1,089.6
PHARMACEUTICAL GOODS



IMPORTS: MOST IMPORTANT COUNTRIES



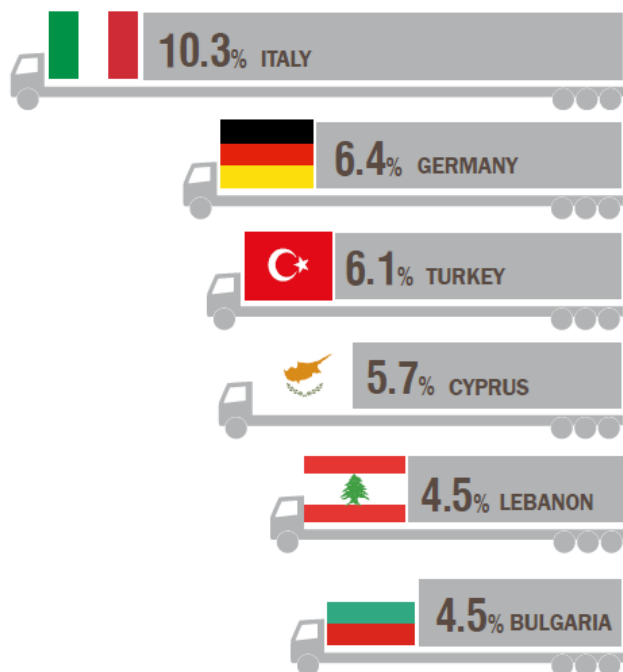


ELSTAT's Official Statistics

Industry · Trade · Services

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EXPORTS: MOST IMPORTANT COUNTRIES



EXPORTS: MOST IMPORTANT GOODS (VALUE) (million euro)



10,708.5

PETROLEUM
PRODUCTS

Al

1,614.7

ALUMINIUM



1,418.2

MEDICAMENTS
(INCL. VETERINARY)



833.8

FRUITS AND
NUTS, FRESH
OR DRIED



660.0

NATURAL OILS
AND FATS



655.1

COMPUTERS



ELSTAT's Official Statistics

Industry · Trade · Services

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Tourism

- Tourist Accommodation Statistics
- Tourism trips of residents

Transport

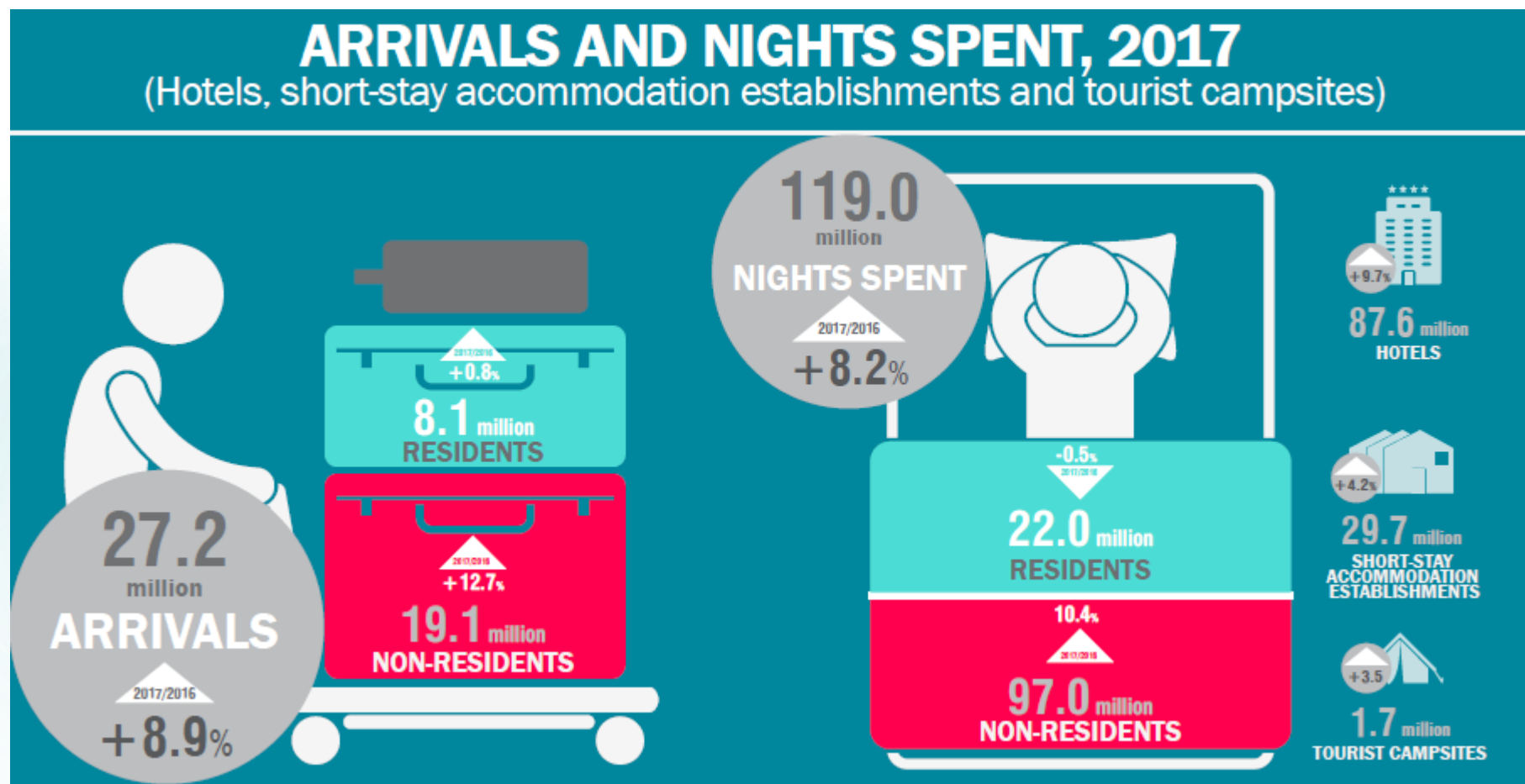
- Passenger and freight transport by sea
- Passenger and freight transport by road
- Passenger and freight transport by rail
- Road network
- Greek Merchant fleet
- Vehicle fleet
- Maritime accidents
- Road accidents
- Census on ships and crews
- Passenger mobility



ELSTAT's Official Statistics

Industry · Trade · Services

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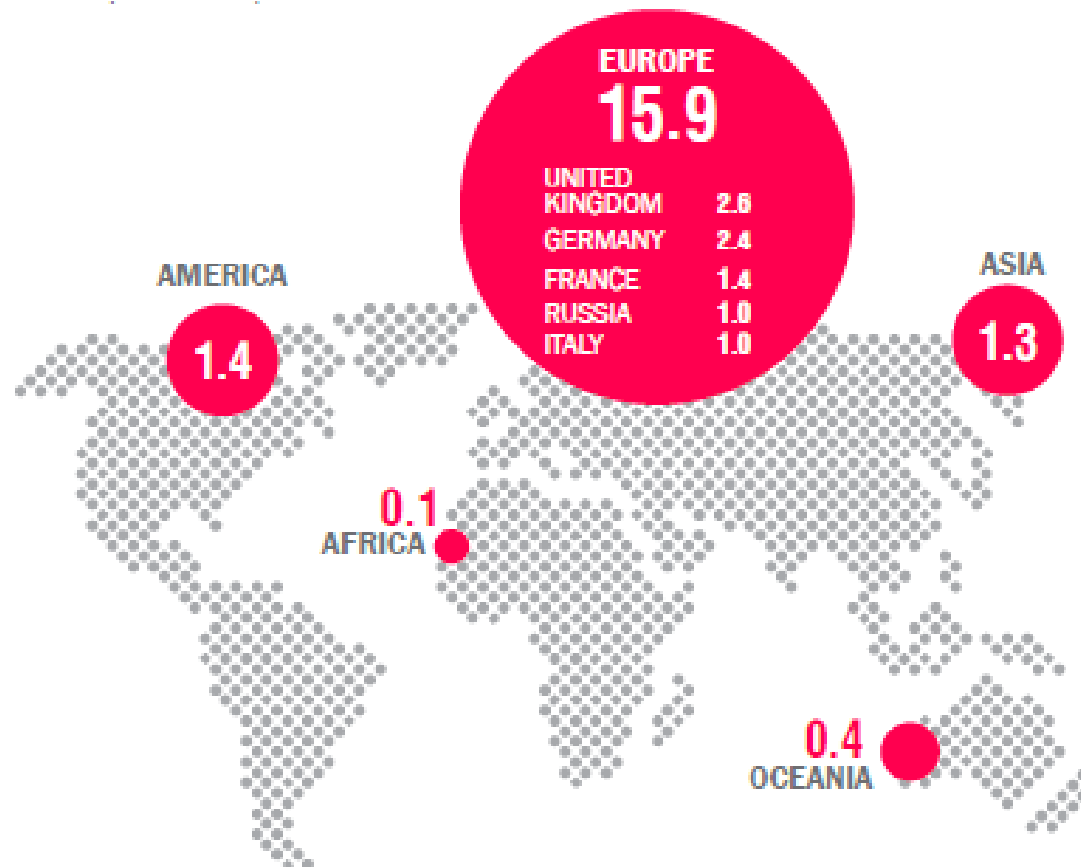
ELSTAT's Official Statistics

Industry · Trade · Services

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ARRIVALS IN TOURIST ACCOMMODATION ESTABLISHMENTS

NON-RESIDENTS
BY COUNTRY OF RESIDENCE
(in millions)





ELSTAT's Official Statistics

Industry · Trade · Services

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Αφίξεις τουριστών από Πολωνία σε καταλύματα, 2017

Przyjazdy turystów z Polski do zakwaterowania, 2017

618.525



Ξενοδοχεία
Hotele

552.790



Ενοικιαζόμενα
Wynajem

59.802



Κάμπινγκ
Camping

5.933

Διανυκτερεύσεις τουριστών από Πολωνία σε καταλύματα, 2017

Nocleg dla turystów z Polonii na zakwaterowanie, 2017

3.660.672



Ξενοδοχεία
Hotele

3.278.308



Ενοικιαζόμενα
Wynajem

359.844



Κάμπινγκ
Camping

22.520



ELSTAT's Official Statistics

Industry · Trade · Services

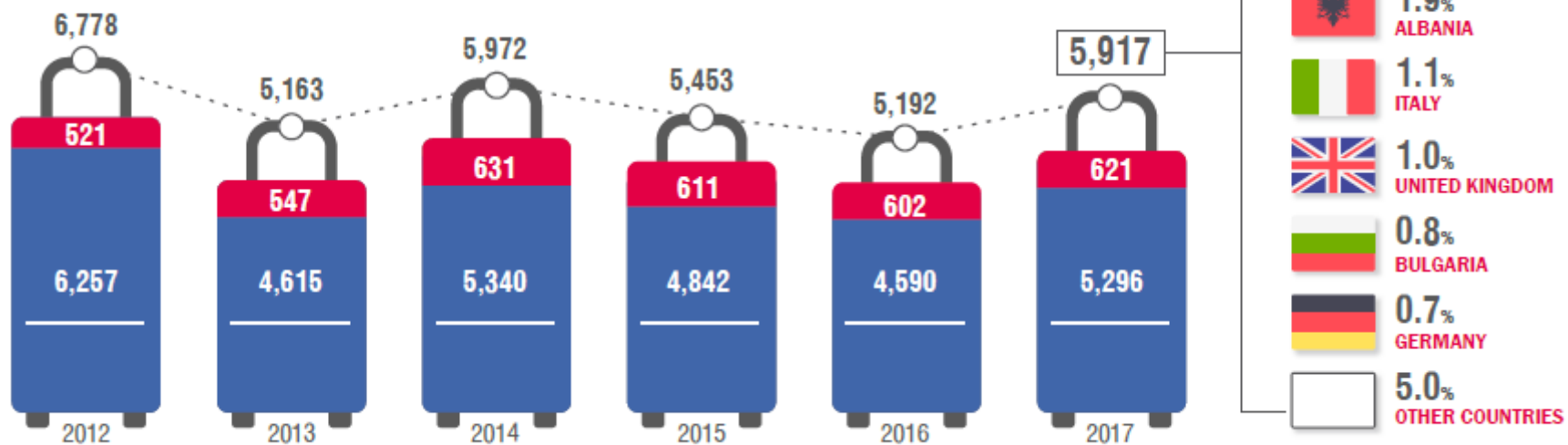
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PERSONAL TRIPS MADE BY RESIDENT TOURISTS, 2017

(Aged 15 and over)

BY DESTINATION (in thousands)

DOMESTIC OUTBOUND TOTAL





ELSTAT's Official Statistics

Industry · Trade · Services

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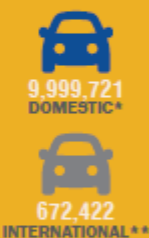
Traffic in Greek Ports, 2017



+7.4%



+4.3%



+3.7%



* movement of goods, mobile units and passengers between Greek ports
** movement of goods, mobile units and passengers in Greek ports with embarking or disembarking at foreign ports

FREIGHT TRANSPORT STATISTICS, 2016

ROAD TRANSPORT

410.3
(million tonnes)
OF FREIGHT
2016/2015
-2.3%



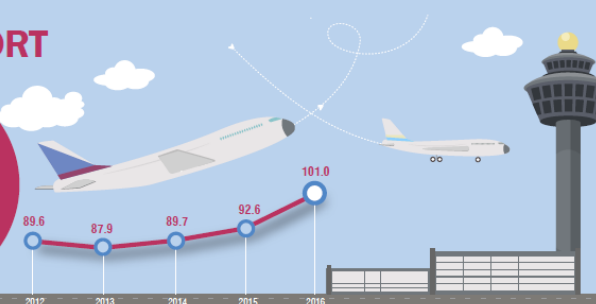
SEA TRANSPORT

143.2
(million tonnes)
OF FREIGHT
2016/2015
+5.5%



AIR TRANSPORT

101.0
(thousand tonnes)
OF FREIGHT
2016/2015
+9.1%





ELSTAT's Official Statistics

Agriculture · Livestock · Fishery · Environment

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Farm Structure

- **Census of Agricultural and Livestock Holdings 2019/2020**
(every ten years)
- **Farm Structure Survey (FSS) 2016/2017**
(every three years)

Livestock and Crop Statistics

- **Vineyard Survey**
- **Basic Orchard Trees Survey**
- **Livestock surveys** (bovine, pigs, sheep and goats)
- **Annual Agricultural Statistical Survey**

Fishery

- **Sea Fishery**
- **Aquaculture**

Environment

- **Environmental Accounts**
- **Waste Statistics**
- **Water Statistics**



Census of Agricultural and Livestock Holdings

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Legal Framework

EU Legal Framework:

- ▶ Regulation (EU) 1091/2018

National Legal Framework:

The Census will be conducted pursuant to National Legislation for the Censuses and the Decisions of the President of ELSTAT.

Method: Exhaustive survey

Population frame: Statistical Farm Register

Statistical Unit: Agricultural or livestock holding

Frequency of data collection: The Census is conducted every 10 years



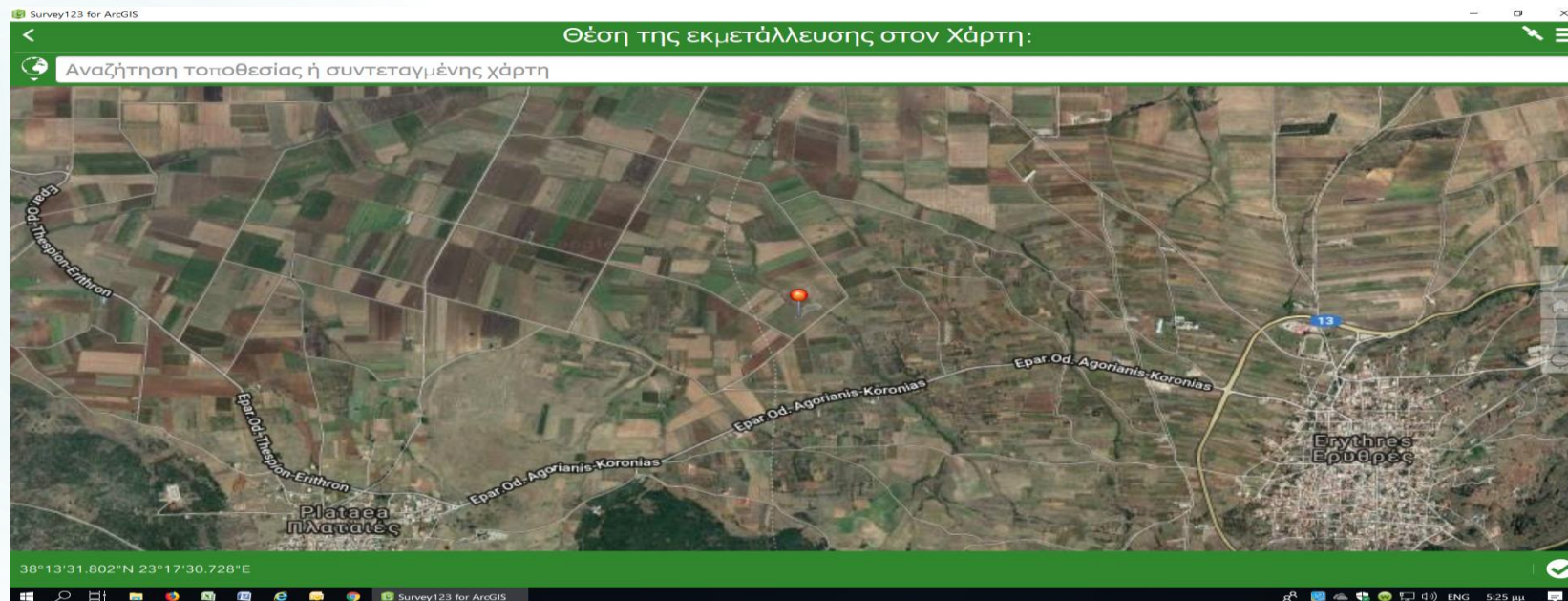
Geographical location of the Agricultural holding

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Data collection method:

The data collection will be conducted by the enumerators with the use of electronic devices (tablets etc). A stand – alone application will be developed and collected data will be uploaded to an intermediate secure database where a predefined set of validation controls will be executed in order to ensure:

- ❑ the geolocation of each holding
- ❑ the timely production of the statistical results





Census of Agricultural and Livestock Holdings

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Reference period:

Crops area 1st October 2019 – 30th September 2020

Livestock 1st November 2020

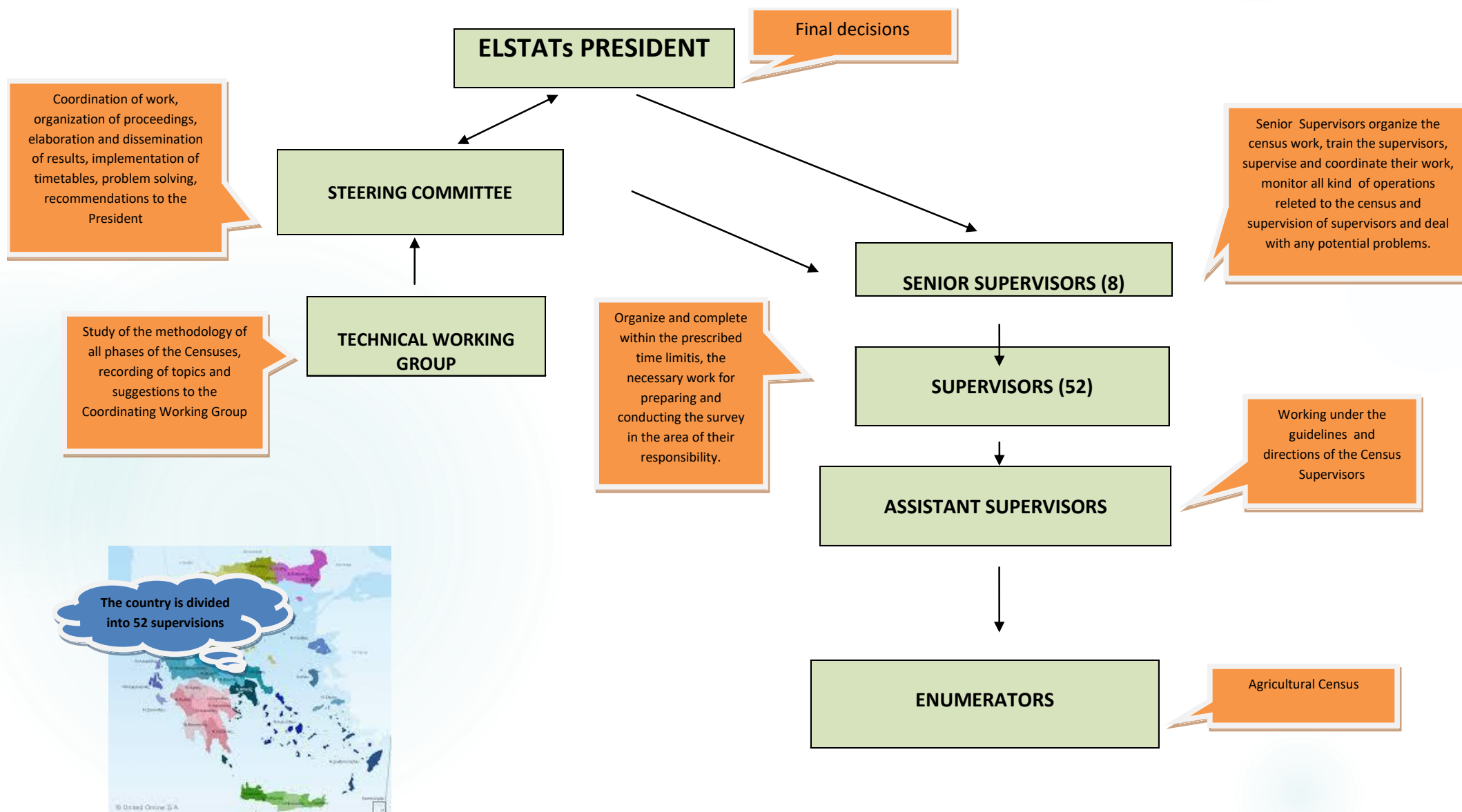
Data collection period: October-December 2020

Main variables: The information collected for each holding is grouped into the following categories:

- ✓ General information: location of the holding and system of farming (biological farming, owned or rented agricultural areas, etc)
- ✓ Agricultural area and land use: size and distribution of the land of the holding and more specifically of the utilized agricultural area (arable land, permanent crops and kitchen gardens, permanent meadows and grassland), as well as specific cultivations
- ✓ Livestock: animals that are bred in the holding (cattle, sheep and goats, pig, poultry, horses and other animals)
- ✓ Variables of special interest, such as Labour Force, Rural Development issues, Animal housing and Manure Management.

Main breakdowns: Total country level (NUTS), Regional level (NUTS II and NUTS III), and Municipality Level (LAU)

Agricultural Census organization chart



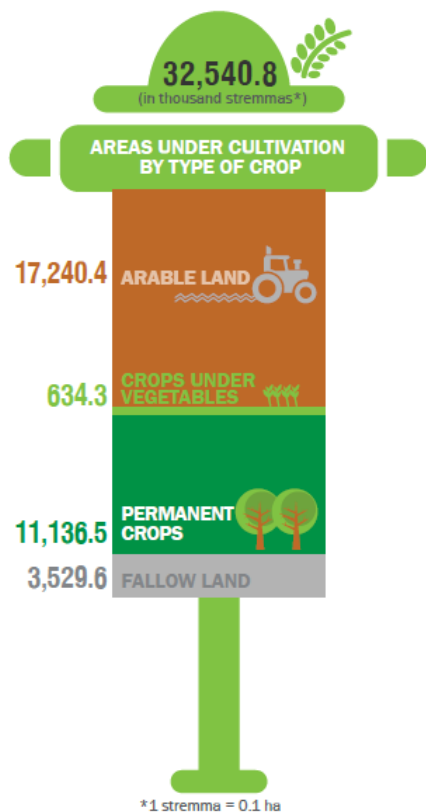


ELSTAT's Official Statistics

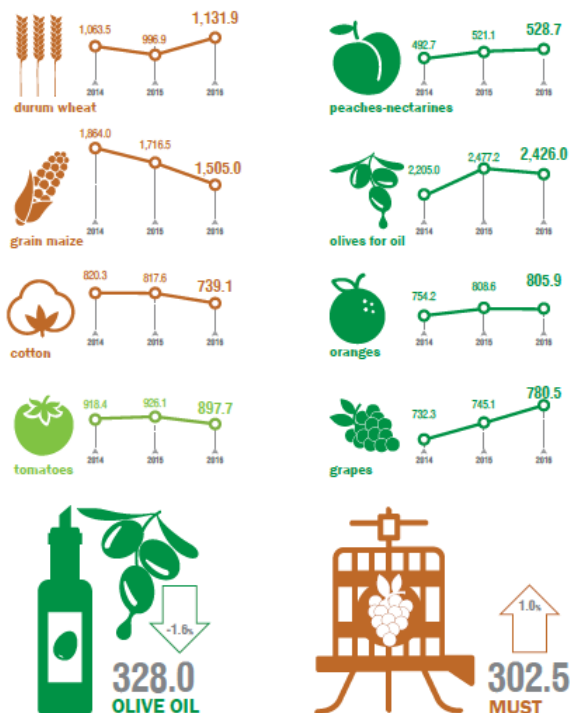
Agriculture · Livestock · Fishery · Environment

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AGRICULTURAL STATISTICAL SURVEY 2016



PRODUCTION OF AGRICULTURAL PRODUCTS (in thousand tonnes)



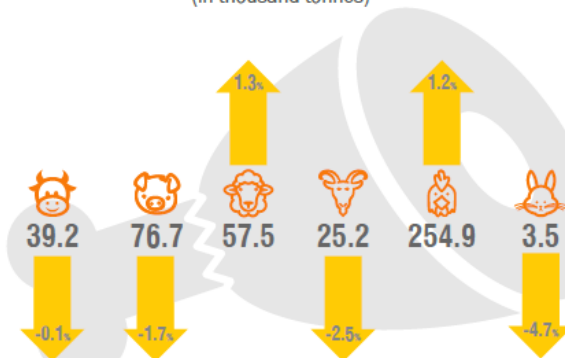
LIVESTOCK BY SPECIES (in thousands)



PRODUCTION OF MILK AND LIVESTOCK PRODUCTS (in thousand tonnes)



PRODUCTION OF MEAT (in thousand tonnes)



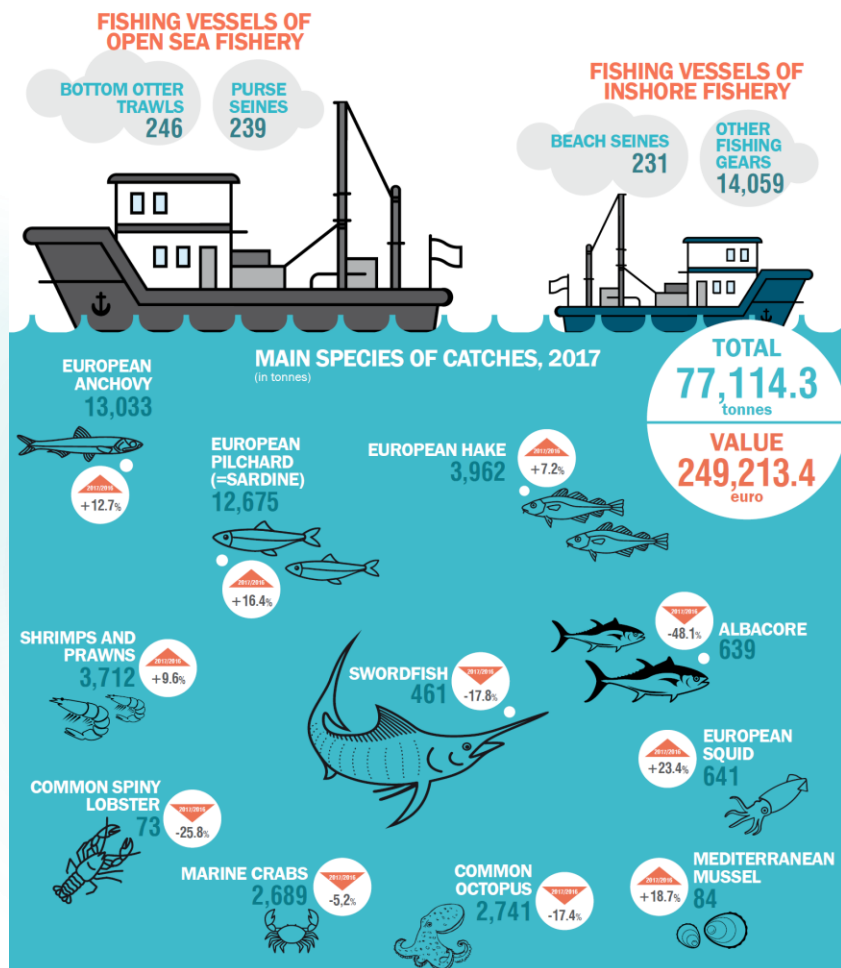


ELSTAT's Official Statistics

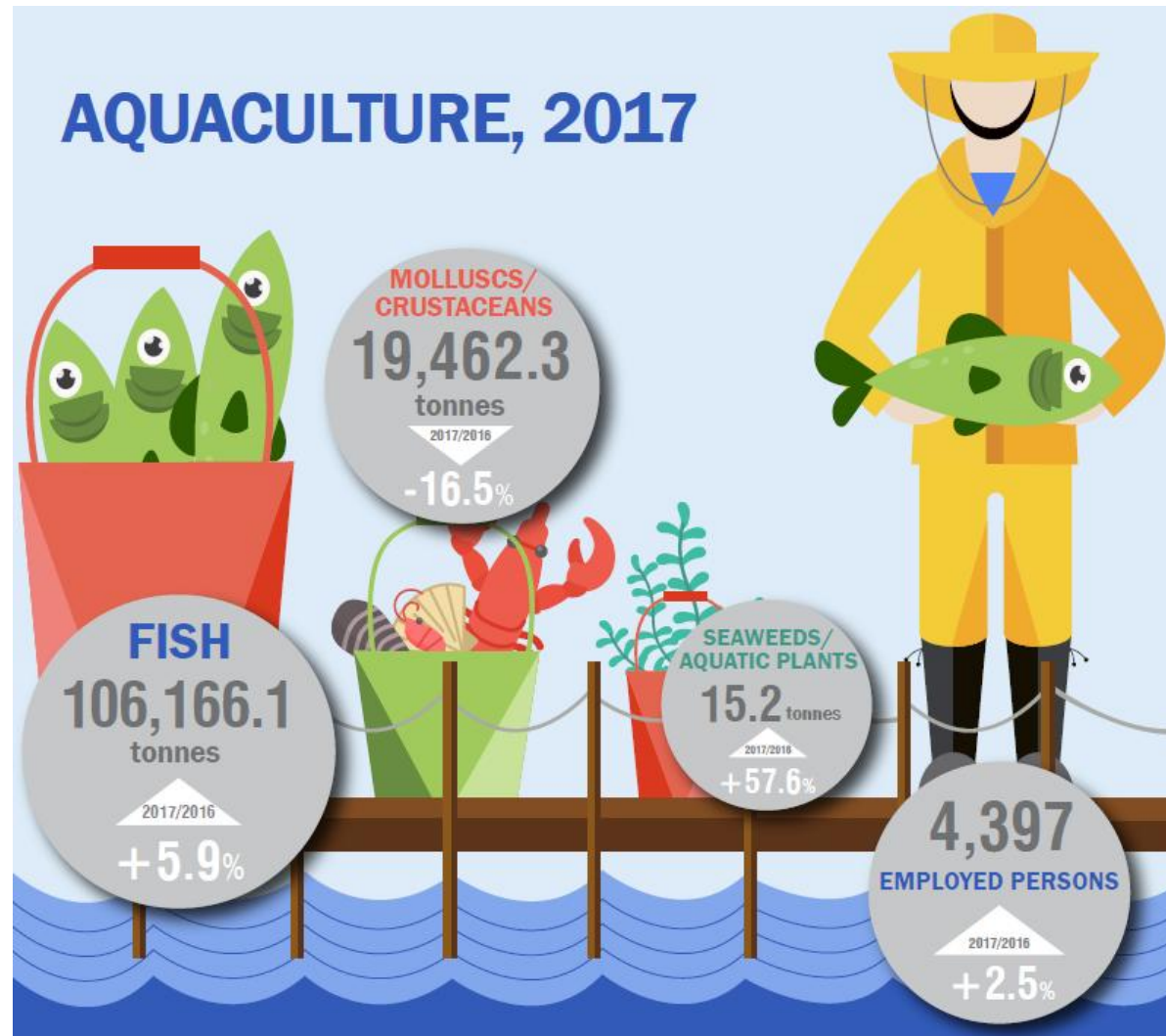
Agriculture · Livestock · Fishery · Environment

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SEA FISHERY SURVEY BY MOTOR-PROPELLED VESSELS, 2017



AQUACULTURE, 2017





ELSTAT's Official Statistics

Population and Social Conditions

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Population and Housing Census 2021

Demography

**Labour
Market**

Household
Budget Survey

Income and Living Conditions
of Households

Use of ICT by
households
and individuals

Health

Justice

Education

Culture





Legal Framework

EU Legal Framework:

- ▶ Regulation (EC) 763/2008
- ▶ Commission Regulation (EU) 712/2017 for establishing the reference year and the program of the statistical data and metadata for population and housing censuses provided for by Regulation (EC) No 763/2008
- ✓ UN Recommendations for the 2020 Censuses of Population and Housing are taken into account

National Legal Framework:

Legal Act and President's Decision regulating the conduct of the Census with the aim to ensure :

- ✓ the required financial and human resources
- ✓ the collection of additional variables for national interest *such as information about buildings building census)*



Population and Housing 2021 Census

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Method: Collection of data from the households by the enumerators with the use of paper questionnaires. All the collected data will be uploaded directly by the enumerators to an intermediate secure database via a web application developed by ELSTAT. Basic validation controls will be performed in terms of plausibility and completeness of the data.

Frequency of data collection: The Population-Housing census is conducting every 10 years. In the light of the new architecture for conducting Population-Housing census it is foreseen that from 2024, the Census will be conducted on a yearly basis for the core variables.

Reference date: One (1) day to be accordingly specified, within the data collection period

Period of data collection: Spring of 2021

Duration of data collection: 9 days



Population and Housing 2021 Census

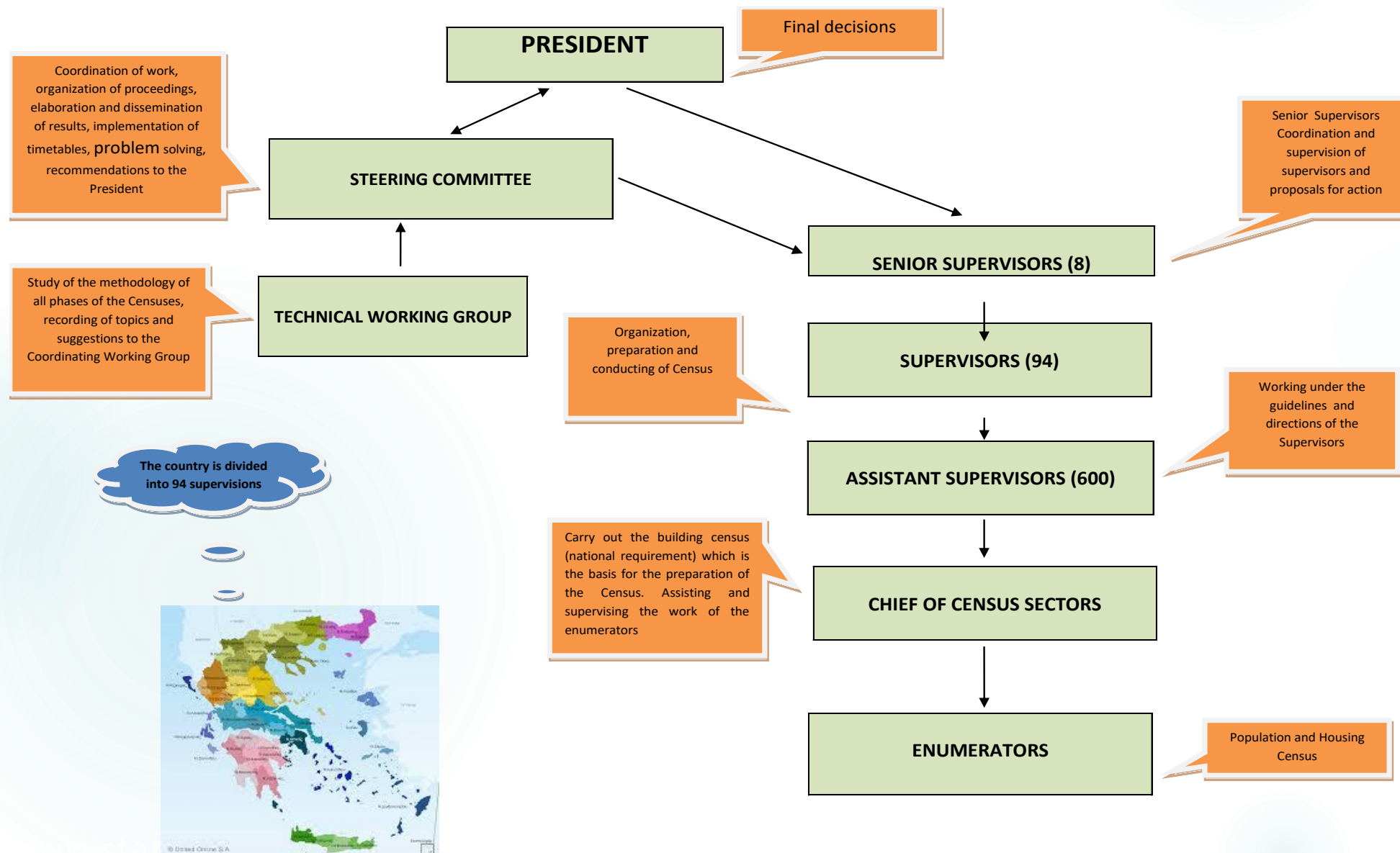
50

Main variables: The Population and Housing Censuses collect statistical data on the main characteristics of dwellings, the number and composition of households and nuclear families, as well as on the demographic, social, educational and economic characteristics of the resident population of the Country.

The surveyed characteristics of the census are laid down in Community legislation and taking into consideration national needs through consultation with other national authorities.

Population and Housing Census organization chart

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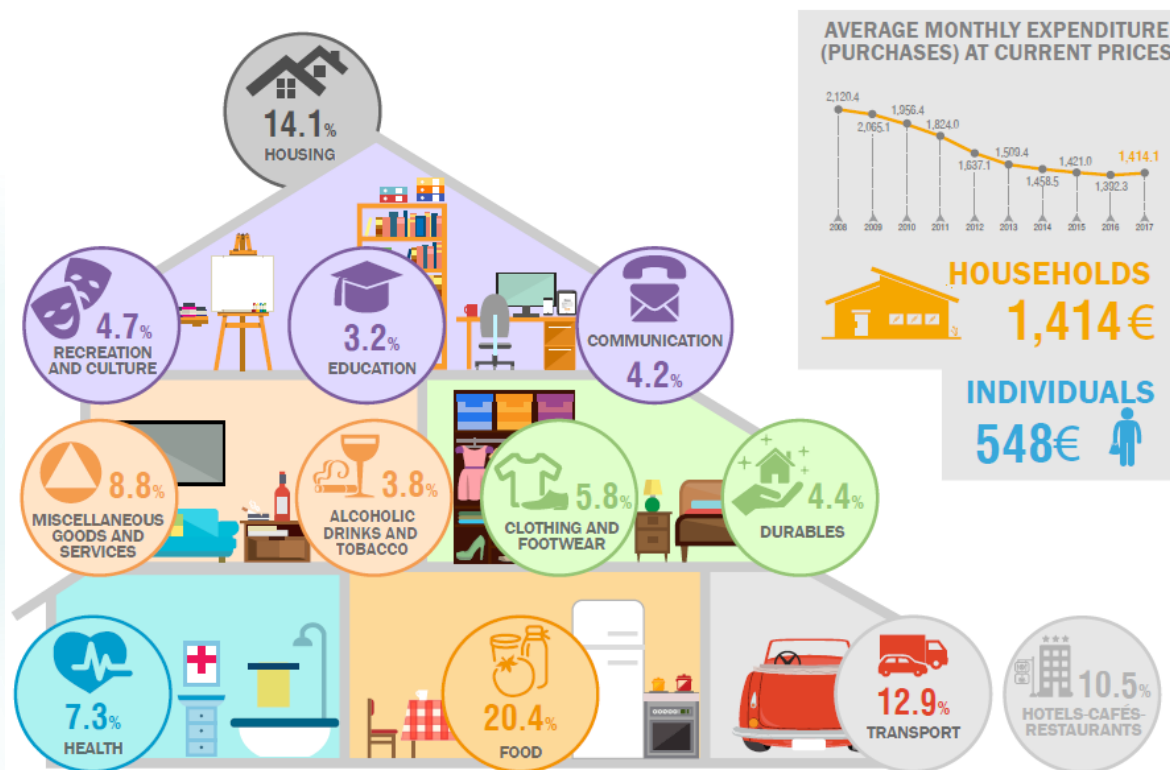


ELSTAT's Official Statistics

Population and Social Conditions

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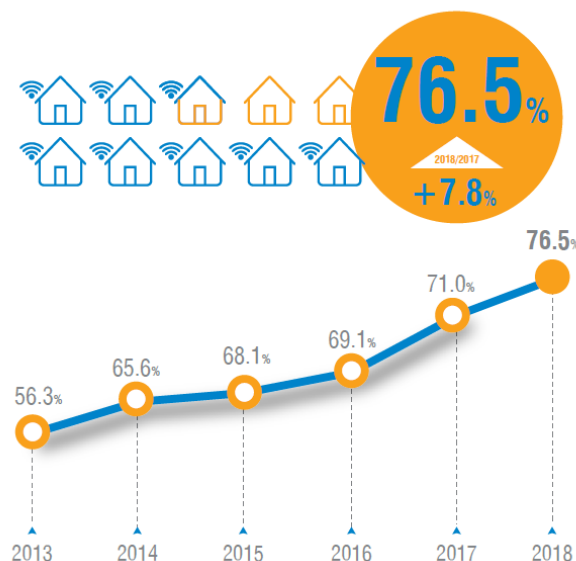
HOUSEHOLD BUDGET SURVEY, 2017



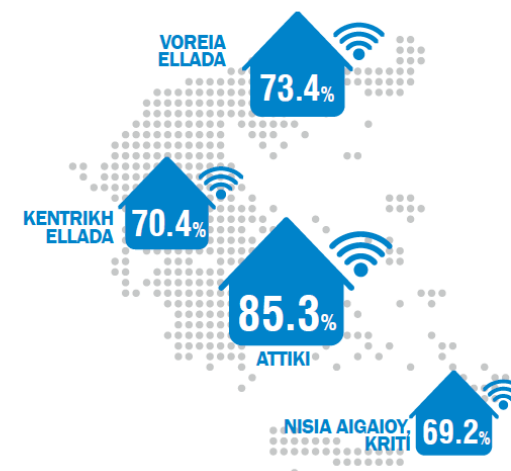
SURVEY ON THE USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES

BY HOUSEHOLDS AND INDIVIDUALS, 2018

INTERNET CONNECTION AT HOME



BY NUTS 1 REGION



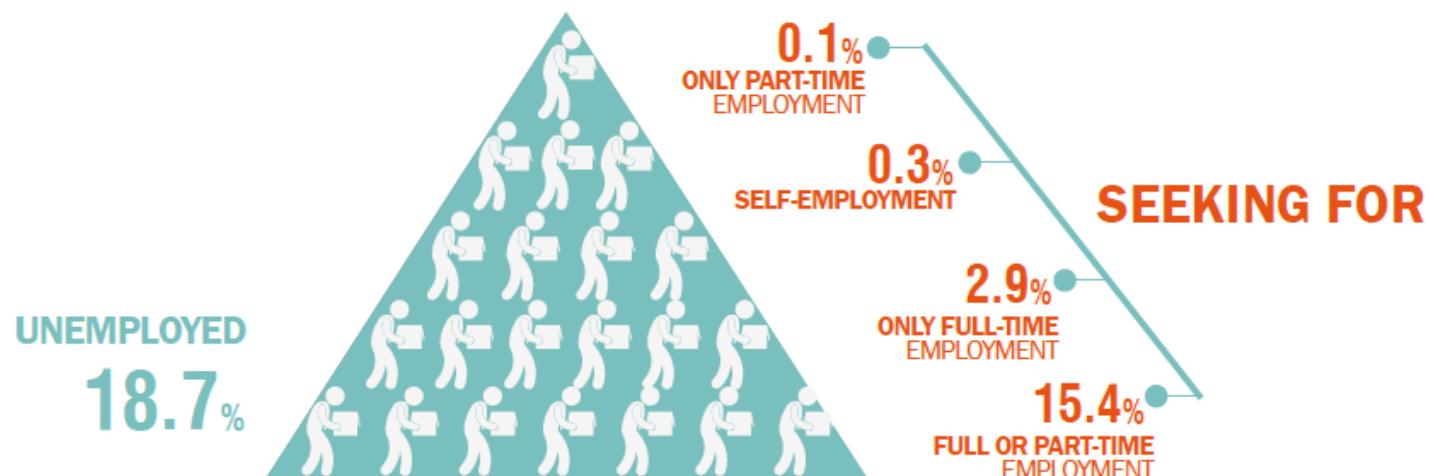
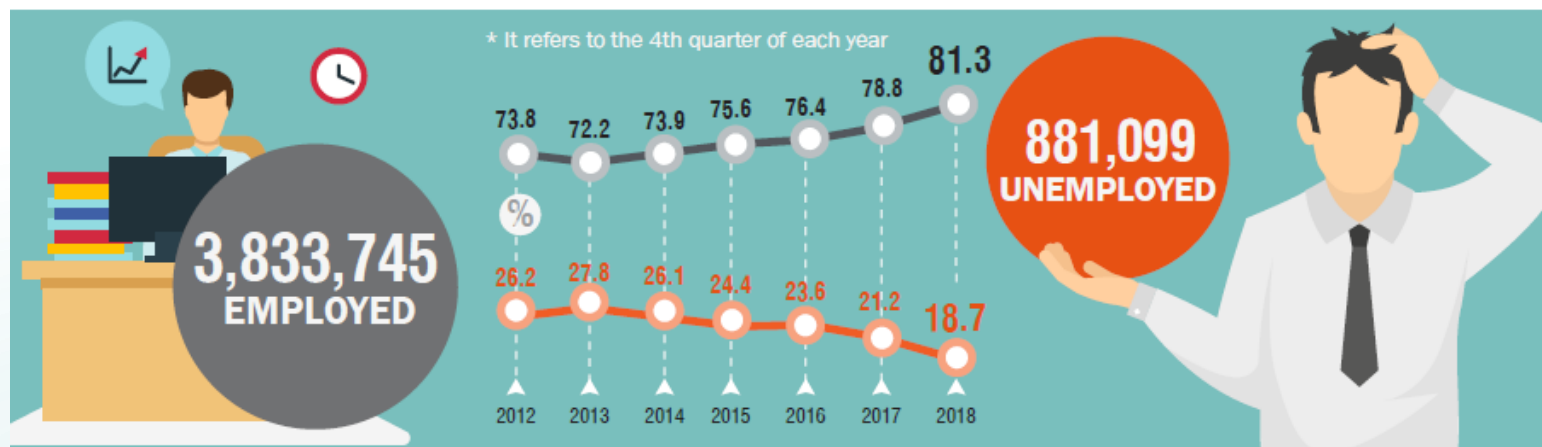


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Population and Social Conditions

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LABOUR FORCE, 2018 (4th quarter)



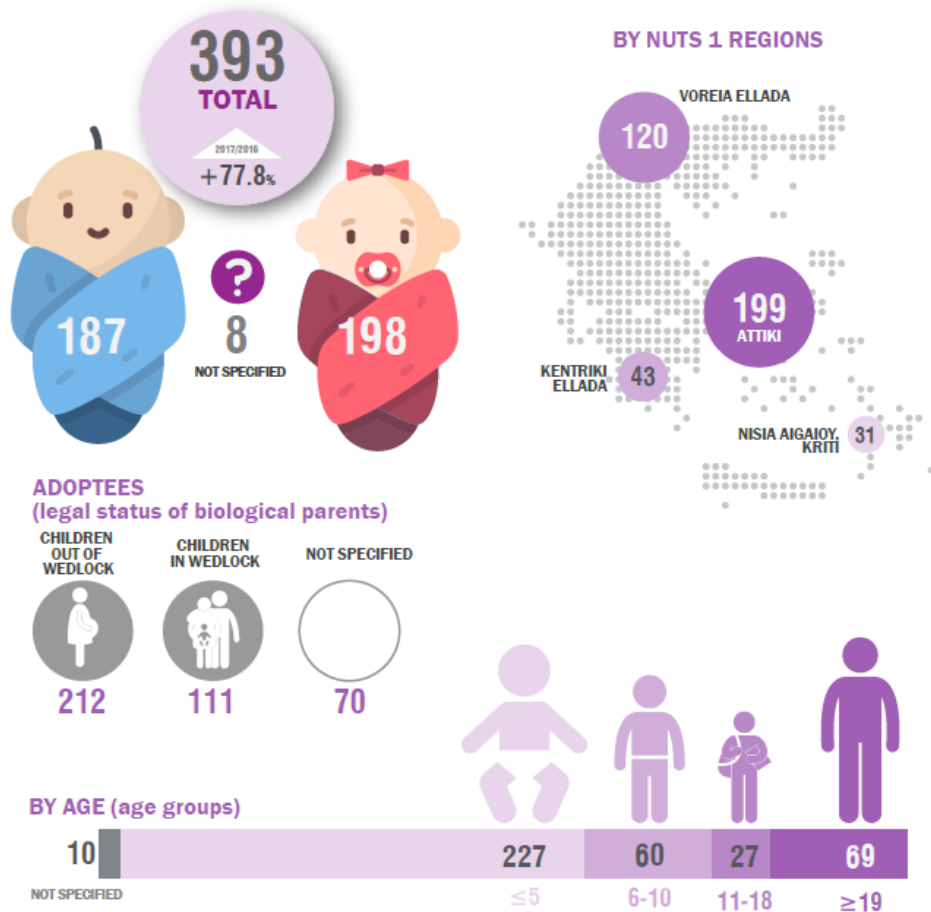


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Population and Social Conditions

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ADOPTIONS, 2017



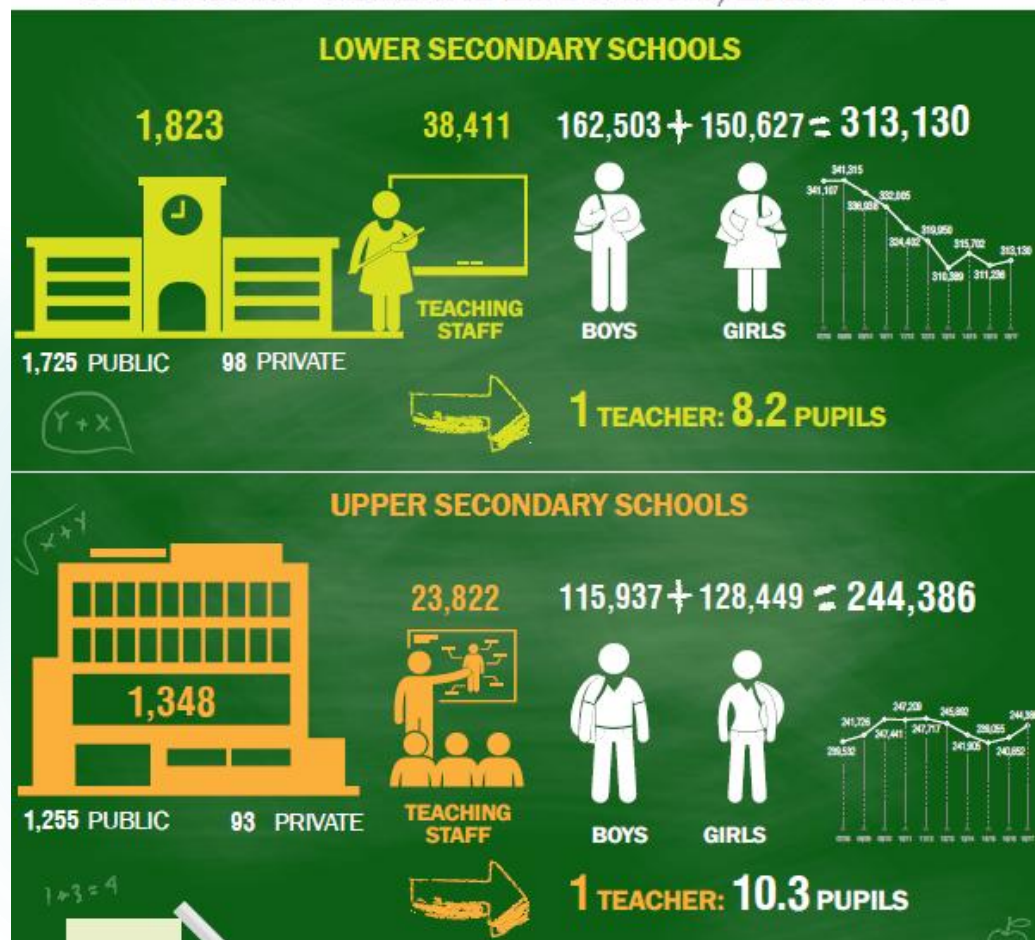


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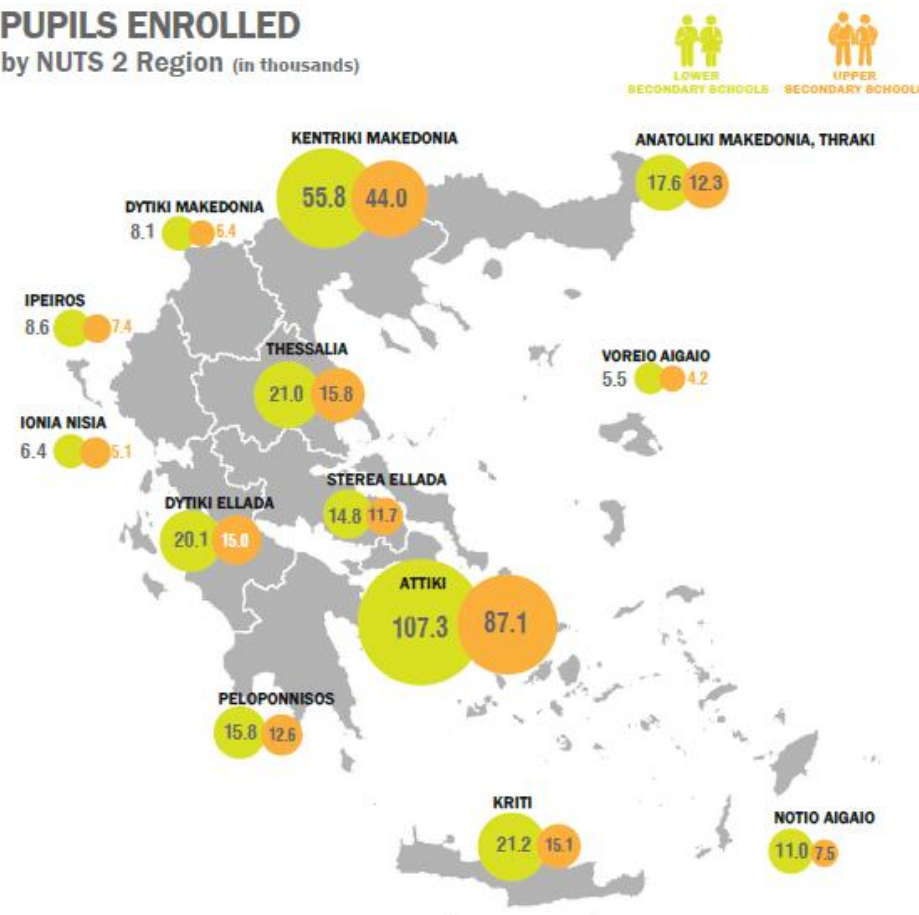
Population and Social Conditions

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SECONDARY GENERAL EDUCATION, 2016 - 2017*



PUPILS ENROLLED by NUTS 2 Region (in thousands)



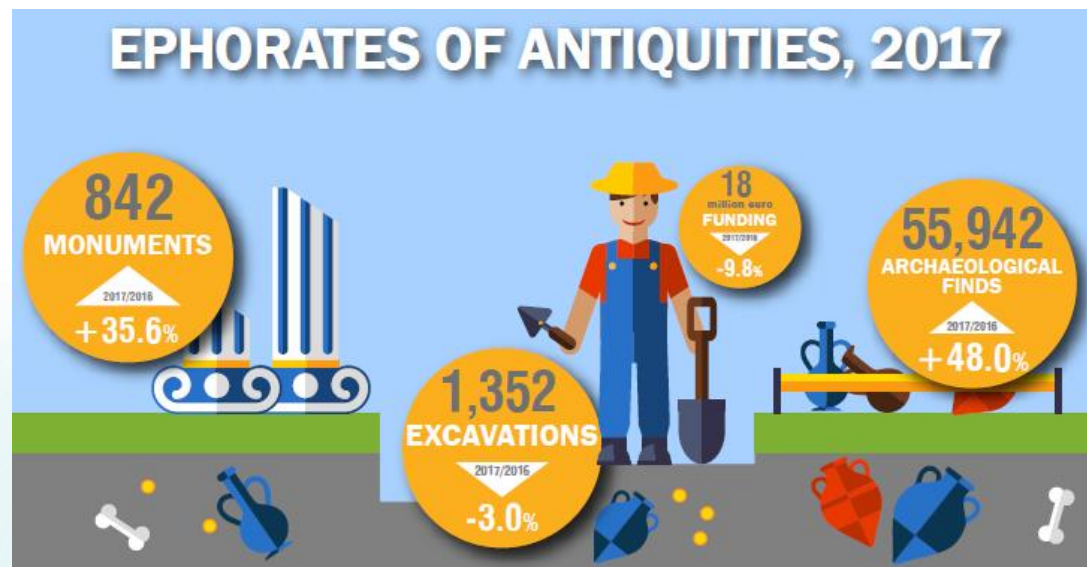


ELSTAT's Official Statistics

Population and Social Conditions

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EPHORATES OF ANTIQUITIES, 2017



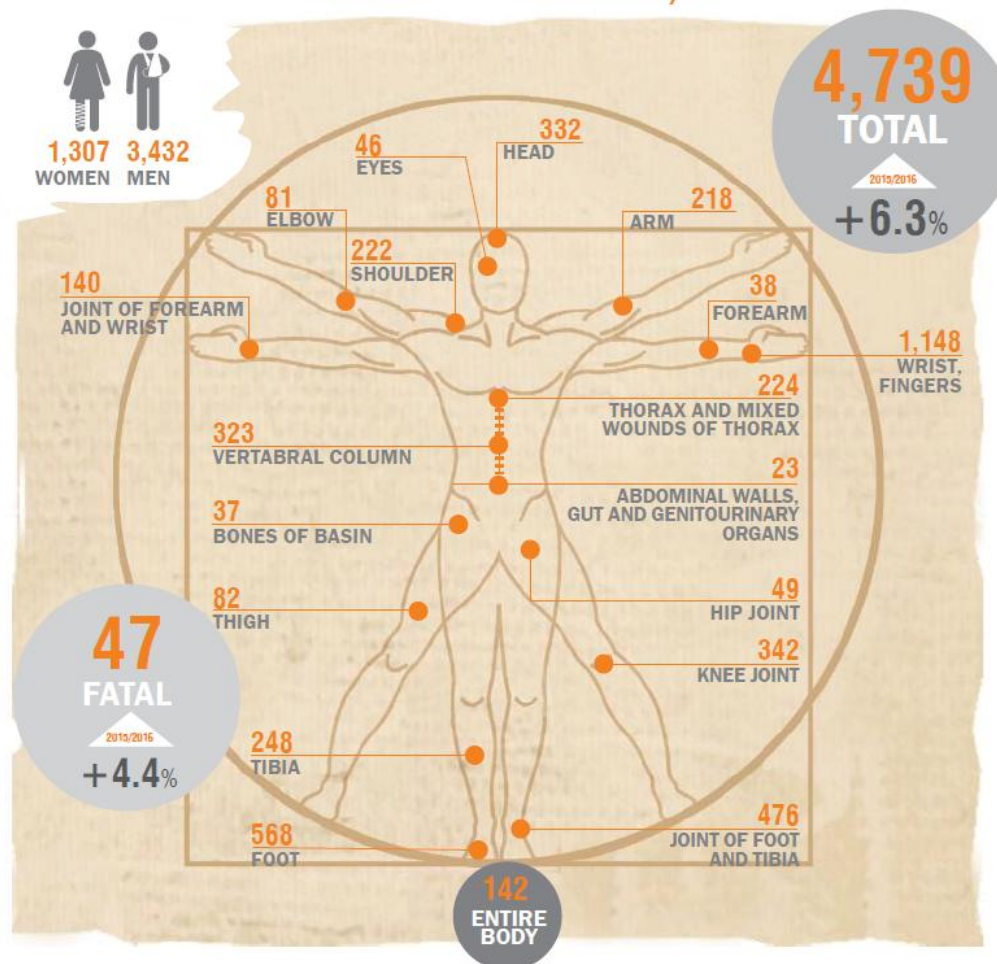
EXCAVATIONS
(in thousands)



OTHER FINDS
(in thousands)



ACCIDENTS AT WORK, 2016



Ευχαριστώ

Dziękuję