

Group of Experts on Population and Housing Censuses
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Challenges and prospects of the Hellenic Statistical System: 2021 Population-Housing Census and beyond



HELLENIC STATISTICAL AUTHORITY (ELSTAT)

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Background



Scope and methodology

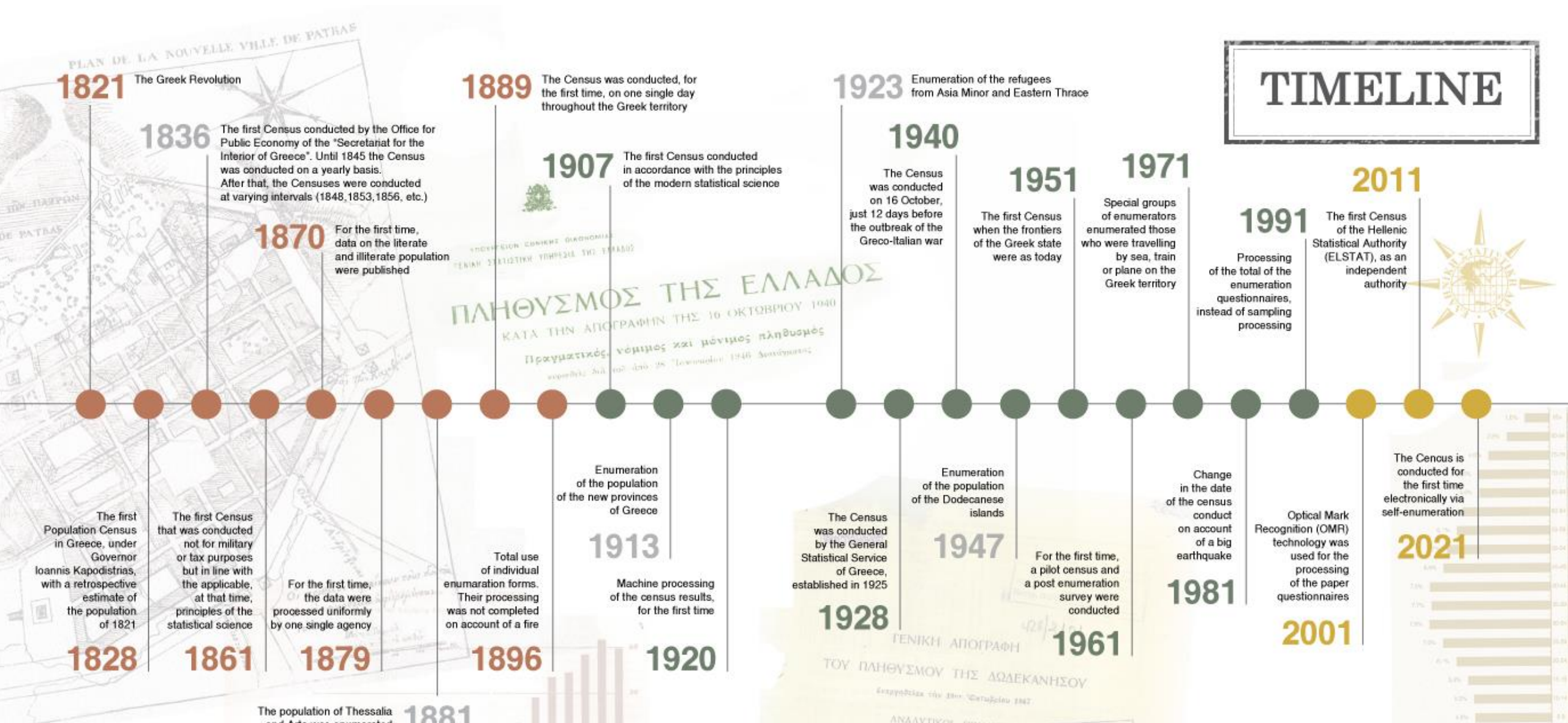


Institutional Framework



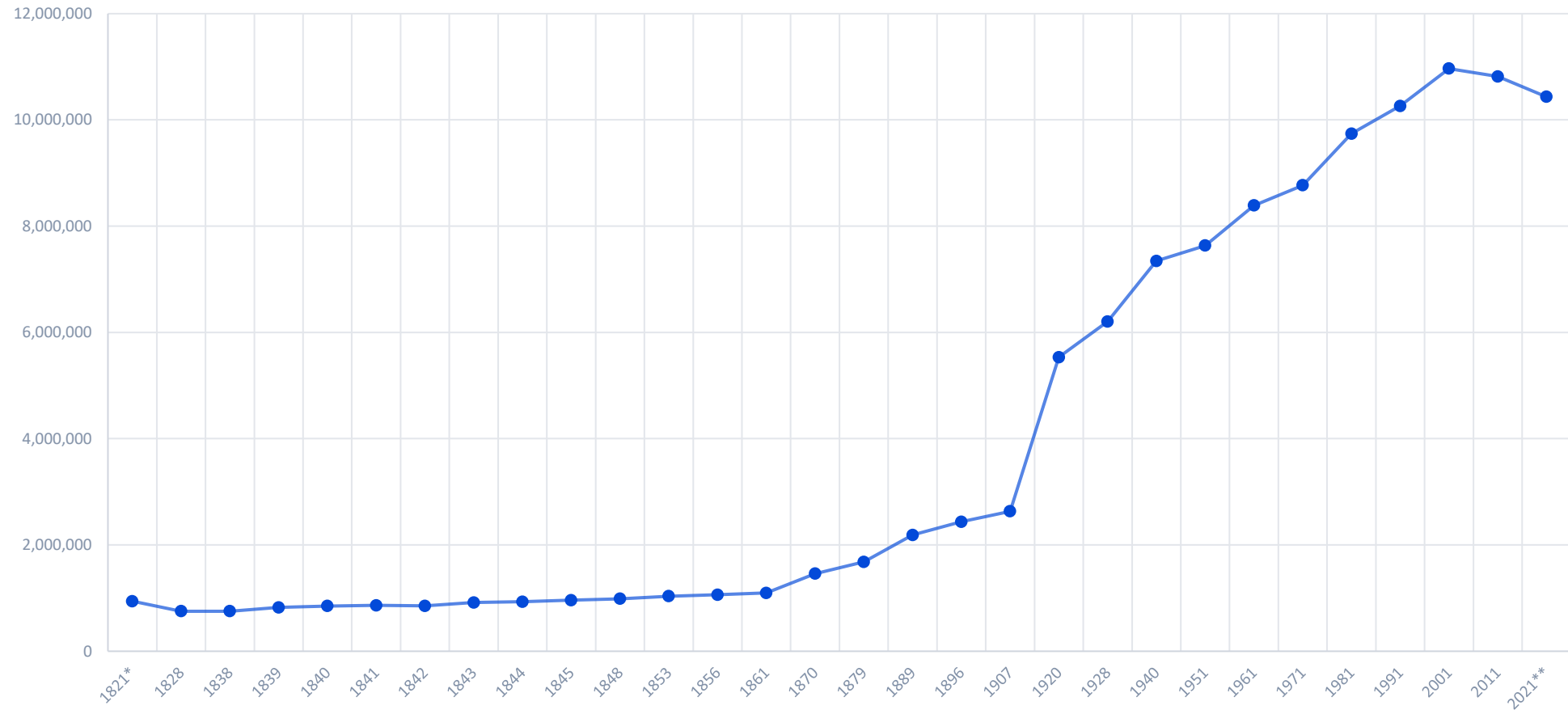
The Census in Greece (1821-2021)

TIMELINE



The Census in Greece (1821-2021)

Population Census Results in Greece (1821-2021)



1821-2001: De Facto population, 2011-2021: Resident population.

* Population estimation through the 1828 Census ** Provisional Data

Web: www.statistics.gr



The Population and Housing Census in Greece

AIM

- ✓ to collect up-to-date and valid data on the demographic, economic and social characteristics of the population and its housing conditions
- ✓ to identify the country's building stock and the buildings' use and their characteristics
- ✓ compilation of Statistical Registers for Buildings and Population



The Population and Housing Census in Greece

The 2021 Population-Housing Census, initially was to be conducted following the traditional, door-to-door, method by fill in a paper questionnaire through an interview.

The combined census model was not a straightforward choice because of:

- ✓ the lack of suitable Registers at national level
- ✓ the lack of a unique ID for both citizens and dwellings that made any linkage between administrative and statistical registers a burdensome undertaking
- ✓ the strict data protection regulations among different administrations



The Population and Housing Census in Greece

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Collection of variables which will provide unique IDs and will be used as "keys" for linking the census data with the appropriate administrative registers

These variables were:

- ✓ the Tax Identification Number (TIN Number or ΑΦΜ), and
- ✓ the Social Security Number (ΑΜΚΑ).



Legal and Institutional Framework

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EU legal framework provides a consistent set of regulations on population statistics under the umbrella of the E.C Regulation 223/2009

At National level the Greek Statistical Law 3832/2010 as well as a special Census Law (4772/2021) set this framework ensuring the access of ELSTAT to relevant administrative sources.

Institutional arrangements special agreements have been concluded in the form of memoranda of cooperation with the administrative data holders, while good cooperation/working relations have been established with them, which is a precondition for ensuring the regular use of this data in the context of official statistics.



ELSTAT introduced a special Census Law

- ✓ the national law 4772/2021, was voted by the vast majority of the members of the Hellenic Parliament

It was the first time that the General Censuses in Greece were conducted by virtue of a legal act that enjoys democratic legitimization to that extent.

Up until the 2021 Census, the Censuses were held with a Presidential (or Royal) Decree and Ministerial Acts.



The aim of introducing a special Census Law was:

- ✓ to provide a long-term and comprehensive legal basis for population statistics
- ✓ to meet evolving user needs, and
- ✓ to exploit the opportunities provided by the growing usage of administrative data sources and new methods.



The Census Law specified:

- ✓ the purpose of the Census
- ✓ the subject,
- ✓ the statistical definitions and the variables,
- ✓ the budget,
- ✓ the methodology,
- ✓ data collection,
- ✓ post-census activities
- ✓ creation of the statistical registers

Special clauses allowed for the President of the ELSTAT to be able to make all the appropriate adaptations regarding the data collection period, the variables and the people working for the Censuses.

| ΕΦΗΜΕΡΙΔΑ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ ΤΗΣ ΕΛΛΗΝΙΚΗΣ ΔΗΜΟΚΡΑΤΙΑΣ | | |
|--|---|---------------|
| 5 Φεβρουαρίου 2021 | ΤΕΥΧΟΣ ΠΡΩΤΟ | Αρ. Φύλλου 17 |
| ΝΟΜΟΣ ΥΠ' ΑΡΙΘΜ. 4772 Διατάγματα Γενικών Απογραφών έτους 2021 από την Ελληνική Στατιστική Αρχή, επείγουσες ρυθμίσεις για την αντιμετώπιση των επιπτώσεων της πανδημίας του κορωνοϊού COVID-19, επείγουσες δημοσιονομικές και φορολογικές ρυθμίσεις και άλλες διατάξεις. | Άρθρο 16: Παραμερισμός και Δημιστικές Ομάδες Εργασίας των Απογραφών Γ.Κ. ΚΕΦΑΛΑΙΟ Δ΄: ΡΥΘΜΙΣΕΙΣ ΔΙΟΙΚΗΤΙΚΩΝ ΚΑΙ ΟΙΚΟΝΟΜΙΚΩΝ ΘΕΜΑΤΩΝ Άρθρο 17: Διοικητικά θέματα Άρθρο 18: Καθεστώς και αποζημίωση Τομεαρχών Απογραφών και Συνοδών-Διευρμένων των Γενικών Απογραφών Άρθρο 19: Καθεστώς και αποζημίωση συλλογικών οργάνων των Γενικών Απογραφών ΚΕΦΑΛΑΙΟ Ε΄: ΘΕΜΑΤΑ ΜΕΤΑΠΟΓΡΑΦΙΚΩΝ ΕΡΓΑΣΙΩΝ Άρθρο 20: Ασφαλές αποθήκευση δεδομένων των Γενικών Απογραφών ΚΤΚ και Γ.Κ. Άρθρο 21: Στατιστικό μητρώο των Απογραφών ΚΤΚ Άρθρο 22: Στατιστικό Γεωργικό Μητρώο ΚΕΦΑΛΑΙΟ ΣΤ΄: ΛΟΙΠΕΣ ΡΥΘΜΙΣΕΙΣ Άρθρο 23: Υποστήριξη από άλλους κρατικούς φορείς Άρθρο 24: Εξουσιοδοτικές διατάξεις Άρθρο 25: Παραρτήματα | |
| Η ΠΡΟΕΔΡΟΣ ΤΗΣ ΕΛΛΗΝΙΚΗΣ ΔΗΜΟΚΡΑΤΙΑΣ Εκδίδομε τον ακόλουθο νόμο που ψήφισε η Βουλή: ΠΙΝΑΚΑΣ ΠΕΡΙΕΧΟΜΕΝΩΝ ΜΕΡΟΣ Α΄: ΔΙΕΝΕΡΓΕΙΑ ΓΕΝΙΚΩΝ ΑΠΟΓΡΑΦΩΝ ΕΤΟΥΣ 2021 ΑΠΟ ΤΗΝ ΕΛΛΗΝΙΚΗ ΣΤΑΤΙΣΤΙΚΗ ΑΡΧΗ Άρθρο 1: Σκοπός ΚΕΦΑΛΑΙΟ Α΄: ΔΙΕΝΕΡΓΕΙΑ ΑΠΟΓΡΑΦΩΝ ΚΤΚ ΕΤΟΥΣ 2021 Άρθρο 2: Αντικείμενο των Απογραφών ΚΤΚ Άρθρο 3: Οργανισμός των Απογραφών ΚΤΚ Άρθρο 4: Πεδίο εφαρμογής των Απογραφών ΚΤΚ | Άρθρο 16: Παραμερισμός και Δημιστικές Ομάδες Εργασίας των Απογραφών Γ.Κ. ΚΕΦΑΛΑΙΟ Δ΄: ΡΥΘΜΙΣΕΙΣ ΔΙΟΙΚΗΤΙΚΩΝ ΚΑΙ ΟΙΚΟΝΟΜΙΚΩΝ ΘΕΜΑΤΩΝ Άρθρο 17: Διοικητικά θέματα Άρθρο 18: Καθεστώς και αποζημίωση Τομεαρχών Απογραφών και Συνοδών-Διευρμένων των Γενικών Απογραφών Άρθρο 19: Καθεστώς και αποζημίωση συλλογικών οργάνων των Γενικών Απογραφών ΚΕΦΑΛΑΙΟ Ε΄: ΘΕΜΑΤΑ ΜΕΤΑΠΟΓΡΑΦΙΚΩΝ ΕΡΓΑΣΙΩΝ Άρθρο 20: Ασφαλές αποθήκευση δεδομένων των Γενικών Απογραφών ΚΤΚ και Γ.Κ. Άρθρο 21: Στατιστικό μητρώο των Απογραφών ΚΤΚ Άρθρο 22: Στατιστικό Γεωργικό Μητρώο ΚΕΦΑΛΑΙΟ ΣΤ΄: ΛΟΙΠΕΣ ΡΥΘΜΙΣΕΙΣ Άρθρο 23: Υποστήριξη από άλλους κρατικούς φορείς Άρθρο 24: Εξουσιοδοτικές διατάξεις Άρθρο 25: Παραρτήματα ΜΕΡΟΣ Β΄: ΕΠΕΙΓΟΥΣΕΣ ΡΥΘΜΙΣΕΙΣ ΓΙΑ ΤΗΝ ΑΝΤΙΜΕΤΩΠΙΣΗ ΤΩΝ ΕΠΙΠΤΩΣΕΩΝ ΤΗΣ ΠΑΝΔΗΜΙΑΣ ΤΟΥ | |



Future obligations:

- ✓ the creation, for the first time in Greece, of the Building and Population registers
- ✓ clear provisions that all the Authorities/Bodies in Greece are obliged to provide administrative data to ELSTAT.

Overall, ELSTAT enjoyed full independence regarding the Census since the President of ELSTAT was the sole decision-maker regarding the timetables, the procedures, the variables etc.



The Census Law

| Law 4772/2021: Conducting General Censuses for the year 2021 from the Hellenic Statistical Authority | |
|---|--|
| Article 1 | The Purpose |
| Article 2 | Subject of Building and Population-Housing Censuses |
| Article 3 | Definitions of Building and Population-Housing Censuses |
| Article 4 | Scope of Building and Population-Housing Censuses |
| Article 5 | Time and procedure for conducting the Building and Population-Housing Censuses |
| Article 6 | Subject of Agriculture-Livestock Census |
| Article 7 | Definitions of the Agriculture-Livestock Census |
| Article 8 | Scope of the Agriculture-Livestock Census |
| Article 9 | Time and procedure for conducting the Agriculture-Livestock Census |
| Article 10 | Conduction - Collection of data for the Building and Population-Housing Censuses |
| Article 11 | Conduction - Collection of data for the Agriculture-Livestock Census |
| Article 12 | The Bodies of Building, Population-Housing and Agriculture-Livestock Censuses |
| Article 13 | Appointment of Heads of Sectors, enumerators and Escorts-Interpreters |
| Article 14 | Establishment of collective bodies for the Building, Population-Housing and Agriculture-Livestock Censuses |
| Article 15 | Regional Working Groups of Building and Population-Housing Censuses |
| Article 16 | Regional and Municipal Working Groups of Agriculture-Livestock Census |
| Article 17 | Administrative issues |
| Article 18 | Status and compensation of Heads of Sectors, Enumerators and Escorts-Interpreters of the General Censuses |
| Article 19 | Status and compensation of the bodies of the General Censuses |
| Article 20 | Secure storage of data of Building, Population-Housing and Agriculture-Livestock Censuses |
| Article 21 | Statistical Registers from the Building and Population-Housing Censuses |
| Article 22 | Statistical Agricultural Register |
| Article 23 | Support from other state bodies |
| Article 24 | Empowering provisions |
| Article 25 | Annexes (the variables of the Censuses) |

**ΕΦΗΜΕΡΙΔΑ
ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ
ΤΗΣ ΕΛΛΗΝΙΚΗΣ ΔΗΜΟΚΡΑΤΙΑΣ**

5 Φεβρουαρίου 2021 ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 17

ΝΟΜΟΣ ΥΠ' ΑΡΙΘΜ. 4772
Διενέργεια Γενικών Απογραφών έτους 2021 από την Ελληνική Στατιστική Αρχή, επείγουσες ρυθμίσεις για την αντιμετώπιση των επιπτώσεων της πανδημίας του κορωνοϊού COVID-19, επείγουσες δημοσιονομικές και φορολογικές ρυθμίσεις και άλλες διατάξεις.

**Η ΠΡΟΕΔΡΟΣ
ΤΗΣ ΕΛΛΗΝΙΚΗΣ ΔΗΜΟΚΡΑΤΙΑΣ**
Εκδίδομε τον ακόλουθο νόμο που ψήφισε η Βουλή:

ΠΙΝΑΚΑΣ ΠΕΡΙΕΧΟΜΕΝΩΝ
ΜΕΡΟΣ Α΄: ΔΙΕΝΕΡΓΕΙΑ ΓΕΝΙΚΩΝ ΑΠΟΓΡΑΦΩΝ ΕΤΟΥΣ 2021 ΑΠΟ ΤΗΝ ΕΛΛΗΝΙΚΗ ΣΤΑΤΙΣΤΙΚΗ ΑΡΧΗ
Άρθρο 1: Σκοπός
ΚΕΦΑΛΑΙΟ Α΄: ΔΙΕΝΕΡΓΕΙΑ ΑΠΟΓΡΑΦΩΝ ΚΤΚ ΕΤΟΥΣ 2021
Άρθρο 2: Αντικείμενο των Απογραφών ΚΤΚ
Άρθρο 3: Οργανικά των Απογραφών ΚΤΚ
Άρθρο 4: Πεδίο εφαρμογής των Απογραφών ΚΤΚ

Άρθρο 16: Περιφερειακές και Δημοτικές Ομάδες Εργασίας των Απογραφών Γ-Κ
ΚΕΦΑΛΑΙΟ Β΄: ΡΥΘΜΙΣΕΙΣ ΔΙΟΙΚΗΤΙΚΩΝ ΚΑΙ ΟΙΚΟΝΟΜΙΚΩΝ ΘΕΜΑΤΩΝ
Άρθρο 17: Διοικητικά θέματα
Άρθρο 18: Καθεστώς και αποζημίωση Τομεακών Απογραφών και Συνοδών-Διερμηνέων των Γενικών Απογραφών
Άρθρο 19: Καθεστώς και αποζημίωση συλλογικών οργάνων των Γενικών Απογραφών
ΚΕΦΑΛΑΙΟ Γ΄: ΘΕΜΑΤΑ ΜΕΤΑΠΟΓΡΑΦΙΚΩΝ ΕΡΓΑΣΙΩΝ
Άρθρο 20: Ασφάλεια αποθήκευση δεδομένων των Γενικών Απογραφών ΚΤΚ και Γ-Κ
Άρθρο 21: Στατιστικά μητρώα των Απογραφών ΚΤΚ
Άρθρο 22: Στατιστικό Εργασιών Μητρώο
ΚΕΦΑΛΑΙΟ ΣΤ΄: ΛΟΙΠΕΣ ΡΥΘΜΙΣΕΙΣ
Άρθρο 23: Υποστήριξη από άλλους κρατικούς φορείς
Άρθρο 24: Εξουσιοδοτικές διατάξεις
Άρθρο 25: Παραρτήματα
ΜΕΡΟΣ Β΄: ΕΠΕΙΓΟΥΣΕΣ ΡΥΘΜΙΣΕΙΣ ΓΙΑ ΤΗΝ ΑΝΤΙΜΕΤΩΠΙΣΗ ΤΩΝ ΕΠΙΠΤΩΣΕΩΝ ΤΗΣ ΠΑΝΔΗΜΙΑΣ ΤΟΥ



A very important aspect of the 2021 Population-Housing Census was the strong legal statistical framework with a solid democratic legitimization in line with the best chosen scientific statistical practices.

This feature indicates the recognition of the professional independence of ELSTAT and provides a solid basis for the Hellenic Statistical System (ELSS) to be able to meet both current and future challenges.



is in line with the Digital Transformation Bible in Greece (Law 4727/2020) as regards the interoperability of the administrative registers

is providing to the President of ELSTAT the flexibility and freedom of choice regarding the times, the procedures and even the variables of the Census.

is ensuring the smooth provision of administrative data and their effective use for statistical purposes nowadays and at the future

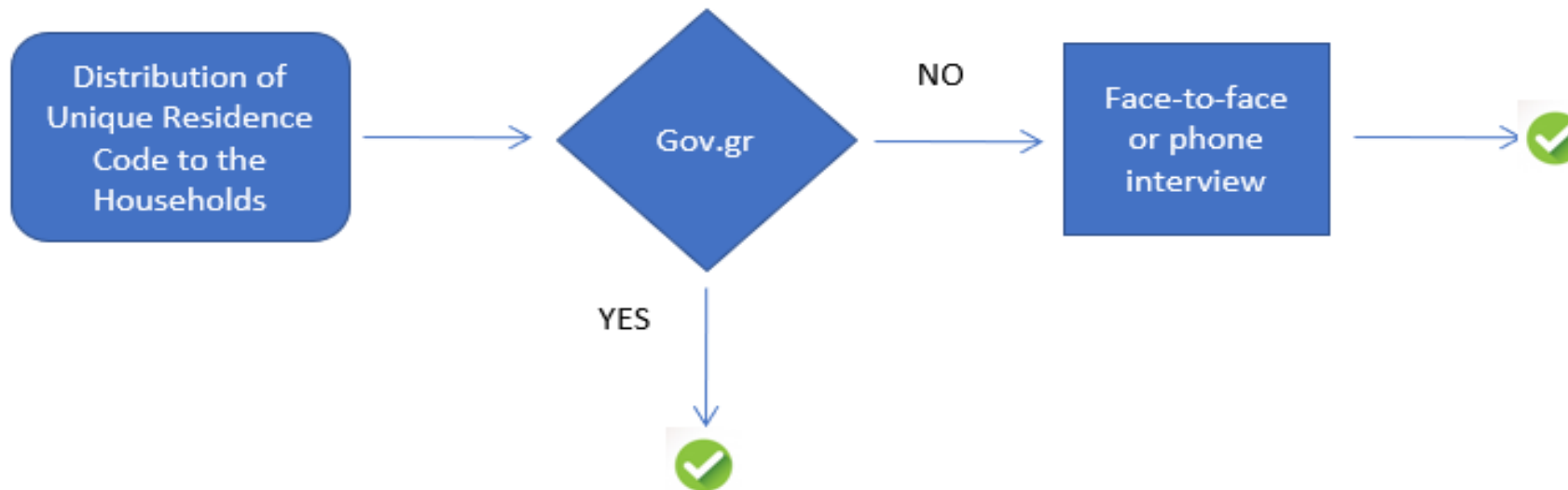


New approach for the data collection and a new data collection period as a result of the covid 19 pandemic

- Electronic self-enumeration of the households via a specially designed (in-house) web application.
- face-to-face or phone interview only for the households where the electronic self-enumeration was not possible, as well as people in reception facilities, nursing homes, hospitals, camps etc.



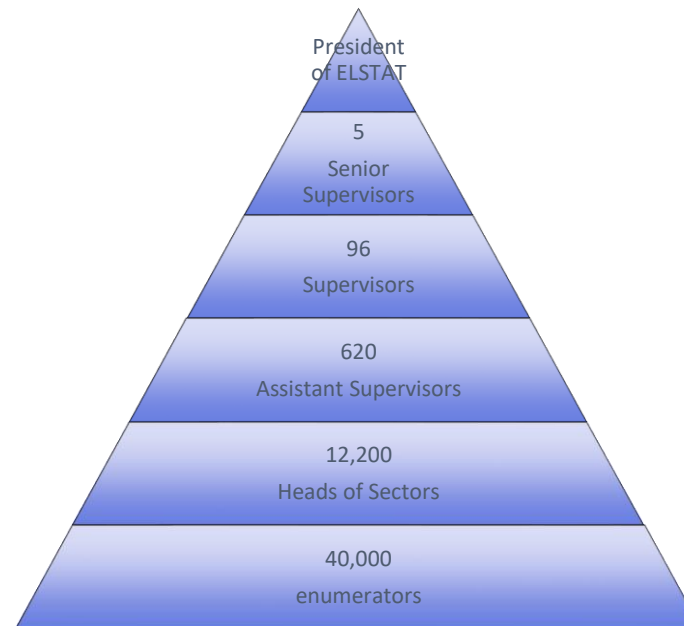
- **Preparatory Phase: The Building Census**
- ✓ In addition to building characteristics, information on building coordinates was collected and lists of buildings were compiled identifying the dwellings/households to be enumerated
- **Phase A: Population and Housing Census – Electronic self-enumeration**



- **Phase B: Data Collection via interview**
 - ❑ The enumerators could identify the residents who were not self-enumerated in Phase A, they had to visit them again to arrange a phone or face-to-face interview
 - ❑ The enumerators at this stage were using paper questionnaires and they were obliged to do the data entry in ELSTAT's dataset via a web application
- **Phase C: Electronic self-enumeration for few cases of citizens who didn't manage to contact their enumerator**



Hierarchical Structure of the 2021 Population-Housing Census in Greece



The management of the entire Census project was performed electronically, by level of responsibility of the Census bodies, with a parallel control of the completeness and correctness of the data collected.



The Census questionnaires have been designed according to

- ✓ the UNECE Recommendations on Population and Housing Censuses
- ✓ the European Regulation (EU) 763/2008
- ✓ the accumulated experience in ELSTAT and the suggestions of other public agencies and stakeholders

For the first time, the Population Census included the collection of:

- ❖ the tax identification number (TIN Number) and
- ❖ the Social Security Number (AMKA)

The aim is to introduce a unique identification number for each person to link the statistical data from the Population Census to data from administrative registers



The purpose was dual:

- ✓ to **link the variables gathered** in the Census with data from administrative registers, with the aim to verify their quality (for errors/uniqueness and to ensure full coverage of the entire population) in order to safeguard the results of the Census and
- ✓ to **build a solid basis** (together with the results of the 2021 Census) for the establishment of the statistical Population Register, subject to a continuous updating with the use of administrative data.



- ✓ The quality of the collected data in terms of completeness and correctness is of a high level
- ✓ The data are checked in terms of quality and completeness and follow “data cleaning”

More precisely the data are checked for identification of:

- duplications,
- missing values / variables

and automated corrections are applied

- ✓ Quality controls as regards the full coverage of the total population are performed

Data from the administrative sources is used as a mean to control and supplement the missing values of main demographic characteristics of the population, such as place of permanent residence, gender, age etc. or any missing records



Use of Administrative sources in the context of the 2021 Population-Housing Census

The use of administrative sources was part of the 2021 General Censuses Strategy of ELSTAT.

The purpose is twofold:

- ✓ quality controls of the census data
- ✓ creation and maintenance of building and population statistical registers with the use of administrative data sources such as:
 - the tax system
 - the social security system
 - the ministry of Labour and Social Affairs
 - the Hellenic Electricity Distribution Network Operator S.A (HEDNO S.A.),
 - Citizens Register of the Minister of Internal Affairs



The Statistical Register of Buildings and the Statistical Register of Population will be set up on the basis of the 2021 census data

Purpose

- ✓ To provide of more detailed, and
- ✓ more frequent datasets as regards topics characteristics and breakdowns for basic demographic characteristics
- ✓ To maintain updated sampling frames for the conduct of social statistical surveys
- ✓ To establish a more flexible statistical system able to adapt to the evolving user needs in the future as regards social statistics



The plan is divided into 3 stages, the data collection from the administrative sources, the data processing and the production stage

STAGE A: COLLECTION OF ADMIN DATA

The first stage includes the collection of all the files from the administrative sources and their integration in the secure database of ELSTAT

- the data is decrypted and transformed into a readable and manageable form by ELSTAT's staff
- checked in terms of quality and completeness and follow
- “data cleaning”
- “standardization” and
- establishment of relations between the files (data controls of first stage)



STAGE B: DATA PROCESSING

a. Analysis of the structure of the administrative data

As administrative data sources are not normally set up for statistical purposes a transformation process was performed in order to create a reliable statistical data set

The first step was

- to identify the variables that could arise from each data source
- to analyze the administrative characteristics in terms of their content
- To compare the administrative characteristics with the population and housing characteristics in order to identify differences in the definitions

b. Data Editing



STAGE C: PRODUCTION

- Compilation of the Statistical Register of Buildings and Population
- Updating of the statistical registers from administrative and other sources such as surveys on a regular basis
- The registers will be kept in this form frozen and will be further used for the production of statistics and any statistical work.
- historical records will be kept for 30 years from their reference year



The legal and institutional framework was one of the most important factors that contributed to:

- ✓ the successful conduct of the 2021 General Census in Greece
- ✓ the effective respond to the conditions arising from the Covid-19 pandemic, adapting the original design to a new approach
- ✓ laying the foundations for the establishment and maintenance of Statistical Registers for Population and Buildings by introducing, for the first time, two unique variables as keys (identifiers) to administrative data sources
- ✓ ensure that the Census questionnaire could include, for the first time, variables that would help both in the controls and in the interconnection with other data sources for the creation of the necessary statistical registers

Finally, this legal framework and the trust that ELSTAT has been enjoying in recent years, that allows administrative data to be provided, sets the required institutional environment that will help the whole ELSS to respond to the increasing needs for statistical information.



#GreekDataMatter



THANK YOU