

**CENSUS\_INS21ES\_A\_CY\_2021\_0000**

National Reference Metadata in Euro SDMX Metadata Structure (ESMS)

Compiling agency: STATISTICAL SERVICE OF CYPRUS



## Eurostat metadata

### Reference metadata

- [1. Contact](#)
- [2. Metadata update](#)
- [3. Statistical presentation](#)
- [4. Unit of measure](#)
- [5. Reference Period](#)
- [6. Institutional Mandate](#)
- [7. Confidentiality](#)
- [8. Release policy](#)
- [9. Frequency of dissemination](#)
- [10. Accessibility and clarity](#)
- [11. Quality management](#)
- [12. Relevance](#)
- [13. Accuracy](#)
- [14. Timeliness and punctuality](#)
- [15. Coherence and comparability](#)
- [16. Cost and Burden](#)
- [17. Data revision](#)
- [18. Statistical processing](#)
- [19. Comment](#)
- [Related Metadata](#)
- [Annexes](#) (including footnotes)

For any question on data and metadata, please contact: [Eurostat user support](#)

1. Contact <a href="#">Top</a>	
1.1. Contact organisation	STATISTICAL SERVICE OF CYPRUS
1.1.1. Responsible party	STATISTICAL SERVICE OF CYPRUS

<b>1.1.2. Responsible party role</b>	Owner Distributor Point of Contact Author
<b>1.2. Contact organisation unit</b>	DEMOGRAPHY, SOCIAL AND TOURISM STATISTICS DIVISION
<b>1.5. Contact mail address</b>	Statistical Service of Cyprus CY-1444 Nicosia Cyprus

<b>2. Metadata update</b> <a href="#">Top</a>	
<b>2.1. Metadata last certified</b>	30/12/2022
<b>2.2. Metadata last posted</b>	30/12/2022
<b>2.3. Metadata last update</b>	30/12/2022

<b>3. Statistical presentation</b> <a href="#">Top</a>	
<b>3.1. Data description</b>	
Detailed description is provided in Items 3.1.1 - 3.1.10.	
<b>3.1.1. Resource title</b>	
Total (provisional) population geocoded to a 1 km <sup>2</sup> grid.	
<b>3.1.2. Resource abstract</b>	
The data concern population in the Government controlled area of the Republic of Cyprus at the geographical level of 1 km <sup>2</sup> grid cell (provisional figures) as compiled during the Census of Population and Housing 2021.	
<b>3.1.3. Resource type</b>	
Spatial data set	
<b>3.1.3.1. Additional information if 'spatial data set' is marked</b>	
<a href="https://data.europa.eu/en">https://data.europa.eu/en</a>	

<b>3.1.4. Resource locator</b>
<a href="https://data.europa.eu/en/">https://data.europa.eu/en/</a>
<b>3.1.5. Unique resource identifier</b>
<a href="https://data.europa.eu/en">https://data.europa.eu/en</a>
<b>3.1.6. Coupled resource</b>
<a href="https://data.europa.eu/en">https://data.europa.eu/en</a>
<b>3.1.7. Resource language</b>
ENG
<b>3.1.8. Keyword value</b>
Population Distribution
<b>3.1.9. Originating controlled vocabulary</b>
<a href="https://inspire.ec.europa.eu/theme/pd">https://inspire.ec.europa.eu/theme/pd</a>
<b>3.1.10. Metadata language</b>
ENG
<b>3.2. Classification system</b>
Not applicable
<b>3.3. Coverage - sector</b>
Not applicable
<b>3.3.1. Topic category</b>
Society
<b>3.3.2. Spatial data service type</b>
Download Service
<b>3.4. Statistical concepts and definitions</b>
The statistical definition of total population is specified in Item 3.4.1.
<b>3.4.1. Statistical concepts and definitions - Total population</b>

For census purposes, the total population of the country consists of all the persons falling within the scope of the census in EU on usual residents.

Usual residence means the place where a person normally spends the daily period of rest, regardless of temporary absences for purposes of recreation, holidays, visits to friends and relatives, business, medical treatment or religious pilgrimage.

Persons usually resident in the place of enumeration but absent, or expected to be absent, at the time of the census for less than one year shall be considered as temporarily absent persons and thus included in the total usually resident population. In contrast, persons living or expected to live outside the place of enumeration for one year or more shall not be considered temporarily absent and shall therefore be excluded from the total population. This is regardless of the length of visits that they may pay to their families from time to time.

Persons who are enumerated but do not meet the criteria for usual residence in the place of enumeration, i.e. do not live or do not expect to live in the place of enumeration for a continuous period of at least 12 months, are considered temporarily present and are therefore not counted in the total usually resident population. Unless otherwise stated in this report.

#### **3.4.2. Statistical concepts and definitions - Sex**

‘Sex’ refers to the biological and physiological characteristics that define men and women.

#### **3.4.3. Statistical concepts and definitions - Age**

The age reached at the reference date (in completed years).

#### **3.4.4. Statistical concepts and definitions - Employed person**

‘Employed’ persons comprise all persons aged 15 years or over who during the reference week:  
(a) performed at least one hour of work for pay or profit, in cash or in kind, or  
(b) were temporarily absent from a job in which they had already worked and to which they maintained a formal attachment, or from a self-employment activity.

#### **3.4.5. Statistical concepts and definitions - Place of birth**

The place of birth for persons born within the country is the civil division in which the person was born; for those born in other countries, it is the country of birth. For persons born in the country (the native-born population), the concept of place of birth usually refers to the geographic unit where the mother of the individual resided at the time of the person’s birth.

<b>3.4.6. Statistical concepts and definitions - Place of usual residence one year prior to the census</b>
<p>The relationship between the current place of usual residence and the place of usual residence one year prior to the census.</p> <p>For all persons that have changed their usual residence more than once within the year prior to the reference date, the previous place of usual residence is the last usual residence from which they moved to their current place of usual residence.</p>
<b>3.5. Statistical unit</b>
Persons in the households and institutions.
<b>3.6. Statistical population</b>
Total population in the government controlled area of the Republic of Cyprus.
<b>3.7. Reference area</b>
Government controlled area of the Republic of Cyprus.
<b>3.7.1. Geographic bounding box</b>
West Bounding Longitude: 32.0382, East Bounding Longitude: 34.8856, North Bounding Latitude: 35.9027, South Bounding Latitude: 34.2783
<b>3.7.2. Spatial resolution</b>
<p>1000</p> <p>Unit:m</p>
<b>3.7.3. Coordinate Reference System</b>
EPSG:3035 - ETRS89 / LAEA Europe
<b>3.8. Coverage - Time</b>
Data refer to the situation in the government controlled area of the Republic of Cyprus at the census reference date, namely 1/10/2021.
<b>3.9. Base period</b>
Not applicable.

<b>4. Unit of measure</b>	<a href="#">Top</a>
---------------------------	---------------------

Counts of statistical units.
------------------------------

<b>5. Reference Period</b>
----------------------------

[Top](#)

The reference date is specified in Item 5.1.
--

<b>5.1. Temporal extent</b>
-----------------------------

1/10/2021
-----------

<b>6. Institutional Mandate</b>
---------------------------------

[Top](#)

<b>6.1. Institutional Mandate - legal acts and other agreements</b>
---

<p>Article 3 of the national Official Statistics Law, No. 25(I) of 2021 defines the functions of the Statistical Service of Cyprus regarding the production and dissemination of official statistics. Moreover, Article 13, explicitly stipulates the mandate for data collection and introduces a mandatory response to statistical enquiries by stipulating the obligation of respondents to reply to surveys and provide the data required. This relates not only to national but also to European statistics which, by virtue of Article 8 of the said Law, are incorporated in the annual and multiannual programmes of work without any further procedure.</p>
--

<p>The data during the 2021 Census of Population have been collected and will be disseminated in accordance with the Framework Regulation (EC) No 763/2008 and Commission Implementing Regulations (EU) 2017/543, (EU) 2017/712, (EU) 2017/881 and (EU) 2018/1799.</p>
--

<b>6.2. Institutional Mandate - data sharing</b>
--

Not available.
----------------

<b>7. Confidentiality</b>
---------------------------

[Top](#)

<b>7.1. Confidentiality - policy</b>
--------------------------------------

Official statistics are released in accordance with all confidentiality provisions of the following:
--

- |  |
|--|
| <ul style="list-style-type: none"><li>• National Official Statistics Law No. 25(I) of 2021 (especially Article 16 on statistical confidentiality). <a href="https://www.cystat.gov.cy/en/StaticPage?id=1074">https://www.cystat.gov.cy/en/StaticPage?id=1074</a></li></ul> |
|--|

- Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics and its later amendments (especially Chapter 5 on statistical confidentiality). <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02009R0223-20150608&qid=1504858409240&from=EN>
- European Statistics Code of Practice (especially Principle 5 on statistical confidentiality). <http://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-32-11-955>
- CYSTAT's Code of Practice for the Collection, Publication and Storage of Statistical Data. <https://www.cystat.gov.cy/en/StaticPage?id=1066>

## 7.2. Confidentiality - data treatment

The treatment of confidential data is regulated by CYSTAT's Code of Practice for the Collection, Publication and Storage of Statistical Data (<https://www.cystat.gov.cy/en/StaticPage?id=1066>). Furthermore, according to Commission Implementing Regulation (EU) 2018/1799, Article 6, paragraph 2(a), "data items on total population shall not be reported as confidential". To that end, CYSTAT has implemented one of the proposed Statistical Disclosure Control methods, namely the Cell Key Method, thus providing for the non-disclosure of small population values in grid cells.

## 8. Release policy

[Top](#)

### 8.1. Release calendar

Not available.

### 8.2. Release calendar access

Not available.

### 8.3. Release policy - user access

Not available.

#### 8.3.1. Conditions applying to access and use

<https://inspire.ec.europa.eu/metadata-codelist/ConditionsApplyingToAccessAndUse/noConditionsApply>

#### 8.3.2. Limitations on public access

<https://inspire.ec.europa.eu/metadata-codelist/ConditionsApplyingToAccessAndUse/noConditionsApply>

<b>9. Frequency of dissemination</b>	<a href="#">Top</a>
Decennial	

<b>10. Accessibility and clarity</b>	<a href="#">Top</a>
<b>10.1. Dissemination format - News release</b>	
Not available.	
<b>10.2. Dissemination format - Publications</b>	
Not available.	
<b>10.3. Dissemination format - online database</b>	
Not available.	
<b>10.4. Dissemination format - microdata access</b>	
Not available.	
<b>10.5. Dissemination format - other</b>	
Not available.	
<b>10.6. Documentation on methodology</b>	
<p>The methodology used for the compilation of the total population at the 1km<sup>2</sup> grid level is the following:</p> <ol style="list-style-type: none"> <li>1. The road network, as well as, the enumeration blocks were updated prior to the commencement of the Census.</li> <li>2. Provisions were made for the capture of the geographic location of each housing unit through the use of the pre-installed Blaise software and the GPS function available on the tablets, which were used by the enumerators. The enumeration of all the housing units was achieved through field enumeration.</li> <li>3. The traditional method of field enumeration was used to cover approximately 80% of the population, while for the remaining 20%, administrative sources were mainly used.</li> <li>4. Following the capture of location and population data, aggregation methods were employed in order to compile the total population figures at the 1km<sup>2</sup> grid level.</li> </ol>	
<b>10.7. Quality management - documentation</b>	



Following the data collection, the data quality was ensured by performing various consistency checks regarding the location of all the housing units. In many cases, housing units located on streets on the border of two neighbouring enumeration blocks might appear to be located in the neighbouring enumeration block instead of the one they truly belong to, but through these checks it was ensured that the location was recorded with the highest possible accuracy in the nearest enumeration block. Furthermore, as regards the population recorded (from field enumeration and administrative sources) validation checks were performed, so as to ensure the quality of the data collected.

<b>11. Quality management</b>	<a href="#">Top</a>
<b>11.1. Quality assurance</b>	
Detailed description is provided in Items 11.1.1 - 11.1.3.	
<b>11.1.1. Lineage</b>	
This dataset refers to the Census of Population and Housing 2021 (reference date: 1.10.2021). It comprises provisional total population figures per 1 km <sup>2</sup> grid cell. Given that the total population figures in the current dataset are provisional, they will be revised by 31.3.2024.	
<b>11.1.2. Conformity, specification</b>	
<p>In order to conform to the implementing rules under Article 7(1) of Directive 2007/2/EC and to the implementing rules of Commission Regulation (EU) 2018/1799, CYSTAT has organized the Census of Population 2021 as follows:</p> <ol style="list-style-type: none"> <li>1. The road network, as well as, the enumeration blocks were updated prior to the commencement of the Census.</li> <li>2. Provisions were made for the capture of the geographic location of each housing unit through the use of the pre-installed Blaise software and the GPS function available on the tablets, which were used by the enumerators. The enumeration of all the housing units was achieved through field enumeration.</li> <li>3. The traditional method of field enumeration was used to cover approximately 80% of the population, while for the remaining 20%, administrative sources were mainly used.</li> <li>4. Following the capture of location and population data, aggregation methods were employed in order to compile the total population figures at the 1km<sup>2</sup> grid level.</li> </ol>	
<b>11.1.3. Conformity, degree</b>	

The spatial dataset fully conforms to the implementing rules adopted under Article 7(1) of Directive 2007/2/EC and Commission Implementing Regulation (EU) 2018/1799.

#### **11.2. Quality management - assessment**

Detailed description is provided in Item 15.1.1.

### **12. Relevance**

[Top](#)

#### **12.1. Relevance - User Needs**

The census data disseminated are addressed to policy makers, researchers, media and the general public.

#### **12.2. Relevance - User Satisfaction**

User satisfaction surveys are conducted by CYPSTAT and these cover all statistical themes, including the Census of Population.

#### **12.3. Completeness**

The data provided covers the Government controlled area of the Republic of Cyprus.

### **13. Accuracy**

[Top](#)

#### **13.1. Accuracy - overall**

None of the figures provided concerning the total population per grid cell are considered unreliable. Nevertheless, the dataset represents provisional figures.

#### **13.2. Sampling error**

Not applicable.

#### **13.3. Non-sampling error**

Not applicable.

### **14. Timeliness and punctuality**

[Top](#)

<b>14.1. Timeliness</b>
Detailed description is provided in Items 14.1.1 - 14.1.3.
<b>14.1.1. Date of publication</b>
Transmission to Eurostat of provisional data on total population per grid cell: 29/12/2022.
<b>14.1.2. Date of last revision</b>
29/12/2022
<b>14.1.3. Date of creation</b>
29/12/2022
<b>14.2. Punctuality</b>
Delivery of data was performed within the specified deadline.

<b>15. Coherence and comparability</b>	<a href="#">Top</a>
<b>15.1. Comparability - geographical</b>	
Detailed description is provided in Item 15.1.1.	
<b>15.1.1. Geographic information - data quality</b>	
<p>Total population per grid cell was compiled by aggregating the population included in each housing unit within a specific grid cell.</p> <p>In order to locate each housing unit within the Government controlled area of the Republic of Cyprus the subsequent procedure was followed:</p> <p>1. All enumerators were equipped with a tablet, on which the software Blaise v.5.10.5 was installed. This program included the required questionnaires for the Census (a Housing Unit questionnaire, a Household Questionnaire and a Personal questionnaire which was filled in for each individual member of the household), as well as, a specific function for capturing the geographic location of each housing unit by using the Global Positioning Signal available on the tablet. The questionnaires,</p>	

as well as, the function of capturing the geographic location of each housing unit, were developed, tested and improved based on pilot surveys that were conducted by CYSTAT.

2. Once the training of the Population Census started, all enumerators were given specific instructions on how to capture the geographic location of each housing unit, so as to ensure the best quality of the data, as well as, their coherence.

3. While the Census was being conducted, the enumerators captured all the housing units in the Government controlled area of the Republic of Cyprus. However, due to days with overcast or due to hardware issues, many times the coordinates were not captured or were located further away from the true location of the housing unit.

4. While the Census was being carried out the completeness of the geographic data was achieved by performing checks of all the housing units recorded, with the use of administrative sources (i.e. the Electricity Authority list of housing units and the Department of Lands and Surveys data on all the housing units), as well as, onsite checks by the supervisors responsible for each enumerator.

5. Once the final Census dataset was extracted, the location of all the recorded housing units was checked. For all the housing units with missing or invalid coordinates their location was recorded by using the location of nearby housing units within the same enumeration block. If that was not possible, then the location of the central point of that street within that enumeration block was recorded.

6. By following the above-mentioned procedures, CYSTAT ensured that all housing units were located with the highest possible accuracy in the nearest enumeration block. Therefore, temporal coherence of the geographic data was achieved, as all housing units were recorded during the same time period and the irregularities were dealt in the same manner.

#### **15.2. Comparability - over time**

CYSTAT did not produce population grid cell data at the 1km<sup>2</sup> grid level during the previous Census of Population (2011).

#### **15.3. Coherence - cross domain**

The 'total population' data item provided by CYSTAT was compiled as specified in the Framework Regulation (EC) No 763/2008 and Commission Implementing Regulation (EU) 2017/543 and the grid cells were constructed using the Commission Implementing Regulation (EU) 2018/1799. Therefore, coherence-cross domain for this data item is achieved.

#### 15.4. Coherence - internal

Internal coherence is assured by Implementing Regulation (EU) 2017/543 concerning the definitions of topics.

#### 16. Cost and Burden

[Top](#)

CYSTAT implemented the upgraded innovative Cyprus Blaise Integrated Census System (CY-BICS) 2021, developed for the 2021 Census of Population, in collaboration with Statistics Netherlands.

The aim of CY-BICS 2021 was two-fold. Firstly, the aim was to capture the Census data by applying the Computer Assisted Personal Interviewing (CAPI) method, as well as, the location of each housing unit, and secondly, to incorporate innovative and highly automated technologies for the production of accurate data quickly and efficiently at low cost. Furthermore, CY-BICS 2021 has achieved significant cost savings with the direct data entry, editing and coding.

#### 17. Data revision

[Top](#)

##### 17.1. Data revision - policy

Not applicable, since the current dataset contains provisional figures.

##### 17.2. Data revision - practice

Not applicable.

#### 18. Statistical processing

[Top](#)

##### 18.1. Source data

Census of Population and Housing 2021.

##### 18.2. Frequency of data collection

Data on population and housing censuses are collected every decade, in a reference year that falls during the beginning of every decade.

##### 18.3. Data collection

The geographic location of each housing unit was captured through the use of the pre-installed Blaise software and the GPS function available on the tablets, which were used by the enumerators. The enumeration of all the housing units was achieved through field enumeration. The traditional method of field enumeration was used to cover approximately 80% of the population, while for the remaining 20%, administrative sources were mainly used. Following the collection of location and population data, aggregation methods were employed in order to compile the total population figures at the 1km<sup>2</sup> grid level.

#### **18.4. Data validation**

Following the data collection, the final data validation was comprised of various consistency checks carried out regarding the location of all the housing units. In many cases, housing units located on streets on the border of two neighbouring enumeration blocks might appear to be located in the neighbouring enumeration block instead of the one they truly belong to, but through these checks it was ensured that the location was recorded with the highest possible accuracy in the nearest enumeration block. Furthermore, as regards the population recorded (from field enumeration and administrative sources) validation checks were performed, so as to ensure the quality of the data collected.

#### **18.5. Data compilation**

During the Census, the completeness and correctness of the housing units recorded in the Census database was performed by using different administrative sources, in addition to onsite checks, as mentioned above. Once the final Census dataset was extracted, the location of all the housing units recorded was checked. For all the housing units with missing or invalid coordinates, their location was recorded by using the location of nearby housing units within the same enumeration block. If that was not possible, then the location of the central point of that street within that enumeration block was recorded.

By following the above-mentioned procedures, CYSTAT ensured that all housing units were located with the highest possible accuracy in the nearest enumeration block.

In parallel, the geocoded total population figure for each housing unit, as explained above, was collected. Subsequent to checking the correctness of the location of the housing units, as well as the total population figure corresponding to each housing unit, the guidelines specified in the Commission Implementing Regulation (EU) 2018/1799 were implemented so as to construct the 1 km<sup>2</sup> grid cells.

#### **18.6. Adjustment**

Not applicable.

### **19. Comment**

[Top](#)

Even though the data corresponds to the Government controlled area of the Republic of Cyprus, the background map to be used should be the map of Cyprus as is currently displayed on Eurostat website (e.g. in the Eurostat Regional Yearbook 2022).

#### Related metadata

[Top](#)

#### Annexes

[Top](#)