

**CENSUS\_INS21ES\_A\_IT\_2021\_0000**

National Reference Metadata in Euro SDMX Metadata Structure (ESMS)

Compiling agency: Italian National Institute of Statistics (ISTAT)



## Eurostat metadata

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

## 1. Contact

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### 1.1. Contact organisation

Italian National Institute of Statistics (ISTAT)

#### 1.1.1. Responsible party

Italian National Institute of Statistics (ISTAT)

<b>1.1.2. Responsible party role</b>	Owner
<b>1.2. Contact organisation unit</b>	Directorate for Demographic Statistics and Population Census (DCDC)  Division for population census and social surveys integration (DCB)
<b>1.5. Contact mail address</b>	Piazza Guglielmo Marconi, 24, 00144 Roma, Italia

<b>2. Metadata update</b> <a href="#">Top</a>	
<b>2.1. Metadata last certified</b>	22/12/2022
<b>2.2. Metadata last posted</b>	22/12/2022
<b>2.3. Metadata last update</b>	22/12/2022

<b>3. Statistical presentation</b> <a href="#">Top</a>	
<b>3.1. Data description</b>	
Grid Data	
<b>3.1.1. Resource title</b>	
Data on the usually resident population in Italy by grid.  ID: DF_CENSUS_GRID_2021	
<b>3.1.2. Resource abstract</b>	
Data refer to the usual resident population in Italy in 2021 in each grid cell.	
<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>	

<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>
English
<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>
English
<b>3.2. Classification system</b>
For the variable place of usual residence, the GEO.G classification is adopted according to the Regulation EU 2018/1799.
<b>3.3. Coverage - sector</b>
Usually Resident Population
<b>3.3.1. Topic category</b>
Society
<b>3.3.2. Spatial data service type</b>
Discovery Service
<b>3.4. Statistical concepts and definitions</b>
See below
<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 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**

Male/Female

#### **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 census reference period:

- (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.

#### **3.4.6. Statistical concepts and definitions - Place of usual residence one year prior to the census**

The relationship between the current place of usual residence and the place of usual residence one year prior to the census.

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.

### 3.5. Statistical unit

The EU grid program includes data on population.

### 3.6. Statistical population

Persons enumerated in the 2021 census are those who were usually resident in the territory of the reporting country on the census reference date.

### 3.7. Reference area

Italy

#### 3.7.1. Geographic bounding box

Northbound 26,69  
Southbound 13,84  
Westbound 40,53  
Eastbound 50,52

#### 3.7.2. Spatial resolution

1000  
Unit:m

#### 3.7.3. Coordinate Reference System

EPSG:3035 - ETRS89 / LAEA Europe

### 3.8. Coverage - Time

Data refer to the information recorded at the census reference date

### 3.9. Base period

Not applicable.

## 4. Unit of measure

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Counts of statistical units.

5. Reference Period <a href="#">Top</a>
31-12-2021
5.1. Temporal extent
31-12-2021

6. Institutional Mandate <a href="#">Top</a>
6.1. Institutional Mandate - legal acts and other agreements
<p>The mission of the National Statistical Institute is to provide to the community the production and communication of timely and high quality statistical information, analysis and forecasts. This purpose must be carried out in full autonomy and on the basis of rigorous ethical-professional principles and the most advanced scientific standards (as required by the Comstat Directive n.10 of 17 March 2010: Adoption of the Italian Code of Official Statistics).</p> <p>Since 1989 Istat has played a role of direction, coordination, technical assistance and training within the National Statistical System (Sistan). The system was established with d.lgs. 322/1989, as amended by Presidential Decree no. 166/2010, to rationalize the production and dissemination of information and optimize the resources allocated to official statistics. In the DPR n. 166/2010 just mentioned, the Institute is defined a public body with scientific, organizational, financial and accounting autonomy, which carries out its activities, according to the principles of scientific independence, impartiality, objectivity, reliability, quality and confidentiality of statistical information provided at European level and international. Furthermore, with the entry into force of Legislative Decree no. 218/2016, Istat was also officially listed among the public research bodies (EPR).</p> <p>For the most part, the object of production is established by the European Statistical Program (Pse) and the National Statistical Program (Psn), respectively adopted by acts of the Council and the European Parliament and the President of the Italian Republic; the production methods are instead established by the European Statistics Code and the Italian Code of Official Statistics, with a supervision carried out by Eurostat and the Commission for the Guarantee of Statistical Information (Cogis), respectively.</p>
6.2. Institutional Mandate - data sharing
Not applicable

## 7. Confidentiality

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### 7.1. Confidentiality - policy

Several national legal acts guarantee the confidentiality of data requested for statistical purposes. In Italy, according to art. 9, paragraph 1 of the Legislative Decree n. 322 of 1989 (concerning the statistical system), statistical data cannot be disseminated but in aggregated form, in order to make it impossible to identify the person to whom the information relates. The data collected can only be used for statistical purposes.

Official statistics must also safeguard the rights, basic freedoms, and dignity of respondents, in particular with regard to the right of confidentiality and personal identity.

Istat assures the protection of personal data according to the General Data Protection Regulation (Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, repealing Directive 95/46/EC) and, as national legislation, Italian Data Protection Code (Legislative Decree no. 196/2003) and Code of conduct and professional practice applying to the processing of personal data for statistical and scientific research purposes within the framework of the national statistical system.

In order to make statistical secrecy and protection of personal data effective, Istat is currently taking appropriate organizational, logistical, methodological and statistical measures in accordance with internationally established standards.

Moreover, Legislative Decree n. 322 of 1989, art. 6 and 6 bis provides that the exchange of microdata and personal data within the National Statistical System (Sistan) is possible if it is necessary to fulfil requirements provided by the National Statistical Programme.

Finally, in implementation of art. 5-ter of the legislative decree 14 March 2013, no. 33, the new "Guidelines for the access for scientific purposes to the elementary data of the National Statistical System" establish the conditions under which the bodies and offices of the National Statistical System can allow researchers to access their own elementary data for scientific purposes.

### 7.2. Confidentiality - data treatment

Confidentiality - 1km<sup>2</sup> grid data:

No restrictions have been placed on the dissemination of data per grid. 0% of grid cells suppressed, 0% of population suppressed.

## 8. Release policy

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<b>8.1. Release calendar</b>
No national release is planned for grid
<b>8.2. Release calendar access</b>
No national release is planned for grid
<b>8.3. Release policy - user access</b>
No national release is planned for grid
<b>8.3.1. Conditions applying to access and use</b>
<a href="https://inspire.ec.europa.eu/metadata-codelist/ConditionsApplyingToAccessAndUse/noConditionsApply">https://inspire.ec.europa.eu/metadata-codelist/ConditionsApplyingToAccessAndUse/noConditionsApply</a>
<b>8.3.2. Limitations on public access</b>
<a href="https://inspire.ec.europa.eu/metadata-codelist/ConditionsApplyingToAccessAndUse/noConditionsApply">https://inspire.ec.europa.eu/metadata-codelist/ConditionsApplyingToAccessAndUse/noConditionsApply</a>

<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 applicable. No national data dissemination is planned for grid.	
<b>10.2. Dissemination format - Publications</b>	
Not applicable. No national data dissemination is planned for grid	
<b>10.3. Dissemination format - online database</b>	
Not applicable. No national data dissemination is planned for grid	
<b>10.4. Dissemination format - microdata access</b>	
Not applicable. No national data dissemination is planned for grid	



<b>10.5. Dissemination format - other</b>
Not applicable. No national data dissemination is planned for grid
<b>10.6. Documentation on methodology</b>
Not available
<b>10.7. Quality management - documentation</b>
Not available

<b>11. Quality management</b>	<a href="#">Top</a>
<b>11.1. Quality assurance</b>	
<p>Since the 90s Istat has adopted a systematic approach to ensure the quality of statistical information and of its services to the community (see the Work done).</p> <p>With the aim of strengthening the commitment to quality, in 2020 Istat set up the Quality Committee, for overseeing all quality initiatives in the Statistical Institute. In addition the role of Quality Manager was formally established.</p> <p>In 2021 a new quality policy for statistical production was adopted. It is consistent with the European quality framework developed by Eurostat, and transposes its main principles and definitions.</p> <p>For details: <a href="https://www.istat.it/en/organisation-and-activity/institutional-activities/quality-commitment">https://www.istat.it/en/organisation-and-activity/institutional-activities/quality-commitment</a></p> <p>Istat quality guidelines are available at <a href="https://www.istat.it/en/methods-and-tools/data-quality-tools/guidelines">https://www.istat.it/en/methods-and-tools/data-quality-tools/guidelines</a></p>	
<b>11.1.1. Lineage</b>	
Although the data provided are provisional, they have been checked and validated.	
<b>11.1.2. Conformity, specification</b>	
The definitions and classifications of spatial objects (e.g.: geographic grid, coordinates, etc.) related to the spatial data set and their georeferencing are in accordance with Commission Implementing Regulation (EU) 1089/2010 of November 23, 2010 on the interoperability of spatial data sets and spatial data services, as amended. They are also in compliance with Commission Implementing Regulation (EU) 2018/1799 of November 21, 2018.	

<b>11.1.3. Conformity, degree</b>
Fully conforming
<b>11.2. Quality management - assessment</b>
The overall data quality according to the Institute's standards was found to be satisfactory.

<b>12. Relevance</b>	<a href="#">Top</a>
<b>12.1. Relevance - User Needs</b>	
Data by grid were produced for Eurostat in compliance with Regulation 2018/1799.	
<b>12.2. Relevance - User Satisfaction</b>	
Istat is constantly interested in understanding who the users of the statistics it produces are, what the information needs are, whether they match production and if the statistics produced satisfy users. To this aim, together with the analysis of user requests received through the Web Contact Center service, tools for direct consultation were developed, such as the annual online survey of customer satisfaction and indirect tools such as analysis of accesses and of users' browsing paths on the web site.	
Since data are not disseminated at national level, no specific user satisfaction measure is available.	
<b>12.3. Completeness</b>	
100%	

<b>13. Accuracy</b>	<a href="#">Top</a>
<b>13.1. Accuracy - overall</b>	
Accuracy of grid data:	
The individuals usually residents in Italy at 31-12-2021 placed in cells that actually exist (not virtual) are 58,933,908 out of a total of 59,030,133 individuals counted. The difference of 96,225 concerns the primary and secondary homeless, who were placed in the virtual cell. Non-geocoded observations: 0.16%.	

The data production technique and sources used to derive the information are the same across the country. The data are 100% consistent and comparable.

All information used refers to the same reference date.

### **13.2. Sampling error**

Not applicable

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

Possible errors are due to the accuracy of geo-coding the population to the grid cells.

## **14. Timeliness and punctuality**

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### **14.1. Timeliness**

One year

#### **14.1.1. Date of publication**

31-12-2022

#### **14.1.2. Date of last revision**

31/12/2022

#### **14.1.3. Date of creation**

01/12/2022

### **14.2. Punctuality**

0 days: data have been delivered punctually

## **15. Coherence and comparability**

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### **15.1. Comparability - geographical**

#### **15.1.1. Geographic information - data quality**

Geographic data used for geocoding: the coordinates of the population's usual residence addresses were used; the source of the coordinates is commercial, i.e. Here (<https://www.here.com/>). Data of positional accuracy in metres are not available.

Positional accuracy: the coordinates are either field-detected coordinates (82%) or interpolated coordinates.

Comparability: 100%

Completeness/coverage of geographic data: the share of geo-coded addresses used to locate the population in the territory is 97,5%.

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

100%

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

100%

#### **15.4. Coherence - internal**

100%

### **16. Cost and Burden**

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In order to produce grid data an additional effort of about one month FTE with respect to costs of Census has been spent.

Administrative data sources were used so no respondents burden is to be considered.

### **17. Data revision**

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#### **17.1. Data revision - policy**

Istat's policy is to provide preliminary data and, after quality improvement actions, release final data.

#### **17.2. Data revision - practice**

A linkage process between the addresses in the population register and those in the housing register (cadastre) is currently in progress. Following the conclusion of this process (expected in 2023), the geo-coding of about 3 million individuals could change.

<b>18. Statistical processing</b>	<a href="#">Top</a>
<b>18.1. Source data</b>	
Information on the usual resident population in Italy comes from municipal registry offices and other administrative sources.	
<b>18.2. Frequency of data collection</b>	
Annual	
<b>18.3. Data collection</b>	
Data are sent to Istat via a secure transmission protocol.	
<b>18.4. Data validation</b>	
Data analysis, comparisons with the 2011 census and map verifications were carried out.	
<b>18.5. Data compilation</b>	
<p>Compilation of 1 km<sup>2</sup> grid data</p> <p>Data on the usually resident population on 31-12-2021 per grid cell were obtained by aggregation from coordinate points. Each individual was placed at a specific point in the territory, using the coordinates of the population's residential addresses. For a little part of the population, coordinates relating to the center of gravity of the census section associated with the address.</p>	
<b>18.6. Adjustment</b>	
None	

<b>19. Comment</b>	<a href="#">Top</a>
None	

<b>Related metadata</b>	<a href="#">Top</a>

<b>Annexes</b>
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