

CENSUS_INS21ES_A_RO_2021_0000

National Reference Metadata in Euro SDMX Metadata Structure (ESMS)

Compiling agency: National Institute of Statistics



Eurostat metadata

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1. Contact

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1.1. Contact organisation

National Institute of Statistics

1.1.1. Responsible party

National Institute of Statistics

1.1.2. Responsible party role	Resource Provider Owner Point of Contact Author
1.2. Contact organisation unit	Department of Studies, Demographic Projections and Population Census
1.5. Contact mail address	andoria.ionita@insse.ro

2. Metadata update Top	
2.1. Metadata last certified	31/12/2022
2.2. Metadata last posted	31/12/2022
2.3. Metadata last update	31/12/2022

3. Statistical presentation Top	
3.1. Data description	
<p>Data given in this domain refer to the 2021 round Population and Housing Census carried-out in Romania between March - July 2022.</p> <p>2021 round Population and Housing Census (PHC2021) applied the requests of European Regulations and United Nations and Eurostat Recommendations for the 2021 Population and Housing Censuses. In the same time, the Romanian dedicated legislation was applied.</p> <p>The 2021 Census has as a priority objective the production of official national and European statistics, presented as statistical indicators, under quality conditions, and pertaining to the number and territorial distribution of the usual resident population, the demographic and socio-economic structure of the resident population, as well as data on households, on the housing stock and housing conditions of the population and the buildings in which dwellings are located.</p> <p>2021 Population and housing census in Romania (PHC 2021) was a combined one, using two methods of data collection:</p> <ul style="list-style-type: none"> • indirect data collection from administrative sources – used for data collection of some census variables and for record imputation • direct data collection from the population, in two forms: <ul style="list-style-type: none"> - self-enumeration through internet, using an electronic questionnaire (CAWI) - face-to-face interview with the enumerators, using an electronic questionnaire (CAPI) <p>PHC2021 reference data was 1-th of December 2021.</p>	

Persons were self-enumerated by themselves or enumerated by enumerators ('questionnaire-based data') at the address where they had the usual residence at 1-th of December 2021.

The definition of usual residence and 12 months criteria, including intention to stay for 12 months or more was defined in Staff's handbook and in all training support materials. The definition was included in the pre-registration form used by persons in order to self-enumerate and in the Information section of the questions regarding place where person lived at 1-th of December 2021 and in the electronic questionnaires, too.

In order to obtain provisional number of usual resident population, a number of around 1 million individual records were totally imputed ('record imputation') into the census database, each of them being assigned to exactly one geographical area at the most detailed geographical level for which census data are produced. An algorithm was applied to determine that these un-enumerated persons belong to the usual resident population of Romania at 1-th December 2021. The place of legal or registered residence was considered the place of usual residence for these persons, according to the provisions of article 2 point d) from The Regulation no. 673/2008.

The provisional usual residence population is the sum of questionnaire-based data and totally imputed records.

The estimated target population at 1-th of December 2021 was 19,023,542. Due to the fact that provisional usual resident population was very close to it (19,053,815), we consider reliable the total population figure.

In applying the definition of 'usual residence' given in Article 2(d) of Regulation (EC) No 763/2008, we treated special cases as follows:

a) and b) – exactly as Regulation no. 2017/543 indicates

c) Tertiary students were considered to have their usual residence at the parents' homes or in the university campuses depending on the way the university organized studies (online studies or studies with physical presence) due to the pandemic crisis, in the period 1-th December 2020 – 30 November 2021 i.e. one year before census reference date.

d) – l) – exactly as Regulation no. 2017/543 indicates

m) - national military, naval and diplomatic service personnel and their families located outside the country self-enumerate itself or they were enumerated by families living in the country at the usual residence where they lived before leaving the country for professional duties, regardless the time spent abroad (less or more than 12 months)

Usual resident population includes primary and secondary homeless. The CAPI questionnaire included a special question in which enumerators recorded that questionnaire is fulfilled for a homeless person. The enumerators had the duty to record homeless people in the field, as any other person. Definitions of primary and secondary homeless were included in census methodology and in the staff's training materials.

3.1.1. Resource title

2021 round Population and Housing Census

3.1.2. Resource abstract

PHC2021

3.1.3. Resource type
Spatial data set series
3.1.3.1. Additional information if 'spatial data set' is marked
https://data.europa.eu/en
3.1.4. Resource locator
Information are not yet available.
3.1.5. Unique resource identifier
https://data.europa.eu/en
3.1.6. Coupled resource
https://data.europa.eu/en
3.1.7. Resource language
Romanian
3.1.8. Keyword value
Population Distribution
3.1.9. Originating controlled vocabulary
https://inspire.ec.europa.eu/theme/pd
3.1.10. Metadata language
Romanian
3.2. Classification system
2021 PHC used: Classification of territorial units for statistics (NUTS) valid on 1 January 2021 ISCO classification in force on 1 January 2021 ISCED classification in force on 1 January 2021 International standard for country codes ISO 3166
3.3. Coverage - sector
Usual resident population
3.3.1. Topic category

Society
3.3.2. Spatial data service type
Download Service
3.4. Statistical concepts and definitions
Statistical concepts and definitions - Information is available on 3.4.1
3.4.1. Statistical concepts and definitions - Total population
<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
3.4.2. Statistical concepts and definitions - Sex
The variable sex was derived from the Personal Identification Number (CNP). The first value from this code represents the sex of the person.
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 comprised all persons aged 15 years or over who during the reference week (22-28-th of November 2021): (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. Priority was given to the status of 'Employed' in preference to 'Unemployed', and to the status of 'Unemployed' in preference to 'Outside of the labour force'.

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
<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>
3.5. Statistical unit
The 2011 Population and Housing Census had as observation units: persons, dwellings, buildings for human habitation, other buildings in which at least one person has usual residence, households and families.
3.6. Statistical population
Statistical population is referring to the persons who had the usual residence in Romania for a period of 12 months or more in the census reference date or who established the usual residence inside Romania for less than 12 months but had the intention to stay at least 12 months.
3.7. Reference area
The Census was carried-out in all Romanian territory, without any exception.
3.7.1. Geographic bounding box
Information are not yet available.
3.7.2. Spatial resolution
<p>1000</p> <p>Unit:m</p>
3.7.3. Coordinate Reference System
EPSG:3035 - ETRS89 / LAEA Europe
3.8. Coverage - Time

Data refer to the situation in the reporting country 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

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The PHC 2021 census reference date was the midnight of the 1-th December 2021.

5.1. Temporal extent

The data refer to the situation at the midnight of the 1-th December 2021.

6. Institutional Mandate

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6.1. Institutional Mandate - legal acts and other agreements

The legal basis for conducting the Population and Housing Census is provided by:

- Emergency Ordinance No. 19 of 4 February 2020 on the organisation and conduct of the population and housing census in Romania in 2021 issued by the Government of Romania
- Law no.16/2022 amending and completing the Government Emergency Ordinance no. 19/2020 on the organisation and conduct of the population and housing census in Romania in 2021
- Law no. 204/2021 on the approval of Government Emergency Ordinance no. 39/2021 amending Government Emergency Ordinance no. 19/2020 on organisation and conduct of the population and housing census in Romania in 2021

Government Emergency Ordinance no. 39/2021 amending Government Emergency Ordinance no. 19/2020 on the organization and conduct of the population and housing census in Romania in 2021

- Law no. 178/2020 for the approval of the Government Emergency Ordinance no. 19/2020 on the organization and conduct of the population and housing census in Romania in 2021

- Government Decision no. 1156/2022 on the distribution of amounts deducted from value added tax for balancing local budgets, provided for in Article 29 paragraph (5) letter a) of Government Ordinance no. 19/2022 on the rectification of the state budget for 2022

- Government Decision no. 143/2022 (including annexes 1-4) on the form and content of instruments of the population and housing census in Romania in 2021

- Government Decision no. 144/2022 (including annexes 1-19) on the approval of the technical

specifications for the transmission of data from administrative sources for the population and housing census in Romania in 2021

- Government Decision no. 145/2022 regarding the amendment and completion of Government Decision no. 1.071/2020 for the establishment of the budget and categories of expenses necessary for carrying out the population and housing census in Romania in the year 2021, as well as the measures for the implementation of some provisions of Government Emergency Ordinance no. 19/2020 on the organisation and conduct of the population and housing census in Romania in 2021
- Government Decision no. 1071/2020 for establishing the budget and categories of expenses necessary for carrying out the population and housing census in Romania in 2021, as well as the measures for the implementation of some provisions of Government
- Emergency Ordinance no. 19/2020 on the organization and conduct of the population and housing census in Romania in 2021
- Government Decision no. 733/2020 on the composition, organization, operation and duties of the Census Coordination and Implementation Unit, respectively of the Census Implementation County Units

- Commission Implementing Regulation (EU) 2018/1799 of 21 November 2018 establishing a temporary direct statistical action for the dissemination of selected themes of the population and housing census in Romania in 2021, geocoded at 1 km² grid level

- Regulation (EC) No 763/2008 of the European Parliament and of the Council of 9 July 2008 on population and housing census

- Commission Implementing Regulation (EU) 2017/543 of 22 March 2017 laying down rules for the application of Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topics and of their breakdowns

- Commission Regulation (EU) 2017/712 of 20 April 2017 establishing the reference year and the programme of the statistical data and metadata for population and housing censuses provided for by Regulation (EC) No 763/2008 of the European Parliament and of the Council

- Commission Implementing Regulation (EU) 2017/881 of 23 May 2017 implementing Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses, as regards the modalities and structure of the quality reports and the technical format for data transmission, and amending Regulation (EU) No 1151/2010

- Recommendations for the 2020 Censuses-UNECE

6.2. Institutional Mandate - data sharing

The transfer of administrative data for census statistical purposes between National Institute of Statistics and data owners was legislated through Government Decision no. 144/2022.

7. Confidentiality

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7.1. Confidentiality - policy
Information are not yet available.
7.2. Confidentiality - data treatment
Information are not yet available.

8. Release policy	Top
8.1. Release calendar	
<p>The release calendar planned two moments for data release:</p> <ul style="list-style-type: none"> - 30-th of December 2022 for provisional data - 31-th of December 2023 for final data 	
8.2. Release calendar access	
<p>The general program of the PHC 2021 data dissemination, approved by the Central Commission of 2021 Population and Housing Census, is available on the census dedicated website: www.recensamantromania.ro.</p>	
8.3. Release policy - user access	
<p>The user access policy for census data is the same policy for user access applied by INS for any other datasets, according with the requirements of Law no.226/2009.</p> <p>Information about methodology, national and international census legislation, all sets of questionnaires and other materials used are available on census dedicated website www.recensamantromania.ro.</p> <p>Census results are public. Access to Census data is possible free of charge for already tabulated results and by cost for special data processing. The payment includes only the operation of data processing (the cost for carry-out of special software for data extraction from the census microdata database in the user's requested format).</p> <p>Micro-data access is available for scientific purposes, on the basis of a special Contract for micro-data use.</p> <p>Data are disseminated free of charge for any media request.</p>	
8.3.1. Conditions applying to access and use	
<p>https://inspire.ec.europa.eu/metadata-codelist/ConditionsApplyingToAccessAndUse/noConditionsApply</p>	
8.3.2. Limitations on public access	

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

9. Frequency of dissemination

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Decennial

10. Accessibility and clarity

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Information are not yet available.

10.1. Dissemination format - News release

There were 2 Press releases for the dissemination of results:

- on 30-th December 2022 for the main provisional results at national level;
- on 31-th January 2023 for the main provisional results;

Each Press release was accompanied by a set of results tabulation, presenting the main results, available on the census dedicated website www.recensamantromania.ro.

10.2. Dissemination format - Publications

All results will be available only electronic, on census website. A syntetic paper publication, called "2021 round Population and Housing Census - syntetic results", will be disseminated to the users, too.

10.3. Dissemination format - online database

Anonimized micro-database will be available after data validation will be finished, under the general rules of microdata dissemination.

10.4. Dissemination format - microdata access

Micro-data access is allowed by request, for scientific scope, based on a legal Contract for micro-data use.

The contract should identify the Contract parts, legal framework, Contract subject, and beneficiary obligations, conditions in which the cancelation of the contract is possible and the ways the litigation are solved.

10.5. Dissemination format - other

Any user can ask for a particular Census statistics, special breakdowns, special administrative units etc. These data need by requests are solved as any other data requests inside National Institute of Statistics, respecting the general dissemination policy of Institute.

10.6. Documentation on methodology

Census methodology is described in the following documents, posted on census dedicated website www.recensamantromania.ro :

- PHC2021 Enumeration and processing methodology
- PHC2021 Sectorization methodology
- PHC2021 Statistical imputation methodology
- PHC2021 other norms and instructions elaborated by Census Coordination and Implementation Unit

Methodology used to estimate the data values on the 1 km² reference grid:

The national equal-area cell grid is based on the ETRS89 reference coordinate system through the equivalent Lambert Azimuthal Projection (ETRS89-LAEA) with the projection center at 52° N, 10° E, and an adjustment of the east coordinates: $x_0 = 4,321,000$ m, adjustment of the north coordinates: $y_0 = 3,210,000$ m.

The method used for grid-level data dissemination was georeferencing a set of address points data. The points were obtained through a WebGIS application for collecting, validating, and storing geospatial data on homes and mapping, configuring the database, and migrating the existing data structure. This application was used to update information on the location of all residential buildings in Romania and those without a residential purpose but in which at least one person had a usual residency, as well as communal living units. Latitude and longitude data were collected for each of these.

For each person for whom data was collected, there is a complete address (including latitude and longitude coordinates) in the database. In this way, each person in the RPL2021 database can be uniquely assigned to a grid.

Since the national projection of Romania is the Stereographic 1970 and the reporting projection is ETRS89-LAEA, it was necessary to transform the spatial information from the national projection to the European projection.

10.7. Quality management - documentation

A Quality Report of the Population and Dwelling Census 2021 round will be available at INS level, in Romanian language, at 31 of March 2024.

11. Quality management

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During the preparation and the carry-out of 2021 PHC 2021 the quality was systematically assessed. In this regard a special unit was set up, called Unit of Coordination and Implementation for PHC 2021 (UCIR PHC 2021). This UCIR PHC 2021 produced a lot of specific guidelines and organizational and methodological norms for each stage and process of the preparation and performing of PHC 2021. GSBPM standards were applied. When temporary staff was recruited, special training was delivered in this respect.

11.1. Quality assurance

For each stage and process of PHC2021, special guidelines were developed in order to ensure the quality dimensions, such as:

- guidelines for promoting PHC2021 at local level
- guidelines for self-enumerations
- guidelines for ARA enumerators (Self enumeration assisted by enumerators for people without access to Internet)
- guidelines for enumeration by face-to-face interview
- guidelines for recruiting the field staff for PHC2021
- guidelines for training of staff recruited for PHC2021
- guidelines for enumeration in special sectors (prisons, Romanian diplomatic staff and so on)
- guidelines for enumeration of persons living in collective living spaces
- guidelines for payment of field staff for PHC2021

During self-enumeration period, completeness and correctness of the answers provided were checked and people had the possibility to correct their questionnaires, when the case. Progress monitoring reports were produced on daily basis.

11.1.1. Lineage

Each variable was tracked during the enumeration process for each data source. First stage of census consisted in identifying the data from administrative sources, extracting it and transforming it into statistical PHC2021 variables. The result was loaded into the PHC2021 database and filled in the individual questionnaires. During self-enumeration, if the information from self-enumeration was not correct, the persons had the possibility to correct it. All other census variables were collected through CAWI and CAPI methods.

The original databases were stored for each step of the self-enumeration and enumeration by face-to-face interview and they were compared and analyzed before starting to apply imputation and correctness on the main database.

11.1.2. Conformity, specification

Definitions of the census variables laid down in Annex of the Commission Implementing Regulation (EU) 2017/543 of 22 March 2017 laying down rules for the application of Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topics and of their breakdowns were applied with no deviation

11.1.3. Conformity, degree

Definitions of the census variables laid down in Annex of the Commission Implementing Regulation (EU) 2017/543 of 22 March 2017 laying down rules for the application of Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topics and of their breakdowns were applied with no deviation

11.2. Quality management - assessment

In the Romanian national statistical system measures for usual resident population, obtained exactly as the international methodology asked for, are performed starting after 2011 population and dwelling census. Therefore, 2021 round data coverage assessment was done by comparing the provisional result with the Estimated usual resident target population at 1-th of December 2021 (the census reference date).

A number of around 1 million individual records were added to the collected ones in order to solve the under-coverage. These records were added after a research into the administrative sources, using an algorithm based on signs-of-live, which proved, those persons had their usual residence in Romania in the last 12 months before the census reference date. The double and multiple individual records for same person were deleted, also.

We obtain a total of 19,053,815 persons (provisional data) belonging of usual resident population at 1-th of December 2021 after total imputation were made. This represent a difference of +30273 persons compared to the estimated usual resident target population.

12. Relevance

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Information are not yet available.

12.1. Relevance - User Needs

Information are not yet available.

12.2. Relevance - User Satisfaction

Information are not yet available.

12.3. Completeness

Information are not yet available.

13. Accuracy

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Information are not yet available.

13.1. Accuracy - overall

Technical specifications of the census topics and their breakdowns laid down in Annex of the Commission Implementing Regulation (EU) 2017/543 of 22 March 2017 laying down rules for the application of Regulation (EC) No 763/2008 of the European Parliament and of the Council on population and housing censuses as regards the technical specifications of the topics and of their breakdowns were applied with no deviation. Full information will be provided in the quality report.

13.2. Sampling error

Not the case. We did not used sample surveys in the 2021 Population and Housing Census.

13.3. Non-sampling error

The questions which generated the highest number of errors were related to the following issues:

- defining family relationships between household members
- omission to declare a household member in the CAWI electronic questionnaires
- registration of previous residence
- recording the date of arrival in the current place of residence

14. Timeliness and punctuality

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Information are not yet available.

14.1. Timeliness

Information are not yet available.

14.1.1. Date of publication

The provisional number of usual resident population was published on 30-th of December 2022.

14.1.2. Date of last revision

31/12/2022

14.1.3. Date of creation

31/12/2022

14.2. Punctuality

The calendar date for transmission of the data for all hypercubes: 31 March 2024.

15. Coherence and comparability

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Information are not yet available.

15.1. Comparability - geographical

Information are not yet available.

15.1.1. Geographic information - data quality

Information are not yet available.

15.2. Comparability - over time
Information are not yet available.
15.3. Coherence - cross domain
Information are not yet available.
15.4. Coherence - internal
Information are not yet available.

16. Cost and Burden Top
Information are not yet available.

17. Data revision Top
Information are not yet available.
17.1. Data revision - policy
Information are not yet available.
17.2. Data revision - practice
Information are not yet available.

18. Statistical processing Top
Information are not yet available.
18.1. Source data
Data on persons were obtained from the census microdata database, P-file. This file included all individual records (directly collected during data collection period or totally imputed from administrative data sources) for present persons and temporarily absent persons (less than 12 months), practically the usual resident population.
18.2. Frequency of data collection
once at 10 years

18.3. Data collection

Data collection was performed:

- indirect data collection from administrative sources – February 2021
- self-enumeration through internet, using an electronic questionnaire (CAWI) – 14-th March – 31-th of May
- face-to-face interview with the enumerators, using an electronic questionnaire (CAPI) – 1-th June – 31-th July

18.4. Data validation

For each kind of section questionnaire (for person, dwelling, household, building), a special list of logical conditions were prepared and included in the electronic questionnaire; data checking was carried out when people self-enumerated (first data collection period), respectively in the time when enumerators made face-to-face interviews (second data collection period) for the people who did not self-enumerate themselves. The logical conditions checked:

- presence or absence of obligatory answers for some important variables;
- logical correlation between several variables;
- outliers and special cases;
- normal limits for numerical variables;

After self-enumeration, the electronic questionnaires submitted were checked from the completion point of view and in order to produce a proof of self-enumerations to the people who did this operation.

Other validations were done after data collection, by supervisors and headquarters, in Survey Solution (for CAPI data collection). These activities were done at each county's level.

After closing both CAWI and CAPI data collection, another package of validation operations were done at INS level, namely:

- looking and cleaning for double records (two or multiple records for the same person);
- missing records;
- logical correlation between several variables;
- outliers and special cases;
- normal limits for numerical variables

18.5. Data compilation

Information is not yet available.

18.6. Adjustment

Not the case.

19. Comment

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The document contains available information at 31-th December 2022.

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Annexes