

CENSUS_INS21ES_A_CH_2021_0000

National Reference Metadata in Euro SDMX Metadata Structure (ESMS)

Compiling agency: Swiss Federal Statistical Office (FSO)



Eurostat metadata

Reference 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

Swiss Federal Statistical Office (FSO)

1.1.1. Responsible party

Jean-Paul Kauthen, Swiss Federal Statistical Office (FSO)

1.1.2. Responsible party role	Point of Contact
1.2. Contact organisation unit	Population Section
1.5. Contact mail address	Swiss Federal Statistical Office Population Section Espace de l'Europe 10 2010 Neuchâtel Switzerland

2. Metadata update Top	
2.1. Metadata last certified	11/01/2023
2.2. Metadata last posted	11/01/2023
2.3. Metadata last update	11/01/2023

3. Statistical presentation Top	
3.1. Data description	
<p>Since 2010, a new Census is conducted and evaluated on an annual basis by the Swiss Federal Statistical Office (FSO). The census consists of four separately conducted surveys, one of which has been used in the preparation of the km2 grid data for the Eurostat Census – the Register Survey.</p> <p>In the Register Survey, data from the local, cantonal and national population registers as well as from the national Buildings and Dwellings Register is used. It provides information on persons and households such as age, sex, place of birth, usual residence 12 months before, etc.; the data can be evaluated at a very detailed geographical level since for every building, metric geo-coordinates are available and a building and dwelling identifier is associated to every person in the population registers.</p>	
3.1.1. Resource title	
STATPOP	
3.1.2. Resource abstract	
<p>In the Register Survey, data from the local, cantonal and national population registers as well as from the national Buildings and Dwellings Register is used. It provides information on persons and households such as age, sex, place of birth, usual residence 12 months before, etc.; the data can be</p>	

evaluated at a very detailed geographical level since for every building, metric geo-coordinates are available and a building and dwelling identifier is associated to every person in the population registers.
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
-
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
English
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
English
3.2. Classification system
GEO: Equal Area Grid 'Grid_ETRS389-LAEA1000'
3.3. Coverage - sector
Population
3.3.1. Topic category

Society
3.3.2. Spatial data service type
Download Service
3.4. Statistical concepts and definitions
<p>Here are the statistical concepts and definitions of the following variables described:</p> <p>Total population, Sex, Age, Place of birth, Place of usual residence one year prior to the census</p> <p>The variable "employed person" is not available in the source STATPOP which has been chosen as the source for the km2 grid data.</p>
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
Men / 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
Not available in the source "STATPOP"
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 EU programme for the 2021 km ² grid data at EU level include data on persons.
3.6. Statistical population
Persons enumerated in the 2021 census are those who were legally resident in the territory of the reporting country at the census reference date. The legal residence is the main residence of the person as registered in the population register, regardless of temporary absences for purposes of recreation, holidays, visits to friends and relatives, business, medical treatment or religious pilgrimage. Persons who are enumerated but do not meet the criteria for permanent legal 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 permanent resident population.
3.7. Reference area
Data are available at the km ² level
3.7.1. Geographic bounding box
<p>Coordinates of the bounding box (in WGS 1984) :</p> <p>West : 5.908953874</p> <p>East : 10.446288681</p>

South : 45.788725841 North : 47.803861445
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 situation in the reporting country at the census reference date (31 December 2021).
3.9. Base period
Not applicable.

4. Unit of measure Top
Counts of statistical units (persons)

5. Reference Period Top
31/12/2021
5.1. Temporal extent
31/12/2021

6. Institutional Mandate Top
6.1. Institutional Mandate - legal acts and other agreements
The Federal Act of 22 June 2007 on the Federal Census (Census Act) SR 431.112 states in its article 9:

1 The body responsible for the survey is the Federal Statistical Office.

2 The Federal Statistical Office may entrust third parties with the conduct of the surveys.

This law is complemented by the Swiss Federal Ordinance of 19 December 2008 on the Federal Population Census (SR 431.112.1).

More information can be found here:

[SR 431.112 - Federal Act of 22 June 2007 on the Federal Census \(Census Act\) \(admin.ch\)](#) (English)

[SR 431.112.1 - Verordnung vom 19. Dezember 2008 über die eidgenössische Volkszählung \(Volkszählungsverordnung\) \(admin.ch\)](#) (German)

[RS 431.112.1 - Ordonnance du 19 décembre 2008 sur le recensement fédéral de la population \(Ordonnance sur le recensement\) \(admin.ch\)](#) (French)

[RS 431.112.1 - Ordinanza del 19 dicembre 2008 sul censimento federale della popolazione \(Ordinanza sul censimento\) \(admin.ch\)](#) (Italian)

6.2. Institutional Mandate - data sharing

Swiss Federal Statistical Office (FSO)

7. Confidentiality

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7.1. Confidentiality - policy

- Federal Act on Data Protection of 19 June 1992 (SR 235.1)
- Ordinance to the Federal Act on Data Protection of 14 June 1993 (SR 235.11)
- Federal Statistics Act of 9 October 1992 (SR 431.01)
- Swiss Federal Act of 22 June 2007 on the Federal Population Census (Census Act; SR 431.112)
- Swiss Federal Ordinance of 19 December 2008 on the Federal Population Census (SR 431.112.1)

"Section 5 - Dissemination and services" of the Federal Statistics Act specifies:

Art. 18, par. 3: Unless such publication is required by law, the results may not enable any conclusions to be drawn regarding the circumstances of individual natural persons or legal entities that the person or entity concerned has not already made generally available.

Art. 19, par. 2: The federal statistical bodies providers may disclose personal data for purposes not related to specific persons, in particular for research, planning or statistics, to research and statistical offices of the Confederation and to third parties, if:

- a. the data is rendered anonymous, as soon as the purpose of the processing the data is achieved;
- b. the recipient divulges the data with the consent of the statistics generators;
- c. the recipient only discloses the results so that the persons concerned are not recognisable; and

d. the recipient meets the requirements for compliance with statistical secrecy and the other data protection provisions.

7.2. Confidentiality - data treatment

Cell Key method recommended by Eurostat applied on the data for the statistical disclosure control.

8. Release policy

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8.1. Release calendar

Data are made available 12 months after the end of the reference period (December 2021)

8.2. Release calendar access

Data and metadata are available on internet.

8.3. Release policy - user access

Data are mostly made available through excel-tables and interactive tables (PC-Axis), on the web pages of the FSO, in German and French, and partly in Italian and English [Federal Statistical Office | Federal Statistical Office \(admin.ch\)](#)

For researchers, micro data can be made available for a limited duration, after signing a data protection contract.

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>

9. Frequency of dissemination

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Decennial

10. Accessibility and clarity

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10.1. Dissemination format - News release
<p>Press releases for the census can be found on these pages:</p> <p>Press releases Federal Statistical Office (admin.ch) (English)</p> <p>Medienmitteilungen Bundesamt für Statistik (admin.ch) (German)</p> <p>Communiqués de presse Office fédéral de la statistique (admin.ch) (French)</p> <p>Comunicati stampa Ufficio federale di statistica (admin.ch) (Italian)</p>
10.2. Dissemination format - Publications
<p>Data are mainly available on the FSO internet pages. A special page is dedicated to the results of the Swiss census:</p> <p>Census Federal Statistical Office (admin.ch) (English)</p> <p>Volkszählung Bundesamt für Statistik (admin.ch) (German)</p> <p>Recensement de la population Office fédéral de la statistique (admin.ch) (French)</p> <p>Censimento della popolazione Ufficio federale di statistica (admin.ch) (Italian)</p> <p>but results can also be found under different topics, for example "Population":</p> <p>Population Federal Statistical Office (admin.ch)</p> <p>The yearly printed publications "Statistical Yearbook of Switzerland", "Statistical Data on Switzerland" and "Switzerland's population" present (among other topics) results of the census. They can also be found on the FSO web pages:</p> <p>All publications Federal Statistical Office (admin.ch)</p>
10.3. Dissemination format - online database
<p>The main results of the census are disseminated through interactive tables (PC-Axis):</p> <p>STAT-TAB - interactive tables (FSO) (admin.ch)</p> <p>A wider collection of published items by the FSO can be consulted here:</p> <p>Catalogues and Databases Federal Statistical Office (admin.ch)</p>
10.4. Dissemination format - microdata access
<p>Micro data can be made available to researchers, for a limited period of time, provided they sign a data protection contract.</p>
10.5. Dissemination format - other
<p>Ad-hoc reports and analyses for external clients.</p>
10.6. Documentation on methodology

Methodology reports are available since 2014.

Below are several links to some documents describing the Swiss Census.

Annexes:

[Census | Federal Statistical Office \(admin.ch\)](#)

[Harmonisierung amtlicher Personenregister - Amtlicher Katalog der Merkmale | Publikation | Bundesamt für Statistik \(admin.ch\)](#) (German)

[Harmonisation de registres officiels de personnes - Catalogue officiel des caractères | Publication | Office fédéral de la statistique \(admin.ch\)](#) (French)

[Describing the Anticipated Accuracy of the Swiss Population Survey - Methodology report | Publication | Federal Statistical Office \(admin.ch\)](#) (English)

[Merkmalskatalog - Eidgenössisches Gebäude- und Wohnungsregister - Version 4.1 | Publikation | Bundesamt für Statistik \(admin.ch\)](#) (German)

[Catalogue des caractères - Registre fédéral des bâtiments et des logements - Version 4.1 | Publication | Office fédéral de la statistique \(admin.ch\)](#) (French)

[Catalogo delle caratteristiche - Registro federale degli edifici e delle abitazioni - Versione 4.1 | Pubblicazione | Ufficio federale di statistica \(admin.ch\)](#) (Italian)

10.7. Quality management - documentation

The final report on the coverage assessment is available since 2014.

[Quality survey of the national census system | Federal Statistical Office \(admin.ch\)](#)

11. Quality management

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11.1. Quality assurance

The quality assurance measures are documented in the detailed concepts of each of the four elements of the Swiss Census. These are internal documents only.

The final report on the coverage assessment is available since 2014.

[Quality survey of the national census system | Federal Statistical Office \(admin.ch\)](#)

11.1.1. Lineage

Data Lineage in the case of Swiss km2 grid data is as follows: The only population source is the population register data, STATPOP. Geo-coordinates of the buildings and dwellings in which the

population is surveyed stems from the building and dwelling register. The Geo-coordinates of the building and dwelling register have been transformed into the Equal Area Grid (EPSG:3035 - ETRS89 / LAEA Europe) as required for the Eurostat Census 2021.

11.1.2. Conformity, specification

The quality assurance measures are documented in the detailed concepts of the different statistics.

11.1.3. Conformity, degree

The quality assurance measures are documented in the detailed concepts of the different statistics.

11.2. Quality management - assessment

In Switzerland, different laws and incentives guarantee that civil status events are registered in the Civil Registers and that persons are registered in the Population registers. Therefore the overall quality of results for the population at their legal residence is judged as very good. However, homeless or roofless persons, nomads and vagrants are counted only if they are registered in the Population registers.

12. Relevance

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12.1. Relevance - User Needs

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

12.2. Relevance - User Satisfaction

No user satisfaction surveys are carried out. User inquiries are handled by the Eurostat User Support service.

12.3. Completeness

Depends on the availability of data transmitted by the National Statistical Institutes.

In Switzerland, different laws and incentives guarantee that civil status events are registered in the Civil Registers and that persons are registered in the Population registers. Therefore the overall quality of results for the population at their legal residence is judged as very good. However, homeless or roofless persons, nomads and vagrants are counted only if they are registered in the Population registers.

13. Accuracy	Top
13.1. Accuracy - overall	
<p>The 1km² grid is based on the Structural Register which contains the permanent resident population.</p> <p>Describing the Anticipated Accuracy of the Swiss Population Survey - Methodology report Publication Federal Statistical Office (admin.ch) (English)</p>	
13.2. Sampling error	
New census system. Quality survey Publication Federal Statistical Office (admin.ch)	
13.3. Non-sampling error	
<p>Homeless or roofless persons, nomads and vagrants are counted only if they are registered in the Population registers.</p>	

14. Timeliness and punctuality	Top
14.1. Timeliness	
<p>The FSO strives to provide statistical data in a timely fashion, while preserving data quality and accessibility.</p> <p>See below the different dates related to the publication of the 1 km² grid.</p>	
14.1.1. Date of publication	
31/12/2022	
14.1.2. Date of last revision	
19/12/2022	
14.1.3. Date of creation	
19/12/2022	
14.2. Punctuality	

Data are recorded with good punctuality in the registers and delivered by the various administrations to the FSO, via a secure data exchange platform (sedex, [sedex \(www.sedex.ch\)](http://www.sedex.ch) | [Bundesamt für Statistik \(admin.ch\)](http://Bundesamt.für.Statistik.admin.ch)), according to planification.

15. Coherence and comparability

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15.1. Comparability - geographical

Data cover the whole of Switzerland and are completely comparable between geographical areas.

15.1.1. Geographic information - data quality

Data cover the whole of Switzerland and are completely comparable between geographical areas.

15.2. Comparability - over time

It's the first time that the grid 1km² is provided.

15.3. Coherence - cross domain

Data are coherent. A large number of data verification on micro as well as macro level takes place before the data publication.

The use of a unique personal identifier (the social insurance number) in all data sets allows for record matching during the production of the data and the correction of any incoherence.

15.4. Coherence - internal

Data are coherent. The use of a unique personal identifier (the social insurance number) in all data sets allows for record matching during the production of the data and the correction of any incoherence.

16. Cost and Burden

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The annual Swiss Census (since 2010) has considerably reduced the burden on communes and respondents. Indeed register harmonization at national, regional and local levels have made it possible that data from registers can be extracted four times a year. The overall costs of compiling data thus have been reduced.

Further measures that helped reduce cost were: application of project management procedures, controlling, good coordination between developers of IT-applications and census specialists, extensive testing of Census procedures and IT-applications, quality control.

17. Data revision	Top
17.1. Data revision - policy	
<p>Below is a link to the data revision policy (English).</p> <p>Annexes:</p> <p>Revision policy Federal Statistical Office (admin.ch)</p>	
17.2. Data revision - practice	
There are no updates of the 1km ² grid scheduled.	

18. Statistical processing	Top
18.1. Source data	
<ul style="list-style-type: none"> • Cantonal and communal population registers • Federal registers of persons 	
18.2. Frequency of data collection	
<p>Since 2010, data on population and housing censuses are collected every year, with reference date 31 December.</p>	
18.3. Data collection	
<p>Register-based data:</p> <p>a) A special law was passed to define the content (only census data) of the already existing registers of persons used for the census: the Federal Act of 23 June 2006 on the Harmonisation of the Register of Residents and of other Official Registers of Persons (Register Harmonisation Act, RHA; SR 431.02. See also the Ordinance on Register Harmonisation of 21 November 2007, SR 431.021). It also addresses the transmission of data to the FSO, the legal obligations regarding registration, the delays in reporting, etc.</p> <p>Art. 11 Duty to notify specifies:</p> <p>The cantons shall issue the required regulations so that:</p> <p>a. natural persons notify the official agency responsible for maintaining the register of residents within 14 days of relocation;</p> <p>b. the persons required to report provide truthful information on the data defined in Article 6 and, if required, the relevant documents.</p> <p>Persons can be registered in several registers, so during processing the FSO links the records with the help of a unique personal identifier (the social insurance number).</p>	

b) Concerning data on buildings and dwellings, the rules concerning the maintenance of the register are fixed in the Ordinance of 31 May 2000 on the Federal Register of Buildings and Dwellings (SR 431.841).

18.4. Data validation

All data treatments are done in accordance with the EDIMBUS Recommended Practices on Editing and Imputation in Cross Sectional Business Surveys (see link below). Although these recommendations have been developed for business surveys, they are also applicable to census surveys.

Annexes:

<https://ec.europa.eu/eurostat/documents/64157/4374310/30-Recommended+Practices-for-editing-and-imputation-in-cross-sectional-business-surveys-2008.pdf>

18.5. Data compilation

All data treatments are done in accordance with the EDIMBUS Recommended Practices on Editing and Imputation in Cross Sectional Business Surveys (see link below). Although these recommendations have been developed for business surveys, they are also applicable to census surveys.

Annexes:

<https://ec.europa.eu/eurostat/documents/64157/4374310/30-Recommended+Practices-for-editing-and-imputation-in-cross-sectional-business-surveys-2008.pdf>

18.6. Adjustment

Data are retrieved from various sources. Problems with contracting data of the following variables are treated automatically or manually:

sex
age
place of birth
residence 12 months before

19. Comment

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Switzerland has a statistical system which makes it possible to observe the structure and development of the population and households, as well as of buildings and dwellings on a continuous basis. Thanks to this population census system, economic and social change can be analysed effectively. The results cover a wide range of current topics.

Since 2010, the census has been conducted annually by the FSO. In order to ease the burden on the population, the information is primarily drawn from communal or cantonal population registers, federal registers of persons and the Federal Register of Buildings and Dwellings and supplemented by sample surveys.

Providing data by a km2 grid in Switzerland depends on the one hand on population registers (communal or cantonal as well as federal) and the geolocation of the buildings and dwellings which is included in the Federal Register of Buildings and Dwellings. The key EGID (federal building identifier) is used to geolocate the surveyed population.

Related metadata

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Annexes

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