

EFGS MODIFIED QUALITY ASSESSMENT PARAMETERS,

FILLED IN BY GEOSTAT1B CONTRIBUTORS

Name of the file	GEOSTAT_grid_POP_1K_CZ_2011_QA
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Measures for production of primary data

Type of primary data	Georeferenced data in the form of point
Positional accuracy	1 – 5 meters for referenced buildings points
Positional source	Result of a computation from official data sources (territorial statistical register and cadastral database)
Logical consistency	Yes
Usage	People are georeferenced according to their place of usual residence which they stated in the Population and Housing Census 2011. Place of usual residence is the place where the person has in fact lived long-term and where he/she has a household or family. It is not important where the person is registered for permanent residence or whether, for example, for reasons of work or study he/she spends the greater part of the week in another place.
Bias	Homeless people or people living in emergency buildings were counted up in the appropriate establishments providing services for them (shelter houses, halfway houses or doss-houses), even though they usually live in the street. Another case represent people staying in facilities designated for short-term residence (hospitals, hotels, health resorts, prisons etc.), who had to state the place of their usual residence, where they were also counted up.
Accuracy of the figures	Total georeferenced population is lower by ca 0,3 % than total population number reported under the official census results, since some persons were not possible to assign to the building points (e.g. homeless people, people living in buildings without final approval or in emergency buildings or shelters). Another 0,6 % of population are misplaced due to inconsistencies in territorial classifications.
Coverage of georeferenced data	99,7 % of the total population from the census data were covered with georeferenced data.
Temporal accuracy (Timeliness) of the spatial data	Last update in July 2013 – 100 %.
Temporal accuracy (Timeliness) of the statistical data	All population data relate to the 26 th of March 2011 (census decisive moment).
Coherence	100 %
Quality report	Not yet available

Inspire compliant metadata	Not yet available
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Measures for production of grid data

Production methods	Aggregation direct from register point-based data (georeferenced building points in Register of Census Districts and Buildings).
Accuracy of the figures	Total population number in grids is lower by 31 998 persons (ca 0,3 %) than total population number reported under the official census results, since some persons were not possible to assign to the building points (e.g. homeless people, people living in buildings without final approval or in emergency buildings or shelters). Another 0,6 % of population are misplaced due to inconsistencies in territorial classifications.
Geographical coverage	100 % of country area covered by grid data
Coherence	No regional differences in quality
Temporal accuracy	100 % of grid data of the same reference date (26/03/2011)
Confidentiality	0 % of grid cells suppressed, 0 % of population suppressed. If the total population in grids is the only one presented variable, then a threshold for confidential data is not defined.
Quality report	Not yet available
Inspire compliant metadata	Not yet available

Name of the file	GEOSTAT_grid_POP_1K_EE_2011_QA
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Measures for production of primary data

Positional system	Point
Positional accuracy	The accuracy of some GPS points are up-to 100 meters, but the overall accuracy is 0.01 meters.
Positional source	For the georeferenced data a combined registers and e-census with traditional census method was used. If the actual location of the resident (including homeless people) was impossible to identify or only a part of the address was encoded, the data were tagged to the centre of the settlement unit or census enumeration area based on the known information (place where data was collected etc.).
Logical consistency	Yes
Usage	The georeferenced statistical data support decision-making in planning and management on the state, regional and local level. The georeferenced statistical data are highly needed in scientific researches and private sector for different location based analyses, e.g. spatial-temporal demographic changes, segregation, specification of target groups, development in ethnicity, housing and suburbanization, etc.
Bias	If the actual location of the resident (including homeless people) was impossible to identify or only a part of the address was encoded, the data were tagged to the centre of the settlement unit or census enumeration area based on the known information (place where data was collected etc.).
Accuracy of the figures	0
Coverage of georeferenced data	98%
Temporal accuracy (Timeliness) of the spatial data	21.05.2013 (0.1%)
Temporal accuracy (Timeliness) of the statistical data	31.12.2011
Coherence	100%
Quality report	Not available
Inspire compliant metadata	Available

Measures for production of grid data

Production methods	Aggregation from microdata that are georeferenced to points.
Accuracy of the figures	0
Temporal accuracy (Timeliness) of	22.05.2013 (100%)

the spatial data	
Temporal accuracy (Timeliness) of the statistical data	31.12.2011
Geographical coverage	100%
Coherence	100%
Temporal accuracy	100%
Confidentiality	0%
Quality report	Not available
Inspire compliant metadata	Available

Name of the file	GEOSTAT_grid_POP_1K_IE_ 2011
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Measures for production of primary data

Positional system	Primary data is georeferenced in point form
Positional accuracy	The georeferenced point should be accurate to within 1 metre of its map position based on the most up-to-date mapping from Ordnance Survey Ireland (OSi). However 2% of the point data was georeferenced by census staff based on the markings on the enumerator maps, the accuracy of which cannot be measured.
Positional source	Primary data sourced from the national address database (GeoDirectory)
Logical consistency	Yes
Usage	There were 122,000 persons recorded as being usual resident in the State on census night but were enumerated elsewhere. As part of the Census 2011 processing these persons were geocoded to their address of usual residence.
Bias	The geographical location of persons absent from the State on Census night but usually reside in the State was based on the position of the household where they were marked as absent on the census form.
Accuracy of the figures	100%
Coverage of georeferenced data	98.6%. Persons who were enumerated on Census night but are not usually resident in the State have been excluded.
Temporal accuracy (Timeliness) of the spatial data	28/02/2012
Temporal accuracy (Timeliness) of the statistical data	28/02/2012
Coherence	100%
Quality report	Not available
Inspire compliant metadata	Not available

Measures for production of grid data

Production methods	Aggregation
Accuracy of the figures	<p>The following adjustments were made to the grid data:</p> <p>(1) If the number of households in the grid is either 1 or 2 the total population has been set to 4 or 5 such that the total population in the grid dataset equals what has been published already. All age and sex variables are suppressed in this instance.</p> <p>(2) If not rule (1) above and population of grid is 4 persons or less or total</p>

	<p>households in grid is 3. All age and sex variables are suppressed in this instance.</p> <p>(3) If not rules (1) or (2) above and all persons in the grid have the same sex. All age and sex variables are suppressed in this instance.</p> <p>(4) If not rules (1), (2) or (3) above and all males in the grid fall into the same age group. All male age variables are suppressed in this instance.</p> <p>(5) If not rules (1), (2) or (3) above and all males in the grid fall into the same age group. All female age variables are suppressed in this instance.</p>
Temporal accuracy (Timeliness) of the spatial data	28/02/2013
Temporal accuracy (Timeliness) of the statistical data	28/02/2012
Geographical coverage	100%
Coherence	100%
Temporal accuracy	100%
Confidentiality	19.4% of grid cells have been suppressed
Quality report	Available
Inspire compliant metadata	Available in 2014

Name of the file	GEOSTAT_grid_POP_1K_NL_2011_QA
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Measures for production of primary data

Positional system	Georeferenced data in the form of address point, in national projection
Positional accuracy	1 meter
Positional source	Derived from national address register with meter accuracy.
Logical consistency	Yes
Usage	Population register is based upon addresses where people are registered, their primary dwelling.
Bias	Homeless people are not accounted for yet. This is covered by the 'conventionally located population proportion' of the INSPIRE specification.
Accuracy of the figures	1 meter
Coverage of georeferenced data	99,98 % of population statistical data is covered with georeferenced data.
Temporal accuracy (Timeliness) of the spatial data	Address coordinates of 1th of January 2013, accounted for temporal address changes
Temporal accuracy (Timeliness) of the statistical data	Population data are derived from the Social Statistic Database. This database contains the registered Dutch population and their addresses from 1995 on. Figures of 1th of January 2011 as they are registered in the coordinated version of July 2011 in the Social Statistic Database.
Coherence	100 % consistent and comparable, no regional differences in quality.
Quality report	not available
Inspire compliant metadata	not available

Measures for production of grid data

Production methods	Aggregation. Population is initially aggregated from address points into 100m grids in the national projection, RD_New (EPSG 28992). Aggregated 100m RD_New grid data is then recasted into the 1km European grid meaning the centre of the national 100m grid with its total figures to be projected into ETRS1998_LAEA. The values of the centres of the 100m national grid data are summed up onto the 1km INSPIRE grid codes.
Accuracy of the figures	Using recasting with the national 100m grid introduces a minimal difference from counting data from projected address points.

Temporal accuracy (Timeliness) of the spatial data	Address coordinates of 1th of January 2013, accounted for temporal address changes
Geographical coverage	100%, but not all contain population
Coherence	100% of consistent and comparable data, no regional differences in quality.
Temporal accuracy	100% of same reference date.
Confidentiality	No suppression on total number of people, sex and age classes -15-65-
Quality report	not available
Inspire compliant metadata	not available

Name of the file	GEOSTAT_grid_POP_1K_NO_2011_QA
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Measures for production of primary data

From point to LAEA grid

Positional system	Georeferenced data in the form of point, initially in national projection (EUREF89/UTM33N)
Positional accuracy	1-50 meter
Positional source	Derived from national address and building register with 1-50 meter accuracy.
Logical consistency	Yes
Usage	Population register is based upon where people have their primary dwelling.
Bias	In this preliminary delivery homeless people are not accounted for yet. This is covered by the 'conventionally located population proportion' of the INSPIRE specification.
Accuracy of the figures	1-50 meter
Coverage of georeferenced data	99,7 % of statistical (primary) data is covered with georeferenced data.
Temporal accuracy (Timeliness) of the spatial data	Address data of November 2011
Temporal accuracy (Timeliness) of the statistical data	15th of February 2011
Coherence	100 % consistent and comparable data, no regional differences in quality down to Statistical Units/Enumeration Areas (Sub municipality level).
Quality report	not available
Inspire compliant metadata	not available

Measures for production of grid data

Production methods	Aggregation, from recasted 100m grid in national projection
Accuracy of the figures	4 addresses out of all 14277259 addresses were found to be geolocated on the boundary in between two grid cells. These addresses including 9 people were manually checked using the building area data for referring the data to a specific grid cell.
Temporal accuracy (Timeliness) of the spatial data	

Temporal accuracy (Timeliness) of the statistical data	Figures of 1rst of January 2011 are last updated the 15 th of February 2011
Geographical coverage	100%, but not all contain population
Coherence	100% of consistent and comparable data, no regional differences in quality.
Temporal accuracy	100% of same reference date.
Confidentiality	0% of grid cells suppressed, thresholds for confidential data for the total population
Quality report	not available
Inspire compliant metadata	not available

Name of the file	GEOSTAT_grid_POP_1K_PT_2011_QA.doc
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Measures for production of primary data

Positional system	Georeferenced data in the form of points
Positional accuracy	Points have been georeferenced on paper maps with a scale range from 1:1 000 to 1:10 000 in rural areas. Each building is located within the delimitation of the building.
Positional source	The source data of the population are the georeferenced residential buildings from the 2011 census, with reference to 21 March 2011. The process of georeferencing the buildings has been executed by the circa 17000 Census fieldworkers using a website with detailed aerial imagery. Each building is represented by its centroid. The population is associated to each residential building.
Logical consistency	Yes
Usage	The population is based on where people have their primary dwelling.
Bias	Individual data that are recorded and counted in some places, but only on the basis of some convention: e.g. homeless people in the place where the data are collected during a standard census process or in the place of the organism that takes care of them for social benefits or health insurance purposes, or diplomatic or military staff located outside the national territory. This is covered by the 'conventionally located population proportion' of the INSPIRE specification.
Accuracy of the figures	The census quality survey for the 2011 census had the following global result: <i>"Coverage indicators: It is estimated that, in Census results, there was an over coverage when counting the statistical units "Building" (+ 1,3%) and "Dwellings" (+ 1,4%) and an under coverage when counting the statistical units "Households" (- 3,6 %) and "Resident individuals" (- 2,5%)."</i>
Coverage of georeferenced data	99,9% of the residential building are represented by their correct geographic position.
Temporal accuracy (Timeliness) of the spatial data	21 March 2011
Temporal accuracy (Timeliness) of the statistical data	21 March 2011
Coherence	100% consistent and comparable data
Quality report	Available: http://censos.ine.pt/ngt_server/attachfileu.jsp?look_parentBoui=159574293&att_display=n&att_download=y
Inspire compliant metadata	not available

Measures for production of grid data

Production methods	Aggregation directly from the micro data of the census results.
Accuracy of the	

figures	
Temporal accuracy (Timeliness) of the spatial data	21 March 2011
Temporal accuracy (Timeliness) of the statistical data	21 March 2011
Geographical coverage	100%
Coherence	100% of consistent and comparable data.
Temporal accuracy	100% of same reference date.
Confidentiality	0% of grid cells suppressed
Quality report	not available
Inspire compliant metadata	not available

Name of the file	GEOSTAT_grid_POP_1K_SI_2011_QA.doc
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Measures for production of primary data

Positional system	Georeferenced data in the form of point.
Positional accuracy	1m.
Positional source	Register of Spatial units: co-ordinate of a centroid of a building with an address.
Logical consistency	Yes
Usage	Known problems. E.g. population registers are based upon where people have their primary dwelling, and hence geocodes people to where they mostly stay at night. However, part of the population have several dwellings; for recreation, work, shared custody etc. This implies that there are some constraints to which analysis may and can be done. Further more, a large share of the population work at night or abroad. This further limits use with respect to daytime phenomenons.
Bias	Individual data that are recorded and counted in some places, but only on the basis of some convention: e.g. homeless people in the place where the data are collected during a standard census process or in the place of the organism that takes care of them for social benefits or health insurance purposes. This is covered by the 'conventionally located population proportion' of the INSPIRE specification.
Accuracy of the figures	/
Coverage of georeferenced data	100% of statistical (primary) data covered with georeferenced data.
Temporal accuracy (Timeliness) of the spatial data	Register of spatial units enables temporal accuracy per date, month and year since 1995.
Temporal accuracy (Timeliness) of the statistical data	Statistical data are being updated quarterly from the Central population register. Census 2011 was entirely register based.
Coherence	100% consistent and comparable data.
Quality report	Not available
Inspire compliant metadata	Not available

Measures for production of grid data

Production methods	Aggregation directly from the register data (Register of spatial units + Central population register)
Accuracy of the figures	/
Temporal accuracy (Timeliness) of the spatial data	01.01.2011. Extent of the updated data (100%).

Temporal accuracy (Timeliness) of the statistical data	01.01.2011.
Geographical coverage	Percentage of country area covered by grid data – 100%.
Coherence	100% of consistent and comparable data.
Temporal accuracy	100% of same reference date.
Confidentiality	0% of grid cells suppressed.
Quality report	Not available
Inspire compliant metadata	Not available

Name of the file	GEOSTAT_grid_POP_1K_FR_2010_QA.doc
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Measures for production of primary data

Type of primary data	The coordinates are available for each dwelling in the tax files.
Positional accuracy	The accuracy is the same as the one observed in the cadastre, about few meters.
Positional source	The coordinates come from the cadastre.
Logical consistency	Yes
Usage	For 7.7 % of the population the coordinates are missing. It is often people living in institutions. Their spatial distribution is supposed to be the same as the rest of the population.
Bias	Students, who are fiscally dependent on their parents, are registered at their parents' address.
Accuracy of the figures	For the children under 18, the sex variable is randomly imputed according to the proportion observed in the 2010 census.
Coverage of georeferenced data	The coordinates are available for 92.3 % percent of the population.
Date of latest update of the spatial data and	2010

percentage updated	
Date of latest update of the statistical data and percentage updated	2010
Coherence	100%
Quality report	no
Inspire compliant metadata	no

Measures for production of grid data

Production methods	For each individual, the tax files provide age, sex and coordinates of his main residence. The sex is missing for children under 18 and coordinates are missing for people living in institution (7.7 %). The population with coordinates figures from the tax files are calibrated on those of the 2010 census by age and municipalities. For each individual under 18, the sex variable is randomly imputed, for the weighted population, according to the sex ratio observed in the 2010 census. To establish the grid weighted population a bottom up method is then used. The results by cell are randomly rounded.
Accuracy of the figures	
Geographical coverage	The dataset doesn't cover the the French Overseas Departments and Territories
Coherence	100
Temporal accuracy	100
Confidentiality	For 53 % of the cells, with less than 11 dwellings, all variables, except the total population, are set to 0. Only 3.4 % of the population lives in these cells.
Inspire compliant metadata	no
License	not available