



**An
Phríomh-Oifig
Staidrimh**

Central
Statistics
Office

Standard SIMS Report: Population and Migration Estimates

Single Integrated Metadata Structure (SIMS) Report

For

Population and Migration Estimates

This documentation applies to the reporting period:

April 2024

Last edited:

19 November 2024

1. Table of Contents

1. Table of Contents	3
2. Introduction	5
3. Contact	5
4. Metadata Update	5
4.1. Metadata last certified	5
4.2. Metadata last posted	5
4.3. Metadata last update	5
5. Statistical Presentation	6
5.1. Data Description	6
5.2. Classification System	6
5.3. Sector Coverage	7
5.4. Statistical Concepts and definitions	7
5.5. Statistical Unit	8
5.6. Statistical Population	8
5.7. Reference Area	8
5.8. Time Coverage	8
5.9. Base period	8
6. Unit of Measure	8
7. Reference Period	8
8. Institutional Mandate	9
8.1. Legal Acts and other agreements	9
8.2. Data Sharing	9
9. Confidentiality	9
9.1. Confidentiality – policy	9
9.2. Confidentiality – data treatment	9
10. Release Policy	9
10.1. Release Calendar	9
10.2. Release calendar access	9
10.3. User access	10
11. Frequency of Dissemination	10
12. Accessibility and clarity	10
12.1. News release	10
12.2. Publications	10
12.3. On-line database	10
12.3.1. AC 1. Data tables - consultations	10
12.4. Micro-data Access	10
12.5. Other	11
12.5.1. AC2. Metadata consultations	11
12.6. Documentation on Methodology	11
12.6.1. AC3 – Metadata completeness – rate	11
12.7. Quality Documentation	11
13. Quality Management	11
13.1. Quality Assurance	11
13.2. Quality Assessment	11
14. Relevance	12
14.1. User Needs	12
14.1.1. Main National Users	12
14.1.2. Principal External Users	12
14.2. User Satisfaction	12
14.3. Data Completeness	12
14.3.1. Data Completeness rate	12
15. Accuracy and reliability	12
15.1. Overall accuracy	12
15.2. Sampling Error	12
15.2.1. A1. Sampling error indicator	12

15.3. Non-sampling Error	13
15.3.1. Coverage error	13
15.3.2. Measurement error	13
15.3.3. Non-Response Error.....	13
15.3.4. Processing error	13
15.3.5. Model assumption error	13
16. Timeliness and punctuality.....	14
16.1. Timeliness	14
16.1.1. TP1. Time lag – First results	14
16.1.2. TP2. Time lag – Final results.....	14
16.2. Punctuality.....	14
16.2.1. TP3. Punctuality – Punctuality - delivery and publication.....	14
17. Comparability	14
17.1. Comparability – Geographical.....	14
17.1.1. CC1. Asymmetry for mirror flow statistics	14
17.2. Comparability over time	14
17.2.1. Length of Comparable Time series.....	14
17.3. Coherence – cross domain.....	14
17.3.1. Coherence – Sub annual and annual statistics.....	15
17.3.2. Coherence with National Accounts.....	15
17.4. Coherence – internal	15
18. Cost and Burden.....	15
19. Data Revision	15
19.1. Data Revision Policy	15
19.2. Data Revision Practice.....	15
19.2.1. Data Revision – Average size.....	16
20. Statistical processing	16
20.1. Source Data	16
20.1.1. Population and sampling frame	16
20.1.2. Sampling design	16
20.1.3. Survey size.....	16
20.1.4. Survey technique.....	16
20.2. Frequency of data collection.....	16
20.3. Data Collection.....	17
20.3.1. Type of Survey/Process	17
20.3.2. Questionnaire (including explanations).....	17
20.3.3. Survey Participation	17
20.3.4. Data Capture	17
20.4. Data Validation	17
20.5. Data Compilation	17
20.5.1. Imputation (for Non-Response or Incomplete Data Sets)	18
20.5.2. Grossing and Weighting.....	18
20.6. Adjustment.....	18
20.6.1. Seasonal Adjustment	18
21. Comment.....	18

2. Introduction

The CSO has been producing annual population estimates since 1951, thus enabling the production of a continual population time series for intercensal periods. Population estimates by NUTS3 region are available from 2011.

Migration estimates have been compiled since 1987. In more recent years, further data breakdowns have been published. Migration estimates by citizenship are available from 2006.

3. Contact

Contact Organisation:	Central Statistics Office
Contact Organisation Unit:	Population and Migration Estimates
Contact Name:	Eva Leahy
Contact person function:	Statistician
Contact Mail address:	Central Statistics Office, Skehard Road, Cork T12 X00E
Contact email address:	eva.leahy@csso.ie
Contact Phone Number:	Ms Leahy +353 21 4535936
Contact Fax Number:	

4. Metadata Update

4.1. Metadata last certified

25/11/2024

4.2. Metadata last posted

November 2024

4.3. Metadata last update

19/11/2024

5. Statistical Presentation

5.1. Data Description

The Population and Migration Estimates release is the primary source of population estimates in the period between each Census of Population. The publication provides estimates of population stock by sex, age, region and citizenship. It also provides migration flows by origin and destination.

Accurate population estimates are important with regards to providing evidence-based data for future planning and policy formulation.

The results are provided at a broad aggregate level in the annual population and migration estimates publication with end-April as the annual reference point. The annual estimates typically publish in August of the reference year.

The information contained in the release is presented as follows:

- Migration is classified by sex, citizenship, age group and country of origin/destination.
- Population is classified by sex, citizenship, 5-year age group and NUTS 3 geographical region.

The population and migration estimates for intercensal periods are revised following the publication of The Census of Population.

It is to be noted that in the 2022 population estimates, those people from households that were fully temporarily absent outside the state on Census night are included for the first time. As this group has not been included in the Population and Migration Estimates prior to 2022, the additivity of population change components has been impacted between 2021 and 2022.

5.2. Classification System

The geographical regions are classified using the Nomenclature of Territorial Units for Statistics (NUTS) classification, created by Eurostat in order to define territorial units for the production of regional statistics across the European Union. In 2003 the NUTS classification was established within a legal framework (Regulation (EC) No 1059/2003).

As the administrative territorial breakdown of EU Member States is the basis of the NUTS classification, changes made under the 2014 Local Government Act prompted a revision to the Irish NUTS 2 and NUTS 3 Regions. These changes included the amalgamation of the local authorities of Tipperary North and South, Limerick City and County Councils and Waterford City and County Councils. In addition, three Regional Assemblies were established (Northern & Western, Southern, Eastern & Midland).

The main changes at NUTS 3 level are the transfer of South Tipperary from the South-East into the Mid-West NUTS 3 region and the movement of Louth from the Border to the Mid-East NUTS 3 Region. There are now three NUTS 2 Regions which correspond to the Regional Assemblies established in the 2014 Local Government Act and are groupings of the new NUTS 3 Regions. The revisions made to the NUTS boundaries have been given legal status under Commission Regulation (EU) 2016/2066. The new NUTS 2 and NUTS 3 structure and classification are displayed in the table below:

Northern & Western (NUTS2 Region) NUTS 3 Constituting Counties:

Border:

- Cavan
- Donegal
- Leitrim
- Monaghan
- Sligo

West:

- Galway

- Mayo
- Roscommon

Southern NUTS2 Region (NUTS2 Region) NUTS 3 Constituting Counties:

Mid-West:

- Clare
- Limerick
- Tipperary

South-East:

- Carlow
- Kilkenny
- Waterford
- Wexford

South-West:

- Cork
- Kerry

Easter & Midlands (NUTS2 Region) NUTS 3 Constituting Counties:

Dublin:

- Dublin City
- Dun Laoghaire – Rathdown
- Fingal
- South Dublin

Mid-East:

- Kildare
- Louth
- Meath
- Wicklow

Midland:

- Laois
- Longford
- Offaly
- Westmeath

5.3. Sector Coverage

Not applicable.

5.4. Statistical Concepts and definitions

Usual residence population concept

For the purpose of this release the population concept of usual residence has been used, i.e. all persons usually resident and present in the State on census night *plus* absent persons who are usually resident in Ireland but are temporarily away from home *and outside the State* on census night. All persons are classified according to their region of usual residence. Up to and including 2005, the de facto population concept was used.

It is to be noted that in the 2022 population estimates, those people from households that were fully temporarily absent outside the state on Census night are included for the first time. As this group has not been included in the Population and Migration Estimates prior to 2022, the additivity of population change components has been impacted between 2021 and 2022.

De facto population concept - The census figures relate to the *de facto* population i.e. the population recorded for each area represents the total of all persons present within its boundaries census night, together with all persons who arrived in the area the following morning having not having been enumerated elsewhere. The figures, therefore, include visitors present on Census Night as well as those in residence, while usual residents temporarily absent from the area are excluded.

Natural Increase - the natural increase is the difference between the number of births and the number of deaths recorded over a period.

Immigration - means the action by which a person establishes his or her usual residence in the State for a period that is, or is expected to be, of at least 12 months, having previously been usually resident in another Member State or a third country.

Emigration - means the action by which a person, having previously been usually resident in the State, ceases to have his or her usual residence in the State for a period that is, or is expected to be, of at least 12 months.

Net Migration - the difference between immigration into and emigration from the State during the reference period.

5.5. Statistical Unit

Individual persons.

5.6. Statistical Population

The population concept of usual residence is applied. Counted under this concept are all persons who are permanently resident in the State and those who intend to reside in the State for a period of 12 months or more

5.7. Reference Area

Republic of Ireland.

5.8. Time Coverage

1996-2024

5.9. Base period

Not applicable.

6. Unit of Measure

Population is expressed as number of persons.

7. Reference Period

2024

8. Institutional Mandate

8.1. Legal Acts and other agreements

Demographic data collection is governed by two EU regulations:

- Regulation (EU) No 1260/2013 outlines the requirements in relation to population statistics.
- Regulation (EC) No 862/2007 outlines the requirements in relation to migration statistics.

The collection of vital statistics is governed at a national level by the Vital Statistics Act (2004).

8.2. Data Sharing

Not applicable.

9. Confidentiality

9.1. Confidentiality – policy

All information supplied to the CSO is treated as strictly confidential. The Statistics Act, 1993 sets stringent confidentiality standards: Information collected may be used only for statistical purposes, and no details that might be related to an identifiable person or business undertaking may be divulged to any other government department or body.

These national statistical confidentiality provisions are reinforced by the following EU legislation: Council Regulation (EC) No 223/2009 on European statistics for data collected for EU statistical purposes. Further details are outlined in the CSO's Code of Practice on Statistical Confidentiality.

For more information on the CSO confidentiality policy please visit:

<https://www.cso.ie/en/aboutus/lqdp/csodatapolicies/statisticalconfidentiality/>

9.2. Confidentiality – data treatment

The confidentiality of all information provided to the CSO by individual respondents is guaranteed by law under the 1993 Statistics Acts. The data inputs which are used to collate the population and migration estimates i.e. Census of Population, births and deaths (Vital Statistics) and migration estimates (LFS) are anonymised prior to being provided to the Demography unit.

The data relates to future population and labour force estimates. Additionally, single year of age is top-coded to 99 plus. All data is fully anonymised.

10. Release Policy

10.1. Release Calendar

The date of dissemination of all statistics released by CSO can be found in the Release Calendar published in CSO.ie. This calendar is regularly updated.

10.2. Release calendar access

The release calendar can be accessed via the CSO website, www.cso.ie, or directly from this link:

<https://www.cso.ie/en/csolatestnews/releasecalendar/>

10.3. User access

In accordance with Principle 6 of the European Statistics Code of Practice all users of CSO statistics have equal access via the CSO website at the same time of 11 am. Any privileged pre-release access to any outside user is limited, controlled and publicised. In the event that leaks occur, pre-release arrangements are revised so as to ensure impartiality.

The CSO recognises that in very limited circumstances a business need for pre-release access may be substantiated. Any form of pre-release access is a privilege and a strict CSO pre-release access policy is adhered to for these special requests. The full pre-release access policy can be accessed at <https://www.cso.ie/en/aboutus/lgdp/csodatapolicies/csopolicyonpre-releaseaccess/>

The various results are published nationally in statistical release format as well as on the CSO website (www.cso.ie). Selected extracts from the results are posted on the CSO's data dissemination database, PxStat.

11. Frequency of Dissemination

Population and migration estimates are published annually, typically in August of the reference year. Publication is generally delayed by one month in the year subsequent to a Census, this allows for the incorporation of Census revisions into the process.

12. Accessibility and clarity

12.1. News release

A press conference is held annually on publication day to enable users and commentators to fully understand the data or seek further clarification.

12.2. Publications

The Population and Migration estimates are typically published annually in August. Population and migration publications dating back to 2003 are available on the CSO website (the 2003 publication contains 6 years of retrospective data).

The projections are published on the CSO website. The most recent publication can be accessed via <https://www.cso.ie/en/statistics/population/populationandmigrationestimates/>

12.3. On-line database

All data disseminated by CSO can be found on our online dissemination database as follows: <https://data.cso.ie/product/pme>

12.3.1. AC 1. Data tables - consultations

The Population and Migration Estimates page on the CSO website was accessed in the CSO website 38002 times during the period 1/1/2024 and 30/06/2024 by a total of 21011 different users.

12.4. Micro-data Access

Not applicable.

12.5. Other

Population data relating to Ireland is also available on the Eurostat website at the following link:
<http://ec.europa.eu/eurostat/web/population-demography-migration-projections>

The population estimates are reproduced in a number of statistical releases in the office such as Men and Women in Ireland, Measuring Ireland's Progress and The CSO Yearbook etc.

12.5.1. AC2. Metadata consultations

Not calculated.

12.6. Documentation on Methodology

Further documentation on the methods used in this survey can be found on the CSO website or by following the link
<https://www.cso.ie/en/methods/population/populationandmigrationestimates/>

12.6.1. AC3 – Metadata completeness – rate

Not calculated.

12.7. Quality Documentation

For more information on the quality of this release please refer to the CSO's methods page as follows:
<https://www.cso.ie/en/methods/qualityreports/populationandmigrationestimates/>

13. Quality Management

13.1. Quality Assurance

Quality Management Framework

The CSO avails of an office wide Quality Management Framework (QMF). This framework allows all CSO processes and outputs to meet the required standard as set out in the European Statistics Code of Practice (ESCOP). The QMF foundations are based on establishing the UNECE's Generic Statistical Business Process Model (GSBPM) as the operating statistical production model to achieve a standardised approach to Quality Management. All and any changes implemented to CSO processes and outputs require adherence to the QMF.

13.2. Quality Assessment

The CSO requires that all produced outputs undergo an annual self-assessment on the quality of the processes used to generate the output and the disseminated product itself. During the last iteration of this exercise it was found that the Population and Migration estimates release meets the basic set of user needs, however some users have demands for additional products that cannot currently be met. With regards to accuracy and reliability, the produced release is limited to a small extent however no immediate changes to processes are deemed to be required and several aspects of the methodology in use are being actively investigated at present.

14. Relevance

14.1. User Needs

The population and migration estimates meet a wide range of national and international requirements. The Irish Government and Eurostat are primary clients and the data collected is used as an input for a wide range of public policy and planning activities.

Other CSO sections which make use of the population data include Labour Force Statistics and Vital Statistics.

14.1.1. Main National Users

The data has wide national usage from government departments (particularly those involved in policy formation and planning), economists and research bodies. A number of special interest groups working in the area of migration and integration also require the data.

External users who make significant use of the population estimates data include, but are not limited to: The ESRI, The Department of Finance, The Department of Health, The Department of Children and Youth Affairs, The Department of Environment and Natural Resources, The Oireachtas, Special Interest Groups (particularly those with an interest in migration) and National media organisations.

14.1.2. Principal External Users

International users include Eurostat, The European Commission and various international organisations.

14.2. User Satisfaction

Not measured.

14.3. Data Completeness

Not calculated.

14.3.1. Data Completeness rate

Not calculated.

15. Accuracy and reliability

15.1. Overall accuracy

The base population is sourced from the national Census of Population and therefore is fully representative and highly accurate.

15.2. Sampling Error

The base population is sourced from the national Census and therefore is fully representative.

Births and deaths are sourced from registered data and are therefore fully representative.

The migration estimates are primarily based on the LFS, which is a sample survey and therefore subject to sampling error. Precision estimates are measured as part of the survey process. For further information on LFS sampling errors please refer to the LFS quality report.

15.2.1. A1. Sampling error indicator

Not applicable.

15.3. Non-sampling Error

In addition to known sampling errors, data can also be subject to non-sampling errors (for example measurement errors arising from questions not capturing the desired information accurately). The exact level of the non-sampling error is far more difficult to measure than the sampling error and no formal estimate of the non-sampling error is available in the LFS. For further information on LFS non-sampling errors please refer to the LFS quality report.

15.3.1. Coverage error

Not measured.

15.3.1.1. A2. Over coverage rate

Not applicable.

15.3.1.2. A3. Common units – proportion

Not applicable.

15.3.2. Measurement error

The migration estimates are compiled with reference to movements in other migration indicators such as Residence permits issued and the number of Personal Public Service (PPS) numbers allocated to non-Irish nationals and the number of visas issued to Irish nationals to a number of the destinations including Australia, US and Canada. In addition, data on National Insurance numbers (equivalent to PPS numbers) issued to Irish nationals in the UK is referenced.

Measurement error is not formally measured for this survey; however the various data components are revised following the publication of the Census of Population (every 5 years).

15.3.3. Non-Response Error

Not applicable.

15.3.3.1. Unit non-response rate

Not applicable.

15.3.3.2. Item non-response rate

Not applicable.

15.3.4. Processing error

- A. Data capture errors: The data used to compile the population estimates, has been checked and verified by the various data providers, prior to being provided to the Demography unit.
- B. Data editing: Minor edits are performed to correct for inconsistencies and missing values within the data provided.

15.3.5. Model assumption error

It is assumed for the purpose of outwards migrants that non-respondents have the same migration profiles as respondents.

16. Timeliness and punctuality

16.1. Timeliness

The annual population and migration estimates (mid-April reference period) are typically published in August, in conjunction with the Q2 LFS publication.

16.1.1. TP1. Time lag – First results

No provisional outputs are published.

16.1.2. TP2. Time lag – Final results

119 days

16.2. Punctuality

The statistics on Population and Migration Estimates are published in accordance with the dates indicated in the CSO advance release calendar.

16.2.1. TP3. Punctuality – Punctuality - delivery and publication

0 Days

17. Comparability

17.1. Comparability – Geographical

Not applicable.

17.1.1. CC1. Asymmetry for mirror flow statistics

Not applicable.

17.2. Comparability over time

Annual population estimates are available since 1951. Migration estimates have been compiled since 1987, with additional series added over time:

- Estimated population by age group, sex, regional authority area and year is available from 1996.
- Estimated population by sex, citizenship and year is available from 2006.
- Estimated migration by citizenship, year and sex is available from 2006.

17.2.1. Length of Comparable Time series

25 years.

17.3. Coherence – cross domain

The migration estimates are compiled with reference to movements in other migration indicators such as Residence permits issued to 3rd Country Nationals and the number of Personal Public Service (PPS) numbers allocated to non-Irish nationals and the number of visas issued to Irish nationals to a number of the destinations including Australia, US and Canada. In addition, data on National Insurance numbers (equivalent to PPS numbers) issued to Irish nationals in the UK is referenced.

17.3.1. Coherence – Sub annual and annual statistics

Not applicable.

17.3.2. Coherence with National Accounts

Not applicable.

17.4. Coherence – internal

Not applicable.

18. Cost and Burden

Estimates of Cost and Burden can be obtained from the Response Burden Barometer
<https://www.cso.ie/en/statistics/enterprisestatistics/responseburdenbarometer/>

Survey specific information is available via CSO's dissemination database PxStat.
<https://data.cso.ie/product/RBB>

19. Data Revision

19.1. Data Revision Policy

Published statistics are subject to correction and revision for a variety of reasons. The most common reasons include the receipt of additional information (for example, late survey responses) and updated seasonal factors. Occasional revisions also occur as a result of changes to definitions, methodology, classifications and general updating of statistical series.

It is recognised internationally that the existence of a sound revisions policy maintains credibility in official statistics. The CSO General Revisions Policy, which details how revisions should be managed and communicated to users, outlines the three main types of revisions:

- Planned Routine Revisions
- Planned Major Revisions
- Unplanned Revisions.

One reason for unplanned revisions occurring can be when errors are detected after publication. The 'CSO Error Correction Policy – How to deal with Publication Errors' outlines the steps taken when these errors are detected. As required under Principle 6.3 of the European Statistics Code of Practice, errors detected in published statistics are corrected at the earliest possible date and users are informed. An important step in the process is the documentation and analysis of errors that have occurred and their causes. This allows the CSO to take measures preventing similar errors from occurring in the future and uniformity in dealing with them when they do.

The data revision policy that CSO statistics adheres to can be found via the following link:
<https://www.cso.ie/en/methods/quality/treatmentofrevisions/>

19.2. Data Revision Practice

The population estimates are revised following the publication of The Census of Population. The most recent revisions to the population estimates data series were scheduled revisions, arising as a result of the 2022 Census of Population. As a result of the Census, new population estimates were calculated for the years 2017-2022 (inclusive), using the 2022 Census usually resident population stock as the base. Intercensal revisions of the type described above will be completed every 5 years after each Census of Population.

It is to be noted that in the 2022 population estimates, those people from households that were fully temporarily absent outside the state on Census night are included for the first time. As this group has not

been included in the Population and Migration Estimates prior to 2022, the additivity of population change components has been impacted between 2021 and 2022.

19.2.1. Data Revision – Average size

Not calculated.

20. Statistical processing

20.1. Source Data

The Census which provides the base population is considered to be accurate. Migration flows are more difficult to measure but the LFS survey is considered to have a high level of accuracy due to the relatively large sample.

Births and deaths are sourced from registered data, which is provided to the Vital Statistics unit by the General Register Office (GRO).

A number of data inputs are required in order to produce the population and migration estimates. The most recent Census (2022) is used to establish the base population. The Labour Force Survey (LFS) is used to estimate emigration and immigration. Births and deaths (administrative data) is provided by the Vital Statistics unit. The data is collated and compiled by the Demography unit of the CSO.

20.1.1. Population and sampling frame

The most recent Census of Population data is used to establish the base population.

The principal source of the migration estimates is the Labour Force Survey (LFS). The total quarterly sample at any point in time is designed to be approximately 26,000 households. The sampling frame consists of the stock of private households as recorded by The Census of Population. The migration flows of the Ukrainian population that arrived from 2022 under the Beneficiaries of Temporary Protection initiative are accounted for using administrative data.

Births and deaths (administrative data) is compiled by the Vital Statistics unit and provided by the General Register Office (GRO).

20.1.2. Sampling design

Not applicable,

20.1.3. Survey size

Not applicable.

20.1.4. Survey technique

Not applicable.

20.2. Frequency of data collection

Annual

20.3. Data Collection

The principal source of information for the estimation of the gross annual migration flows is the Labour Force Survey (LFS), which also provides the basis for the classification of the flows by sex, age group, origin/destination and citizenship.

The migration estimates are compiled with reference to movements in other migration indicators such as the number of Personal Public Service (PPS) numbers allocated to non-Irish nationals and the number of visas issued to Irish nationals to a number of the destinations including Australia, US and Canada. In addition, data on National Insurance numbers (equivalent to PPS numbers) issued to Irish nationals in the UK is referenced.

20.3.1. Type of Survey/Process

Multi source statistics based on a combination of data collected for purposes other than purely this output and administrative sources.

20.3.2. Questionnaire (including explanations)

The questions pertaining to migration are surveyed via the LFS. The most recent questionnaire can be found at the following link: <https://www.cso.ie/en/methods/surveyforms/labourforcesurvey/>

20.3.3. Survey Participation

- The Census is a statutory survey and under Section 26 of the Statistics Act, 1993, participation is compulsory.
- Participation in the LFS is voluntary for respondents but collection is mandatory.
- The recording of births and deaths is compulsory, the Vital Statistics unit are provided with registered births and deaths by the General Register Office (GRO).

20.3.4. Data Capture

The base population is collected by the Census area and provided to the Demography unit in an anonymised format.

The LFS is conducted using mixed mode data collection with the introduction of Computer Assisted Telephone Interviewing (CATI). Information is collected from each sample household over 5 successive quarters or waves. However, in the LFS, the first interview is conducted by a team of face-to-face interviewers using Computer Assisted Personal Interviewing (CAPI). The four follow-up interviews are conducted using CATI from a dedicated call centre where householders have agreed to conduct a telephone interview on each occasion. In circumstances where householders have not agreed to conduct a telephone interview, the interviews are conducted using face-to-face interviews.

Administrative data relating to births and deaths is provided to the Vital Statistics unit by the General Register Office (GRO).

20.4. Data Validation

Data inputs have generally been edited in advance of being submitted to the Demography unit.

20.5. Data Compilation

The principal source of information for the estimation of the gross annual migration flows is the Labour Force Survey (LFS), which also provides the basis for the classification of the flows by sex, age group, origin/destination and citizenship.

The grossed migration flows are smoothed using Census data to produce a representative single year of age distribution. The components are added or subtracted at unit (person) level as appropriate to arrive at an updated population figure. See below:

- Base Population year T
- + Births
- - Deaths
- + Immigration
- - Emigration
- = Population year T+1

20.5.1. Imputation (for Non-Response or Incomplete Data Sets)

Imputation is also used to estimate births and deaths by citizenship. Births by citizenship are imputed using the distribution of the citizenship of babies as recorded in the 2022 census, while deaths by citizenship are also imputed using the latest Census results.

20.5.1.1. A7. Imputation rate

Not calculated.

20.5.2. Grossing and Weighting

The Census of Population – Provides the base population.

The LFS – Provides migration flows.

The Vital Statistics unit – Provide data in relation to births and deaths.

The Census of Population is used to establish the base population at unit (person) level. The LFS is used to ensure that emigrants and immigrants receive grossing factors based on the gender, age group, region and citizenship breakdown in the current population. Births and deaths are added and subtracted at a unit (person) level to arrive at an updated population.

20.6. Adjustment

Not applicable.

20.6.1. Seasonal Adjustment

Not applicable.

21. Comment