



An
Phríomh-Oifig
Staidrimh

Central
Statistics
Office

Standard Report on Methods and Quality for Census of Population 2011

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1.1. Contact organisation	Central Statistics Office of Ireland
1.2. Contact organisation unit	Census Division
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3. Statistical presentation	
3.1. Data description	Broad description of the census exercise
3.2. Classification system	ISCO-08, NACE Rev. 2, etc.
3.3. Coverage - sector	
3.4. Statistical concepts and definitions	
3.4.1. Statistical concepts and definitions - Usual residence	Usual residence means the place where a person normally spends the daily period of rest, regardless of temporary absences for purposes of recreation, holidays, visits to friends and relatives, business, medical treatment or religious pilgrimage.

Persons usually resident in the place of enumeration but absent, or expected to be absent, at the time of the census for less than one year shall be considered as temporarily absent persons and thus included in the total usually population. In contrast, persons living or expected to live outside the place of enumeration for one year or more shall not be considered temporarily absent and shall therefore be excluded from the total population. This is regardless of the length of visits that they may pay to their families from time to time.

Persons who are enumerated but do not meet the criteria for usual residence in the place of enumeration, i.e. do not live or do not expect to live in the place of enumeration for a continuous period of at least 12 months, are considered temporarily present and are therefore not counted in the total usually resident population.

For the Irish Census, a person's usual residence was defined as the place where he/she spent most of his/her daily night's rest. The general guidance given on classifying whether the address at which the person was enumerated was their usual residence was as follows :

An address was considered a usual residence if the person had lived at the address for a continuous period of at least 12 months before Census Night or arrived at the address in the 12 month period leading to the Census with the intention of staying for at least one year.

The following specific guidance was also offered on the Census questionnaire:

Persons away from home during the week who returned to the family home at weekends were advised to consider the family home as their place of usual residence.

Primary and secondary school students who boarded away from home and third level students at college or university were advised to consider the family home as their place of usual residence

If a person spent or intended to spend 12 months or more in an institution, then that institution was that person's place of usual residence.

If a person regularly lived in more than one residence during the year leading to the census, then the place where he/she spent the majority of their time should be chosen as the place of usual residence.

Householders were also required to complete questions in respect of persons who were usually resident in the household but absent on Census Night. Two questions were relevant for the usual residence criteria. The first was "How long altogether is this person away for?". There were two response options to this question

- Less than 12 months
- 12 months or more

The second was "Was this person in the Republic of Ireland on Sunday 10 April?"

- Yes
- No

For the purposes of the hypercubes, persons who were absent but were away for less than 12 months outside of the Republic of Ireland were included as usual residents.

Where an entire household was absent on Census night household members who were out of the country on Census night were not counted in the Census.

	<p>All persons captured on Reconciliation Forms (see section 12.1) were considered usual residents.</p>
3.4.2. Statistical concepts and definitions - Sex	<p>Sex is captured in the Census questionnaire through responses provided to Question 2, which is obligatory for every person.</p> <p>Question 2 is headed ‘Sex’ and provides respondents with two potential options ‘1 – Male’ or ‘2 –Female’.</p> <p>When coding the sex variable, the responses provided to Question 2 are used to decide which sex should be allocated to the person record. In instances where the question is not correctly answered or left blank, the sex of the person is determined through a manual inspection of other information provided on the Census form, particularly the list of persons present and name.</p>
3.4.3. Statistical concepts and definitions - Age	<p>The age reached at the reference date (in completed years).</p>
3.4.4. Statistical concepts and definitions - Marital status	<p>Marital status is the (legal) conjugal status of an individual in relation to the marriage laws of the country (de jure status).</p> <p>A person shall be classified according to his/her most recently acquired legal marital status at the reference date.</p> <p>'Registered partnerships' are reported only by countries that have a legal framework regulating partnerships that:</p> <ul style="list-style-type: none"> (a) lead to legal conjugal obligations between two persons; (b) are not marriages; (c) prevent persons to commit themselves into multiple partnerships with different partners. <p>In countries where the legislation includes provisions for married partners to be 'legally separated', such 'legally separated' persons are classified under 'married'.</p> <p>Whereas no one piece of law defines legal marital statuses in Ireland, they are referred to in several legislative acts. Article 41 of the Irish constitution</p>

	<p>refers to the essential link between marriage and the family.</p> <p>The Family Law (Divorce) Act 1996 recognised divorce in Ireland for the first time, thereby ensuring divorce was a legal marital status.</p> <p>Annulment has been a legal marital status in Ireland since the 1870 Matrimonial Causes and Marriage Law Act. Subsequent case law has built on this act.</p> <p>Same-sex civil partnerships became a legal marital status in Ireland through the enactment of the Civil partnership and certain rights and obligations of cohabitants act 2010.</p> <p>The minimum age for marriage and same-sex civil partnerships is 18.</p>
<p>3.4.5. Statistical concepts and definitions - Family status</p>	<p>The family nucleus is defined in the narrow sense, that is as two or more persons who belong to the same household and who are related as husband and wife, as partners in a registered partnership, as partners in a consensual union, or as parent and child. Thus a family comprises a couple without children, or a couple with one or more children, or a lone parent with one or more children. This family concept limits relationships between children and adults to direct (first-degree) relationships, that is between parents and children.</p> <p>Child (son/daughter) refers to a blood, step- or adopted son or daughter (regardless of age or marital status) who has usual residence in the household of at least one of the parents, and who has no partner or own children in the same household. Foster children are not included. A son or daughter who lives with a spouse, with a registered partner, with a partner in a consensual union, or with one or more own children, is not considered to be a child. A child who alternates between two households (for instance if his or her parents are divorced) shall consider the one where he or she spends the majority of the time as his or her household. Where an equal</p>

amount of time is spent with both parents the household shall be the one where the child is found at the time on census night.

The term couple shall include married couples, couples in registered partnerships, and couples who live in a consensual union.

Registered partnerships are reported only by countries that have a legal framework regulating partnerships that:

- (a) lead to legal conjugal obligations between two persons;
- (b) are not marriages;
- (c) prevent persons to commit themselves into multiple partnerships with different partners.

Two persons are considered to be partners in a 'consensual union' when they

- belong to the same household, and
- have a marriage-like relationship with each other, and
- are not married to or in a registered partnership with each other.

'Skip-generation households' (households consisting of a grandparent or grandparents and one or more grandchildren, but no parent of those grandchildren) are not included in the definition of a family.

Relationships between household members and family status were identified using the relationship question on the Irish Census form. Person 1 on the Census form was not required to answer the relationship question. Person 2 was required to state his/her relationship to Person 1. Person 3 in the household was required to state his/her relationship to Persons 1 and 2. Person 4 was required to state his/her relationship to Persons 1, 2 and 3. Persons 5 and 6 and any subsequent persons were required to state their relationship to Persons 2, 3 and 4.

In the case of usual residents absent from the household on Census night relationship to Person 1 is collected.

There were 12 relationship options available, of which one was selected.

These options were

- Husband or wife
- Partner (including same-sex partner)
- Son or daughter
- Step-child

	<ul style="list-style-type: none"> • Brother or sister • Mother or father • Grandparent • Step-mother/father • Son-/daughter-in-law • Grandchild • Other related • Unrelated (including foster child) <p>The individual families and the relationships within each family is either coded automatically or manually by operator using the Family Nucleus Coding station.</p>
<p>3.4.6. Statistical concepts and definitions - Household status</p>	<p>In the Irish Census, a household is defined according to the housekeeping concept. The precise definition of a household used is as follows:</p> <ul style="list-style-type: none"> • One person living alone, or • A group of related or unrelated people living at the same address with common housekeeping arrangements, meaning they share at least one meal a day or share a living or sitting room. <p>Relationships between household members and family status were identified using the relationship question on the Irish Census form which is a combination of relation to the reference person and a relationship matrix. Specifically, Person 1 on the Census form was not required to answer the relationship question. Person 2 was required to state his/her relationship to Person 1. Person 3 in the household was required to state his/her relationship to Persons 1 and 2. Person 4 was required to state his/her relationship to Persons 1, 2 and 3. Persons 5 and 6 and any subsequent persons were required to state their relationship to Persons 1, 2, 3 and 4.</p> <p>In the case of usual residents absent from the household on Census Night</p>

relationship to Person 1 on the census form was also collected.

There were 12 relationship options available, of which one was selected.

These options were

- Husband or wife
- Partner (including same-sex partner)
- Son or daughter
- Step-child
- Brother or sister
- Mother or father
- Grandparent
- Step-mother/father
- Son-/daughter-in-law
- Grandchild
- Other related
- Unrelated (including foster child)

The individual families and the relationships within each family is either coded automatically or manually by an operator during Census processing using the relationship question, as well as the information provided in the date of birth, usual residence and marital status questions.

Using the following coding frame.

The family nucleus code effectively defines the structure that exists in the non-single person private household for **usual residents**. FNC is based on the relationship to Person 1 of all other members of the household. There may be one, two or three family nuclei within the same household. At most, 3 family nuclei will be coded.

- The head of the first family will be allocated FNC 1;
- the head of the second family will be allocated FNC 4 and

- the head of the third family will be assigned FNC 7.

The FNC Matrix shows the possible codes in each family.

FNC Matrix

	Partner 1 or Spouse 1	Partner 2 or Spouse 2	Children
<u>Private Households</u>			
• First Family	FNC 1	FNC 2	FNC 3
• Second Family	FNC 4	FNC 5	FNC 6
• Third Family	FNC 7	FNC 8	FNC 9
• Non-relatives and/or Not usually resident	FNC 0	FNC 0	FNC 0
<u>Communal Establishment</u>	FNC 0	FNC 0	FNC 0

Note: In the Irish Census, persons defined as children can be of any age providing they have never been married.

3.4.7. Statistical concepts and definitions - Current activity status

Current activity status' is the current relationship of a person to economic activity, based on a reference period of one week, which may be either a specified, recent, fixed, calendar week, or the last complete calendar week, or the last seven days prior to enumeration.

The 'currently economically active population' comprises all persons who fulfil the requirements for inclusion among the employed or the unemployed.

'Employed' persons comprise all persons aged 15 years or over who during the reference week:

- performed at least one hour of work for pay or profit, in cash or in kind, or
- 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.

The 'unemployed' comprise all persons aged 15 years or over who were:

- (a) 'without work', that is, were not in wage employment or self-employment during the reference week; and
- (b) 'currently available for work', that is, were available for wage employment or self-employment during the reference week and for two weeks after that; and
- (c) 'seeking work', that is, had taken specific steps to seek wage employment or self-employment within four weeks ending with the reference week.

The category 'Currently not economically active' includes persons below the national minimum age for economic activity.

In ascribing a single activity status to each person, priority is given to the status of 'employed' in preference to 'unemployed', and to the status of 'unemployed' in preference to 'not economically active'.

The reference week in the CSO's question on Present Principal Status was the week leading up to the night of enumeration, ie Sunday April 10th 2011. This is implicit in the question.

The question appeared after the age filter on the Census form which instructed persons aged 14 and under did not to respond to it. If persons aged 14 or under did respond to the question, the response was removed during processing.

No guidelines were provided on how to answer the question other than the respondent was required to mark one of the eight response options.

These options were

- Working for payment or profit,
- Looking for first regular job,
- Unemployed,
- Student or pupil,
- Looking after home/family,
- Retired from employment,
- Unable to work due to permanent sickness or disability

	<ul style="list-style-type: none"> • Other. <p>The 'Other' option was accompanied by write-in boxes where respondents could write in their present status. The text captured from this option was subsequently coded to 'Other' or to one of the other seven options where applicable.</p> <p>Where current activity status was left blank by the respondent a value was imputed using other information on the form and rotation files whose current activity profile was based on sectors of the general population.</p>
<p>3.4.8. Statistical concepts and definitions - Occupation</p>	<p>Occupation' refers to the type of work done in a job (that is the main tasks and duties of the work). Persons doing more than one job are allocated an occupation based on their main job, which is identified according to the time spent on the job or, if not available, to the income received. The breakdown by occupation is available for persons aged 15 or over that were:</p> <ul style="list-style-type: none"> — employed during the reference week, or — unemployed during the reference week, but have ever been in employment <p>Persons are classified according to the occupation they had during their most recent employment. The categories included in the breakdown 'occupation' correspond to the major groups of the ISCO-08 (COM) classification.</p> <p>Persons under the age of 15 years, as well as persons aged 15 or over that were:</p> <ul style="list-style-type: none"> — not economically active during the reference week, or — unemployed, never worked before (i.e. they have never been employed in their lives) <p>are classified under 'not applicable'.</p> <p>The allocation of a person within the breakdowns of the topics 'Occupation', 'Industry' and 'Status in employment' is based on the same job.</p>

<p>3.4.9. Statistical concepts and definitions - Industry</p>	<p>Industry (branch of economic activity) is the kind of production or activity of the establishment (or similar unit) in which the job of a currently economically active person is located.</p> <p>Persons doing more than one job shall be allocated an industry (branch of economic activity) based on their main job, which is to be identified according to the time spent on the job or (if not available) the income received.</p> <p>The breakdown by industry is available for persons aged 15 or over that were:</p> <ul style="list-style-type: none"> — employed during the reference week, or — unemployed during the reference week, but have ever been in employment <p>Persons are classified according to the industry they worked in during their most recent employment. The categories included in the breakdown 'industry' list the 21 sections of the NACE Rev. 2 classification and appropriate aggregates.</p> <p>Persons under the age of 15 years, as well as persons aged 15 or over that were:</p> <ul style="list-style-type: none"> — not economically active during the reference week, or — unemployed, and have never worked before (i.e. have never been employed in their lives) <p>are classified under 'not applicable'.</p> <p>The allocation of a person within the breakdowns of the topics 'Occupation', 'Industry' and 'Status in employment' is based on the same job.</p>
<p>3.4.10. Statistical concepts and definitions - Status in employment</p>	<p>An 'employee' is a person who works in a 'paid employment' job, that is a job where the explicit or implicit contract of employment gives the incumbent a basic remuneration, which is independent of the revenue of the unit for which he/she works.</p> <p>An 'employer' is a person who, working on his or her own account or with a small number of partners, holds a 'self-employment' job and, in this capacity, on a continuous basis (including the reference week) has engaged one or more persons to work for him/her as 'employees'.</p> <p>If a person is both employer and employee, he/she shall be allocated to only one group according to the time spent on the job or (if not available) the income received.</p> <p>An 'own-account worker' is a person who, working on his/her own account or with one or a few partners, holds a 'self-employment job' and has not</p>

	<p>engaged, on a continuous basis (including the reference week), any 'employees'.</p> <p>A 'contributing family worker' is a person who</p> <ul style="list-style-type: none"> — holds a 'self-employment' job in a market-oriented establishment operated by a related person, living in the same household, and — cannot be regarded as a partner (that is an employer or own-account worker) because the degree of commitment to the operation of the establishment, in terms of working time or other factors to be determined by national circumstances, is not at a level comparable to that of the head of the establishment. <p>A 'member of a producers' cooperative' is a person who holds a 'self-employment' job in an establishment organised as a cooperative, in which each member takes part on an equal footing with other members in determining the organisation of production, sales and/or other work, the investments and the distribution of the proceeds among the members.</p> <p>In the Irish Census, persons who identified themselves as either working, unemployed or retired were required to answer the employment status question. There were four employment status options, one of which was chosen. These options were :</p> <ul style="list-style-type: none"> • Employee • Self-employed, with paid employees • Self-employed, without paid employees • Assisting relative (not receiving a fixed wage or salary) <p>The Census did not identify persons who are both employers and employees.</p>
<p>3.4.11. Statistical concepts and definitions - Place of work</p>	<p>The location of the place of work is the geographical area in which a currently employed person does his/her job.</p> <p>The place of work of those mostly working at home is the same as their usual residence. The term 'working' refers to work done as an 'employed person' as defined under the topic 'Current activity status'. 'Mostly' working at home means that the person spends all or most of the time working at</p>

	home, and less, or no, time in a place of work other than at home.
3.4.12. Statistical concepts and definitions - Educational attainment	<p>'Educational attainment' refers to the highest level successfully completed in the educational system of the country where the education was received. All education which is relevant to the completion of a level is taken into account even if this was provided outside schools and universities. Persons aged 15 years or over are classified under only one of the categories according to their educational attainment (highest completed level). Persons under the age of 15 years are classified under 'not applicable'.</p>
3.4.13. Statistical concepts and definitions - Size of the locality	<p>A locality is defined as a distinct population cluster, that is an area defined by population living in neighbouring or contiguous buildings. Such buildings may either:</p> <ul style="list-style-type: none"> (a) form a continuous built-up area with a clearly recognisable street formation; or (b) though not part of such a built-up area, comprise a group of buildings to which a locally recognised place name is uniquely attached; or (c) though not meeting either of the above two criteria, constitute a group of buildings, none of which is separated from its nearest neighbour by more than 200 metres.
3.4.14. Statistical concepts and definitions - Place of birth	<p>Place of birth is defined as the place of usual residence of the mother at the time of the birth, or, if not available, as the place in which the birth took place.</p> <p>Information on the country of birth is based on the international boundaries existing on 1 January 2011. 'EU Member State', in particular, means a country that is a member of the European Union on 1 January 2011. The list of countries in the breakdown 'country/place of birth' serves only for statistical purposes.</p> <p>For reporting countries that are EU Member States, the sub-category under</p>

	<p>the category 'other EU Member State' that refers to their Member State does not apply. For reporting countries that are not EU Member States, the category 'Other EU Member State' shall be read as 'EU Member State'. The category 'Information not classifiable according to current borders' covers those persons whose country of birth existed at the time of the birth, but no longer exists at the time of the census, and who cannot be allocated uniquely to one country existing at the time of the census, i.e. according to current borders.</p> <p>The category 'outside any country' covers persons for whom the usual residence of the mother at the time of the birth is not known and who were born outside the borders of any country, for example at sea or in the air.</p> <p>Place of birth was directly asked on the Irish Census form. The question required persons to write in their county (if in Ireland) or country of birth.</p> <p>An instruction was given in the question body that the place of birth should be the place where the person's mother lived at the time of the birth.</p>
<p>3.4.15. Statistical concepts and definitions - Country of citizenship</p>	<p>Citizenship is defined as the particular legal bond between an individual and his/her State, acquired by birth or naturalisation, whether by declaration, option, marriage or other means according to the national legislation.</p> <p>A person with two or more citizenships is allocated to only one country of citizenship, to be determined in the following order of precedence:</p> <ol style="list-style-type: none"> 1. reporting country; or 2. if the person does not have the citizenship of the reporting country: other EU Member State; 3. if the person does not have the citizenship of another EU Member State: other country outside the European Union. <p>'EU Member State' means a country that is a member of the European Union on 1 January 2011. The list of countries in the breakdown 'Country of citizenship' shall only apply for statistical purposes.</p> <p>For reporting countries that are EU Member States, the sub-category of the category 'citizenship not of reporting country, but other EU Member State' that refers to their Member State does not apply. For reporting countries that are not EU Member States, the category 'citizenship not of reporting country, but other EU Member State' shall be changed to 'citizenship of an EU Member State'.</p> <p>Persons who are neither citizens of any country nor stateless and who have</p>

	<p>some but not all of the rights and duties associated with citizenship shall be classified under 'recognised non-citizens'.</p> <p>There was no question in the Irish Census on citizenship. However, there was a question on nationality. The question required persons to indicate whether they have Irish nationality, a non-Irish nationality or no nationality. Persons who indicated that they had a non-Irish nationality were required to write in this nationality. Persons who had more than one nationality are required to write in each of their non-Irish nationalities.</p> <p>There was also an option for persons to indicate that they had no nationality.</p>
<p>3.4.16. Statistical concepts and definitions - Year of arrival in the country</p>	<p>The year of arrival is the calendar year in which a person most recently established usual residence in the country. The data for 2011 refer to the time span between 1 January 2011 and the reference date.</p>
<p>3.4.17. Statistical concepts and definitions - Residence one year before</p>	<p>This indicates the relationship between the current place of usual residence and the place of usual residence one year prior to the census. Children under one year of age are classified under 'Not applicable'. 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> <p>The question in the Irish Census was asked of persons aged 1 year or over. It asked 'Where did you usually live one year ago?'.</p> <p>There were three response options</p>

	<ul style="list-style-type: none"> • Same as now • Elsewhere in Ireland (including Northern Ireland) • Elsewhere abroad <p>If persons indicated that their usual residence one year ago was the 'same as now', it was coded to the geography at which they were enumerated.</p> <p>If they indicated that their usual residence one year ago was 'Elsewhere in Ireland (including Northern Ireland)', they were required to write in the county in which they lived.</p> <p>If they indicated that their usual residence one year ago was 'Elsewhere abroad', they were required to write in the country in which they lived.</p> <p>The write-in answers were subsequently coded during processing to a lookup containing county and country codes.</p>
3.4.18. Statistical concepts and definitions - Housing arrangements	<p>The topic 'Housing arrangements' covers the whole population and refers to the type of housing in which a person usually resides at the time of the census. This covers all persons who are usual residents in different types of living quarters, or who do not have a usual residence and stay temporarily in some type of living quarters, or who are roofless, sleeping rough or in emergency shelters, when the census is taken.</p> <p>Occupants are persons with their usual residence in the places listed in the respective category.</p> <p>'Conventional dwellings' are structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are, at the reference date, either used as a residence, or vacant, or reserved for seasonal or secondary use.</p> <p>'Separate' means surrounded by walls and covered by a roof or ceiling so</p>

	<p>that one or more persons can isolate themselves. 'Independent' means having direct access from a street or a staircase, passage, gallery or grounds.</p> <p>'Other housing units' are huts, cabins, shacks, shanties, caravans, houseboats, barns, mills, caves or any other shelter used for human habitation at the time of the census, irrespective if it was designed for human habitation.</p> <p>'Collective living quarters' are premises which are designed for habitation by large groups of individuals or several households and which are used as the usual residence of at least one person at the time of the census.</p> <p>'Occupied conventional dwellings', 'other housing units' and 'collective living quarters' together represent 'living quarters'. Any 'living quarter' must be the usual residence of at least one person.</p> <p>The sum of occupied conventional dwellings and other housing units represents 'housing units'.</p> <p>The homeless (persons who are not usual residents in any living quarter category) can be persons living in the streets without a shelter that would fall within the scope of living quarters (primary homelessness) or persons moving frequently between temporary accommodation (secondary homelessness).</p>
<p>3.4.19. Statistical concepts and definitions - Type of family nucleus</p>	<p>The family nucleus is defined in the narrow sense, that is as two or more persons who belong to the same household and who are related as husband and wife, as partners in a registered partnership, as partners in a consensual union, or as parent and child. Thus a family comprises a couple without children, or a couple with one or more children, or a lone parent with one or more children. This family concept limits relationships between children and adults to direct (first-degree) relationships, that is between parents and children.</p> <p>Child (son/daughter) refers to a blood, step- or adopted son or daughter (regardless of age or marital status) who has usual residence in the household of at least one of the parents, and who has no partner or own children in the same household. Foster children are not included. A son or daughter who lives with a spouse, with a registered partner, with a partner in a consensual union, or with one or more own children, is not considered to be a child. A child who alternates between two households (for instance if his or her parents are divorced) shall consider the one where he or she spends the majority of the time as his or her household. Where an equal amount of time is spent with both parents the household shall be the one where the child is found at the time on census night.</p> <p>The term couple shall include married couples, couples in registered</p>

	<p>partnerships, and couples who live in a consensual union.</p> <p>Registered partnerships are reported only by countries that have a legal framework regulating partnerships that:</p> <ul style="list-style-type: none"> (a) lead to legal conjugal obligations between two persons; (b) are not marriages; (c) prevent persons to commit themselves into multiple partnerships with different partners. <p>Two persons are considered to be partners in a 'consensual union' when they</p> <ul style="list-style-type: none"> — belong to the same household, and — have a marriage-like relationship with each other, and — are not married to or in a registered partnership with each other. <p>'Skip-generation households' (households consisting of a grandparent or grandparents and one or more grandchildren, but no parent of those grandchildren) are not included in the definition of a family.</p>
<p>3.4.20.</p> <p>Statistical concepts and definitions -</p> <p>Size of family nucleus</p>	<p>The family nucleus is defined in the narrow sense, that is as two or more persons who belong to the same household and who are related as husband and wife, as partners in a registered partnership, as partners in a consensual union, or as parent and child. Thus a family comprises a couple without children, or a couple with one or more children, or a lone parent with one or more children. This family concept limits relationships between children and adults to direct (first-degree) relationships, that is between parents and children.</p> <p>Child (son/daughter) refers to a blood, step- or adopted son or daughter (regardless of age or marital status) who has usual residence in the household of at least one of the parents, and who has no partner or own children in the same household. Foster children are not included. A son or daughter who lives with a spouse, with a registered partner, with a partner in a consensual union, or with one or more own children, is not considered to be a child. A child who alternates between two households (for instance if his or her parents are divorced) shall consider the one where he or she spends the majority of the time as his or her household. Where an equal amount of time is spent with both parents the household shall be the one where the child is found at the time on census night.</p> <p>The term couple shall include married couples, couples in registered partnerships, and couples who live in a consensual union.</p> <p>Registered partnerships are reported only by countries that have a legal framework regulating partnerships that:</p> <ul style="list-style-type: none"> (a) lead to legal conjugal obligations between two persons; (b) are not marriages;

	<p>(c) prevent persons to commit themselves into multiple partnerships with different partners.</p> <p>Two persons are considered to be partners in a 'consensual union' when they</p> <ul style="list-style-type: none"> — belong to the same household, and — have a marriage-like relationship with each other, and — are not married to or in a registered partnership with each other. <p>'Skip-generation households' (households consisting of a grandparent or grandparents and one or more grandchildren, but no parent of those grandchildren) are not included in the definition of a family.</p>
<p>3.4.21. Statistical concepts and definitions - Type of private household</p>	<p>Private households may be defined according to the 'housekeeping concept' , or, if this is not possible, Member States may apply the 'household-dwelling' concept.</p> <p>1. Housekeeping concept</p> <p>According to the housekeeping concept, a private household is either:</p> <p>(a) A one-person household, that is a person who lives alone in a separate housing unit or who occupies, as a lodger, a separate room (or rooms) of a housing unit but does not join with any of the other occupants of the housing unit to form part of a multiperson household as defined below; or</p> <p>(b) A multiperson household, that is a group of two or more persons who combine to occupy the whole or part of a housing unit and to provide themselves with food and possibly other essentials for living. Members of the group may pool their incomes to a greater or lesser extent.</p> <p>2. Household-dwelling concept</p> <p>The household-dwelling concept considers all persons living in a housing unit to be members of the same household, such that there is one household per occupied housing unit. In the household dwelling concept, then, the number of occupied housing units and the number of households occupying them is equal, and the locations of the housing units and house holds are identical.</p> <p>The category 'Persons living in a private household' comprises 'Persons in a family nucleus' and 'Persons not in a family nucleus'. The category 'Persons in a family nucleus' comprises all persons who belong to a private household that contains a family nucleus of which they are a member.</p> <p>'Persons not in a family nucleus' comprises all persons who either belong to a non-family household or to a family household without being member of any family nucleus in that household.</p> <p>A non-family household can be a one-person household ('Living alone') or a multiperson household without any family nucleus. The category 'Not living alone' comprises persons that live either in a multiperson household</p>

without any family nucleus or in a family household without being member of any family nucleus in that household. Persons who belong to a skip-generation household and who are not member of any family nucleus in that household shall be classified in the optional category 'Persons living in a household with relative(s)'.

The term 'son/daughter' is defined as the term 'child' in the technical specifications for the topic 'Family status'. 'Husband/wife couple' means a married opposite-sex couple.

'Registered partnership' is defined as in the technical specifications for the topic 'Legal marital status'. 'Consensual union' is defined as in the technical specifications for the topic 'Family status'.

The category 'Partners' comprises 'Persons in a married couple', 'Partners in a registered partnership' and 'Partners in a consensual union'.

'Primary homeless persons' are persons living in the streets without a shelter that would fall within the scope of living quarters as defined in the technical specifications for the topic 'Type of living quarters'.

The Irish Census operates on the 'housekeeping' definition of households. In the field staff training literature on identifying households, the following definition is provided:

‘A private household comprises either one person living alone or a group of people (not necessarily related) living at the same address with common housekeeping arrangements – that is sharing at least one meal a day or sharing a living room or sitting room.’

This definition was also defined on the Census form.

Households are the basic unit of enumeration in the Census. Each household received a separate Census form and all details pertaining to each member of that household were completed within that form. When more than one household resided in a single dwelling unit, additional Census forms were distributed to each separate household. This ensured that the data of household members could be linked throughout the processing and during publication and analysis of the results.

Primary homeless persons in the Irish Census are referred to as 'Rough sleepers'.

The methodology used to identify and enumerate Rough Sleepers is described below.

Dublin

Within the county of Dublin, a count of rough sleepers was performed on Census Night on behalf of the CSO by the Dublin Region Homeless Executive (DRHE), the statutory body responsible for tackling homelessness in Dublin.

The methodology followed by the DRHE was based on 'discovery', that is, direct observation of the number of persons physically present and sleeping rough in Dublin on Census Night.

The count took place between 3.30 a.m and 6.00 a.m on the morning of Monday April 11 2011. To perform the count, teams of volunteers were recruited to work alongside experienced homeless sector workers. Each team was given a designated area to cover and was provided with a detailed map. Every street in Dublin city centre was walked. In more residential and suburban areas where there was evidence of persons sleeping rough, teams covered some ground in cars.

Each team carried two types of form, 'A' forms and 'B' forms. 'A' forms were used to record details of persons who were found 'bedded down', that is persons who were lying down in a sleeping bag or other bedding in the open air or in buildings or other places not designed for habitation. If the person was awake the teams explained their purpose and asked the person for the following basic information: name, age and nationality. The location and time of discovery were also recorded. The volunteers were instructed not to wake persons who were asleep but rather to note his/her gender and approximate age, along with the location and time of discovery. The 'B' forms were used to record the details of those who in all likelihood were sleeping rough but who were not yet bedded down, for example someone who was walking around, or to record other information such as bedding without anyone being there.

After the count took place, a meeting was held between DRHE, CSO and representatives from Dublin City Council and the voluntary sector where the total number of persons counted sleeping rough was agreed based upon the findings from the collated Forms 'A' and 'B': duplicates were removed, other irregularities were examined, and persons on the 'B' count were reviewed and a decision made as to whether to include these persons in the final count. This was done on the basis of whether that person was known to habitually sleep rough or whether he/she may have been enumerated elsewhere on Census Night, such as in Emergency accommodation.

The methodology followed provided a definitive minimum count of persons who were sleeping rough on Census Night in Dublin. It is accepted that there may have been additional persons hidden in inaccessible

	<p>locations, such as private property, who could not be counted on the night.</p> <p>Once the final list was agreed, all details were transmitted to CSO where the details were transcribed onto official census forms.</p> <p><i>Outside Dublin</i></p> <p>Enumeration of persons sleeping rough outside of Dublin was the responsibility of local census field staff. In advance of the commencement of the field operation, Census Regional Supervisors were instructed to make contact with local authority homeless forums and local service providers to inform them of the upcoming count. As part of this communication, the Regional Supervisors were instructed to query the possible location of persons sleeping rough and to convey this information to the relevant Census Field Supervisors. Field Supervisors were also instructed to make contact with local Gardaí to inquire as to whether there may be persons sleeping rough in local areas on Census Night and to provide this information to the Enumerator for the relevant Enumeration Area (EA).</p> <p>Enumerators who discovered persons sleeping rough in their EA were required to complete a Household Form for that person and to indicate that they were sleeping rough.</p> <p>A total of 64 persons were counted sleeping rough. A special Census report on Homeless persons in Ireland was published. See http://www.cso.ie/en/media/csoie/census/documents/homelesspersonsinireland/Homeless,persons,in,Ireland,A,special,Census,report.pdf</p>
<p>3.4.22. Statistical concepts and definitions - Size of private</p>	<p>Private households may be defined according to the 'housekeeping concept' , or, if this is not possible, Member States may apply the 'household-dwelling' concept.</p> <p>1. Housekeeping concept</p>

household

According to the housekeeping concept, a private household is either:

- (a) A one-person household, that is a person who lives alone in a separate housing unit or who occupies, as a lodger, a separate room (or rooms) of a housing unit but does not join with any of the other occupants of the housing unit to form part of a multiperson household as defined below; or
- (b) A multiperson household, that is a group of two or more persons who combine to occupy the whole or part of a housing unit and to provide themselves with food and possibly other essentials for living. Members of the group may pool their incomes to a greater or lesser extent.

2. Household-dwelling concept

The household-dwelling concept considers all persons living in a housing unit to be members of the same household, such that there is one household per occupied housing unit. In the household dwelling concept, then, the number of occupied housing units and the number of households occupying them is equal, and the locations of the housing units and house holds are identical.

The category 'Persons living in a private household' comprises 'Persons in a family nucleus' and 'Persons not in a family nucleus'. The category 'Persons in a family nucleus' comprises all persons who belong to a private household that contains a family nucleus of which they are a member.

'Persons not in a family nucleus' comprises all persons who either belong to a non-family household or to a family household without being member of any family nucleus in that household.

A non-family household can be a one-person household ('Living alone') or a multiperson household without any family nucleus. The category 'Not living alone' comprises persons that live either in a multiperson household without any family nucleus or in a family household without being member of any family nucleus in that household. Persons who belong to a skip-generation household and who are not member of any family nucleus in that household shall be classified in the optional category 'Persons living in a household with relative(s)'.

The term 'son/daughter' is defined as the term 'child' in the technical specifications for the topic 'Family status'. 'Husband/wife couple' means a married opposite-sex couple.

'Registered partnership' is defined as in the technical specifications for the topic 'Legal marital status'. 'Consensual union' is defined as in the technical specifications for the topic 'Family status'.

The category 'Partners' comprises 'Persons in a married couple', 'Partners in a registered partnership' and 'Partners in a consensual union'.

'Primary homeless persons' are persons living in the streets without a shelter that would fall within the scope of living quarters as defined in the technical specifications for the topic 'Type of living quarters'.

3.4.23.

Statistical
concepts and
definitions -
Tenure status
of households

The topic 'Tenure status of households' refers to the arrangements under which a private household occupies all or part of a housing unit. Households that are in the process of paying off a mortgage on the housing unit in which they live or purchasing their housing unit over time under other financial arrangements are classified under 'Households of which at least one member is the owner of the housing unit'.

Households of which at least one member is the owner of the housing unit and at least one member tenant of all or part of the housing unit are classified under category 'Households of which at least one member is the owner of the housing unit'.

Categorisation of occupied dwellings by ownership type in the Irish Census was based on the answer to the question below on the Census form, which was answered by the householder on behalf of all household members:

Does your household own or rent your accommodation? (mark one only)

- Own with mortgage or loan
- Own outright
- Rent
- Live here rent free

If renting, who is your landlord?

- Private landlord
- Local authority
- Voluntary/co-operative housing body

These were the only dwelling ownership types reported in the Census.

<p>3.4.24.</p> <p>Statistical concepts and definitions - Type of living quarter</p>	<p>'Conventional dwellings' are structurally separate and independent premises at fixed locations which are designed for permanent human habitation and are, at the reference date, either used as a residence, or vacant, or reserved for seasonal or secondary use.</p> <p>'Separate' means surrounded by walls and covered by a roof or ceiling so that one or more persons can isolate themselves. 'Independent' means having direct access from a street or a staircase, passage, gallery or grounds.</p> <p>'Other housing units' are huts, cabins, shacks, shanties, caravans, houseboats, barns, mills, caves or any other shelter used for human habitation at the time of the census, irrespective if it was designed for human habitation.</p> <p>'Collective living quarters' are premises which are designed for habitation by large groups of individuals or several households and which are used as the usual residence of at least one person at the time of the census.</p> <p>'Occupied conventional dwellings', 'other housing units' and 'collective living quarters' together represent 'living quarters'. Any 'living quarter' must be the usual residence of at least one person.</p>
<p>3.4.25.</p> <p>Statistical concepts and definitions - Occupancy status</p>	<p>'Occupied conventional dwellings' are conventional dwellings which are the usual residence of one or more persons at the time of the census.</p> <p>'Unoccupied conventional dwellings' are conventional dwellings which are not the usual residence of any person at the time of the census.</p> <p>Conventional dwellings with persons present but not included in the census are classified under the category 'Dwellings reserved for seasonal or secondary use'.</p> <p>One of 9 dwelling statuses was attributed to each dwelling during Census enumeration in Ireland. This was decided by Enumerators subsequent to visiting each dwelling and was noted in the Enumerators Record Book (ERB). The dwelling statuses which could be recorded by the Enumerator were as follows :</p> <ul style="list-style-type: none"> • Occupied

- Temporarily absent
- Vacant house/communal establishment
- Vacant flat
- Holiday home
- Under construction
- Derelict
- Commercial only
- Does not exist

When contact was made with a householder who confirmed that the dwelling would be occupied on Census Night, the dwelling was categorised as 'occupied'. When no contact was made with a householder or when the householder confirmed that the dwelling would be unoccupied on Census Night, one of the other categories was chosen. The definition of each of these categories was as follows:

Temporarily absent

Dwellings where the entire household was temporarily away on Census Night. In this case the householder was asked for the address where each household member spent Census Night. A tracking system was used to check that each household member was included on the Census Form where they claimed to have spent Census night.

Vacant house/Communal establishment

To confirm whether a habitable house was vacant, the Enumerator was required to call to it several times prior to Census Night, varying the times of the calls in case the householder worked a set pattern of hours. The Enumerator was instructed to look for signs that the house was not occupied, e.g no furniture, no cars outside, mail accumulating, overgrown garden etc. There was also an instruction to make contact with neighbours

to ascertain whether the house was vacant. The Enumerator was required to call back to houses classified as vacant after Census night to confirm that they remained unoccupied.

Vacant flat

The same approach was required in categorizing a flat/apartment as vacant as for a house.

Holiday home

This category covered dwellings which were only occasionally occupied and approximated to 'dwellings reserved for seasonal or secondary use'. The Enumerator was advised that they were usually found in rural areas, but that they included all dwellings that were occasionally occupied such as city apartments used for week-end breaks etc. As with vacant dwellings, the Enumerator was required to make contact with householders if possible and to call several times to the dwelling if required in order to do this. However if this was not possible, the Enumerator was instructed to make contact with neighbours, who were the best source for categorizing a dwelling as a holiday home rather than vacant.

Under construction

Dwellings which were not yet fit for habitation because the roof, doors, windows or walls had not yet been built or installed were considered under construction.

Derelict

Derelict dwellings were those which had been abandoned, looked dilapidated and had doors and windows boarded up. The grounds of these dwellings may have been overgrown and the buildings were likely to be old.

	<p><i>Commercial only</i></p> <p>Buildings were to be categorised as commercial only if the premises were used solely for commercial purposes and no part of the building was used as a dwelling.</p> <p><i>Does not exist</i></p> <p>When the Enumerator could not find a dwelling at the location indicated on his/her map and Enumerators Record Book (see section 12.1) , he/she was instructed to indicate that the marked dwelling did not exist.</p>
<p>3.4.26. Statistical concepts and definitions - Type of ownership</p>	<p>The topic 'Type of ownership' refers to the ownership of the dwelling and not to that of the land on which the dwelling stands.</p> <p>'Owner-occupied dwellings' are those where at least one occupant of the dwelling owns parts or the whole of the dwelling. 'Cooperative ownership' refers to ownership within the framework of a housing cooperative.</p> <p>'Rented dwellings' are those where at least one occupant pays a rent for the occupation of the dwelling, and where no occupant owns parts or the whole of the dwelling.</p>
<p>3.4.27. Statistical concepts and definitions - Number of occupants</p>	<p>The number of occupants of a housing unit is the number of people for whom the housing unit is the usual residence.</p>
<p>3.4.28. Statistical concepts and definitions - Useful floor space</p>	<p>Useful floor space is defined as the floor space measured inside the outer walls excluding non-habitable cellars and attics and, in multi-dwelling buildings, all common spaces; or the total floor space of rooms falling under the concept of 'room'.</p> <p>A 'room' is defined as a space in a housing unit enclosed by walls reaching</p>

	<p>from the floor to the ceiling or roof, of a size large enough to hold a bed for an adult (4 square metres at least) and at least 2 metres high over the major area of the ceiling.</p>
<p>3.4.29. Statistical concepts and definitions - Number of rooms</p>	<p>A 'room' is defined as a space in a housing unit enclosed by walls reaching from the floor to the ceiling or roof, of a size large enough to hold a bed for an adult (4 square metres at least) and at least 2 metres high over the major area of the ceiling.</p> <p>The number of rooms available to each household was captured in the Irish Census through the following question, answered by the householder on behalf of all household members:</p> <p>How many rooms do you have for use only by your household?</p> <p>The following information was provided in the question body as a guide:</p> <p>Do not count bathrooms, toilets, kitchenettes, utility rooms, consulting rooms, offices, shops, halls or landings or rooms that can only be used for storage, such as cupboards.</p> <p>Do count all other rooms such as kitchens, living rooms, bedrooms, conservatories you can sit in, and studies.</p> <p>If two rooms have been converted into one, count them as one.</p> <p>The householder was required to write in the appropriate number of rooms.</p>

<p>3.4.30. Statistical concepts and definitions - Density standard (floor space)</p>	<p>The topic 'Density standard' relates the useful floor space in square metres or the number of rooms to the number of occupants, as specified under the topic 'Number of occupants'. Data report on the density standard measured by the 'useful floor space', or, if not possible, by the 'number of rooms'.</p> <p>The density standard variable in the Irish Census was computed by taking the number of rooms available for use to a household (taken from the question above) and dividing it by the number of usual residents in the household.</p>
<p>3.4.31. Statistical concepts and definitions - Density standard (number of rooms)</p>	<p>The topic 'Density standard' relates the useful floor space in square metres or the number of rooms to the number of occupants, as specified under the topic 'Number of occupants'. Data report on the density standard measured by the 'useful floor space', or, if not possible, by the 'number of rooms'.</p>
<p>3.4.32. Statistical concepts and definitions - Water supply system</p>	<p>The data pertaining to water supply is collected using Question H7 on the Census form. This question must be completed by the head of every household.</p> <p>The question and response options are as follows:</p> <p>H7. What type of piped water supply does your accommodation have?</p> <p>Mark one box only.</p> <p>1 Connection to a public main</p> <p>2 Connection to a group water scheme with a local authority source of supply</p> <p>3 Connection to a group water scheme with a private source of supply (e.g borehole, lake, etc.)</p>

	<p>4 Connection to other private source (e.g. well, lake, rainwater tank etc.)</p> <p>5 No piped water supply</p> <p>No further instructions are provided to householder along with this question</p>
<p>3.4.33. Statistical concepts and definitions - Toilet facilities</p>	<p>The information supplied on toilet facilities is derived from the question in the Irish Census on sewerage treatment. The question and associated response options are as follows:</p> <p>What type of sewerage facility does your accommodation have?</p> <ul style="list-style-type: none"> • Public sewerage scheme • Individual septic tank • Individual treatment system other than a septic tank • Other sewerage facility • No sewerage facility
<p>3.4.34. Statistical concepts and definitions - Bathing facilities</p>	<p>No information was directly collected on bathing facilities in the Irish Census, however CSO will derive a variable on bathing facilities from existing Census data on water supply and make this available through the relevant hypercubes.</p>
<p>3.4.35. Statistical concepts and definitions - Type of heating</p>	<p>A housing unit is considered as centrally heated if heating is provided either from a community heating centre or from an installation built in the building or in the housing unit, established for heating purposes, without regard to the source of energy.</p>
<p>3.4.36. Statistical concepts and definitions -</p>	<p>The topic 'Dwellings by type of building' refers to the number of dwellings in the building in which the dwelling is placed.</p>

Type of building	
3.4.37. Statistical concepts and definitions - Period of construction	The topic 'Dwellings by period of construction' refers to the year when the building in which the dwelling is placed was completed.
3.5. Statistical unit	The EU programme for the 2011 population and housing censuses include data on persons, private households, family nuclei, conventional dwellings and living quarters
3.6. Statistical population	Persons enumerated in the 2011 census are those who were usually resident in the territory of the reporting country at the census reference date. 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
3.7. Reference area	<p>The census data relates to the entire territory of the Republic of Ireland.</p> <p>Data are available at different levels of geographical detail: national, NUTS2, NUTS3 and local administrative units (LAU2)</p>
3.8. Coverage - Time	All data pertain to Sunday, April 10 th 2011.

3.9. Base period	
4. Unit of measure	Counts of statistical units
5. Reference Period	10/04/2011
6. Institutional Mandate	
6.1. Institutional Mandate - legal acts and other agreements	<p>Section 8 of the Statistics Act 1993 establishes the Central Statistics Office to exercise the functions of the Statistics Act.</p> <p>The Census was taken under Section 26 of the Statistics Act 1993 and the Statistics (Census of Population) Order 2010 see http://www.irishstatutebook.ie/2010/en/si/0207.html</p>
6.1.1. Bodies responsible	The sole body responsible for collection and compilation of Census data is the Central Statistics Office.
6.2. Institutional Mandate - data sharing	Standard text on data ownership by Eurostat
7.	

Confidentiality	
7.1. Confidentiality - policy	<p>The Statistics Act, 1993 Part V, Paragraph 32 guarantees that all information collected in the Census is only used for statistical compilation and analysis purposes.</p> <p>Paragraph 33 guarantees that no Census data which could identify an individual will be released.</p> <p>Paragraph 35 guarantees that the confidentiality requirements pertaining to a Census of Population will expire 100 years after the relevant Census.</p> <p>All staff working on the Census must become Officers of Statistics, thereby making a legal commitment to protecting the confidentiality of Census information. This is covered under Part 2, Paragraphs 20 to 22 of the Statistics Act, 1993.</p> <p>The penalties associated with breaches of confidentiality are contained in Part 6, Paragraphs 38 to 45. Legal action was taken against 5 householders after Census 2011, 3 of the prosecutions were successful.</p> <p>The Statistics Act, 1993 can be accessed online via the following link:</p> <p>http://www.irishstatutebook.ie/1993/en/act/pub/0021/print.html</p>
7.2. Confidentiality - data treatment	<p>All Census data which is disseminated into the public domain is in accordance with the non-disclosure guarantee given in Paragraph 33 of the Statistics Act 1993. When compiling Census data for dissemination, cells that are found to be disclosive of either individuals' identities or individuals' attributes are either suppressed or aggregated with other cells, thereby removing the disclosure.</p>
8. Release policy	
8.1. Release calendar	<p>Data are made available 27 months after the end of the reference period (March 2014)</p>
8.2. Release	

calendar access	
8.3. Release policy - user access	<p>Census thematic reports were released via the CSO website in pdf format and were free to access and download. Simultaneously tables of data related to each report were also released on the CSO's online Statbank (PC-Axis). All Census data were also free to access and download. Hard copies of each report were available to purchase through the CSO. The release calendar informed users of the date of forthcoming Census reports. The calendar was published on the CSO's website in advance of the commencement of the publication schedule.</p> <p>Press releases were also issued to national and local media to accompany each report. Reports were made available to all users simultaneously. In a number of instances a press briefing was arranged whereby key stakeholders in government departments were given a preview of Census reports in the hour before they were released, however this was done under a curfew that lasted until the report was publicly available.</p> <p>Metadata supplied to Eurostat will also be made available to users via hyperlinks on the CSO's website.</p>
9. Frequency of dissemination	Data on population and housing censuses are disseminated every decade
10. Dissemination format	
10.1. Dissemination format - News release	<p>Press releases were issued with all of the Census thematic publications in 2012. Hyperlinks to these releases are listed here in chronological order.</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011pdr/ENGLISH,This,is,Ireland,National,Press,Release,Version,1,290312.pdf (This is Ireland Part 1)</p>

<http://www.cso.ie/en/media/csoie/census/documents/census2011vol1andprofile1/Press,release,Census,2011,Profile,1,for,website.pdf> (Population classified by area)

<http://www.cso.ie/en/media/csoie/census/documents/census2011vol1andprofile1/Press,release,Census,2011,Profile,1,for,website.pdf> (Town and country)

[http://www.cso.ie/en/media/csoie/census/documents/census2011profile2/Press release Census 2011 Profile 2.pdf](http://www.cso.ie/en/media/csoie/census/documents/census2011profile2/Press%20release%20Census%202011%20Profile%202.pdf) (Older and younger)

<http://www.cso.ie/en/media/csoie/census/documents/thisisirelandpart2census2011/Press,Release,for,This,is,Ireland,Part,2.pdf> (This is Ireland Part 2)

[http://www.cso.ie/en/media/csoie/census/documents/census2011profile3/Profile 3 Press Release At Work.pdf](http://www.cso.ie/en/media/csoie/census/documents/census2011profile3/Profile%203%20Press%20Release%20At%20Work.pdf) (At work)

[http://www.cso.ie/en/media/csoie/census/documents/census2011profile4/Profile4 Press Release The Roof over our heads.pdf](http://www.cso.ie/en/media/csoie/census/documents/census2011profile4/Profile4%20Press%20Release%20The%20Roof%20over%20our%20heads.pdf) (The roof over our heads)

<http://www.cso.ie/en/media/csoie/census/documents/census2011profile5/Profile,5,,Press,Release,Households,and,Families.pdf> (Households and families)

<http://www.cso.ie/en/media/csoie/census/documents/census2011profile6/PR,xxxx,Profile,6,Migration,a...pdf> (Migration and diversity in Ireland)

<http://www.cso.ie/en/media/csoie/census/documents/census2011profile>

	<p>7/Profile,7,Press,Release,Religion,,Ethnicity,and,Irish,Travellers.pdf (Religion, ethnicity and Irish Travellers)</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011profile8/Profile,8,Press,Release,Our,Bill,of,Health.pdf (Our bill of health)</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011profile9/Profile,9,What,we,know,Press,Statement.pdf (What we know)</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011profile10/Profile,10,Press,Statement,Door,to,Door,.pdf (Door to door)</p>
10.2. Dissemination format - Publications	<p>CSO released a series of thematic publications based upon Census 2011 data. Hyperlinks to the publications are provided below.</p> <p>http://www.cso.ie/en/media/csoie/census/documents/Prelim,complete.pdf Preliminary report – 30 June 2011</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011pdr/Census,2011,Highlights,Part,1,web,72dpi.pdf This is Ireland Part 1 (Principal demographic results) – 29 March 2012</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011vol1andprofile1/Census,2011,-,Population,Classified,by,Area.pdf Population classified by area – 26 April 2012</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011vol1andprofile1/Profile1_Town_and_Country_Entire_doc.pdf Town and country (Population distribution and movements) – 26 April 2012</p>

http://www.cso.ie/en/media/csoie/census/documents/census2011profile2/Profile2_Older_and_Younger_Entire_Document.pdf Older and younger (An age profile of Ireland) – 24 May 2012

<http://www.cso.ie/en/media/csoie/census/documents/thisisirelandpart2census2011/This,is,Ireland,Highlights,,P2,Full,doc.pdf> This is Ireland Part 2 (Principal socio-economic results) – 28 June 2012

<http://www.cso.ie/en/media/csoie/census/documents/census2011profile3/Profile,3full,doc,for,web,sig,amended.pdf> At work (Employment, occupations and industry in Ireland) - 26 July 2012

<http://www.cso.ie/en/media/csoie/census/documents/census2011profile4/Profile,4,The,Roof,over,our,Heads,Full,doc,sig,amended.pdf> The Roof over our head (Housing in Ireland) – 30 August 2012

<http://www.cso.ie/en/media/csoie/census/documents/homelesspersonsinireland/Homeless,persons,in,Ireland,A,special,Census,report.pdf> Homeless persons in Ireland : A special Census report – 6 September 2012

<http://www.cso.ie/en/media/csoie/census/documents/census2011profile5/Profile,5,Households,and,Families,full,doc,sig,amended.pdf> Households and families (Living arrangements in Ireland) – 20 September 2012

<http://www.cso.ie/en/media/csoie/census/documents/census2011profile6/Profile,6,Migration,and,Diversity,entire,doc.pdf> Migration and diversity (A profile of diversity of Ireland) – 4 October 2012

	<p>http://www.cso.ie/en/media/csoie/census/documents/census2011profile7/Profile,7,Education,Ethnicity,and,Irish,Traveller,entire,doc.pdf Religion, ethnicity and Irish Travellers (Ethnic and cultural background in Ireland) – 18 October 2012</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011profile8/Profile,8,Full,document.pdf Our bill of health (Health, disability and carers in Ireland) – 1 November 2012</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011profile9/Profile,9,What,we,know,full,doc,for,web.pdf What we know (Education, skills and the Irish language) – 22 November 2012</p> <p>http://www.cso.ie/en/media/csoie/census/documents/census2011profile10/Profile,10,Full,Document.pdf Door to door (Commuting in Ireland) – 13 December 2012</p>
10.3. Dissemination format - online database	<p>Census data tables were released simultaneously with the publications. The data tables were made available online on the CSO's website Statbank data repository, which is built using a PC-Axis framework. Statbank allows data to be manipulated and downloaded by users free of charge in several formats including .xls, .csv, .txt and .html.</p> <p>Statbank can be accessed through the following link:</p> <p>http://www.cso.ie/px/pxeirestat/statire/SelectTable/Omrade0.asp?Planguage=0</p> <p>CSO also release comprehensive Census Small Area data. Small Areas are polygons containing on average 108 dwellings. They were generated by researchers in the University of Maynooth and Ordnance Survey Ireland and fully incorporated into the Census for the first time in 2011. They</p>

facilitate data comparisons between similarly sized geographical areas across the country. Data on Small Areas are available for the following thematic areas:

- Sex, age & marital status
- Migration, ethnicity and religion
- Irish language
- Families
- Private households
- Housing
- Communal establishments
- Principal status
- Social class and socio-economic group
- Education
- Commuting
- Disability, carers and general health
- Occupation
- Industries
- PC and internet access

CSO also made available a bespoke online tool, SAPMAP, which allows users to view a standard Census report for a wide range of geographies from small area(average 100 households) up to state level.

Small area (and higher level geographies)thematic data can be downloaded in .csv format at the following link:

<http://www.cso.ie/en/census/census2011smallareapopulationstatistics.aspx/>

The link to the SAPMAP application is :

<http://census.cso.ie/sapmap/>

CSO also formed a partnership with the All-Island-Research Observatory

	<p>(AIRO) who have a lot of expertise in thematic mapping of data. Data was provided a week before release to AIRO under a confidentiality agreement and was released by AIRO at the same time as CSO. AIRO have put up a wide range of mapping tools allowing thematic mapping of 130+ census counts, vacant dwellings and travel to work data. They have also made available specialised for aimed at Regional and Local Authorities for use in their planning process. See http://www.airo.ie/mapping-module/census</p>
10.4. Dissemination format - microdata access	<p>Two Census microdata files are made available. POWSCAR (Place of work, school and college anonymised record) contains anonymised records for all workers resident in Ireland and Irish resident students aged 5 and over. It includes key socio-economic variables and information on the origin and destination of the journeys to work, school or college. The dataset is topcoded to ensure anonymity is retained. Access to the is strictly controlled through a formal application procedure and confidentiality contract and is available exclusively to bona fide researchers resident in Ireland.</p> <p>The IPUMS dataset is an anonymised sample of 10% of households enumerated on Census night and 10% of persons who spend Census night in a communal establishment. The dataset contains a wide selection of Census variables which are selectively topcoded to prevent disclosure. The dataset will be available only to researchers approved by the IPUMS organisation from summer 2014.</p>
10.5. Dissemination format - other	<p>Census Small Area population statistics (SAPS) are available across a wide range of variables (see section 10.3 for details). The data are based on Small Areas which are polygons containing on average 108 dwellings. These Small Areas were generated by researchers in the University of Maynooth and Ordinance Survey Ireland. SAPS data is disseminated both in .csv and graphical formats. The graphical interface, SAPMAPS, was made available on the CSO website free of charge at the same time as the .csv data was released.</p>
11. Accessibility of documentation	
11.1. Documentation on methodology	<p>On completion, the Census quality reporting and metadata will be made available via hyperlinks to Eurostat's website on www.cso.ie.</p>

11.2. Quality management - documentation	On completion, the Census quality reporting and metadata will be made available via hyperlinks to Eurostat's website on www.cso.ie .
12. Quality management	
12.1. Quality assurance	<p>There were several aspects of quality assurance contained within the Census process.</p> <ul style="list-style-type: none"> • Census forms were subject to quality testing during printing to reduce the possibility of printing errors which could affect scanning and data capture. The quality checking was performed both in-house by the company responsible for printing the forms and by the CSO on receipt of the forms. The checking was performed on a random selection of pages both from printed reels and completed boxes of forms. It involved a range of visual inspections on colour, blemishes, alignment and page order, colour checking with a densitometer, form drop out on scanning and testing of barcodes. • All Enumerators were given a list of dwellings in their Enumeration Area (contained in an Enumerators Record Book – ERB) which were also printed on a corresponding map to help them locate the dwellings. These dwellings were taken from the An Post Geodirectory, a database of property addresses in Ireland. In advance of the Census, CSO estimated that up to 4% of actual dwellings may be missing from the Geodirectory. In order to ensure that dwellings which were not on the Geodirectory were not missed during enumeration, the CSO facilitated the addition of unlisted dwellings by Enumerators. In order to incentivise Enumerators to add these unlisted dwellings, an additional fee was paid for finding 'new' dwellings which did not appear on the ERB/map. The 4% estimate was based on a pilot test in 2009, for the Census the CSO outputted dummy addresses for buildings where the number of addresses on the address table for the building was less than the number of address points indicated for the building by the post office (An Post). In total enumerators found 48,516 addresses/households (2.4%) which were not listed on the Geodirectory. The location of all new dwellings were digitised from the marked up enumeration maps.

- All Census Enumerators were subject to a structured quality assessment within days of taking up the job. This assessment was conducted by their immediate supervisor, the Field Supervisors and was subject to oversight by the next line of management, the Regional Supervisors. The assessment involved the Field Supervisor observing the Enumerator's work at first hand and making an assessment on their ability to follow selected field procedures. Enumerators who did not meet the expected quality levels were required to receive additional training and would be subject to further monitoring by the Field Supervisor. Enumerators who could not correctly follow procedures after further monitoring were subject to dismissal and replacement.
- After several visits to a dwelling an Enumerator could decide that the dwelling was unoccupied. In order to verify this, Enumerators were instructed to seek information about the dwelling from neighbours as well as to call back after Census night to ensure that the dwelling was still unoccupied. If contact was made at this stage, a Census form was issued to the household with instruction to complete it. The instruction to carry out multiple visits to apparently unoccupied dwellings and to speak to neighbours was intended to reduce the possibility of occupied dwellings being missed in the Census count.
- Enumerators performed a 'doorstep check' on the collected Census form in the presence of the householder once the form was handed over. This check ensured that all persons present in the household on Census Night were accounted for on the form (enumerators had recorded the number of males and females expected on Census night at the form delivery contact) and that the relevant questions for each person were correctly completed. It was designed to limit occurrences of unit no-information.
- Provision was made for dwellings which were known by the Enumerator to be occupied, but where the householder could either not be contacted or refused to complete a form. Under Irish legislation, all householders present in the country on Census Night were obliged to complete a Census form. In rare cases where a completed form could not be collected, intervention from Field and Regional Supervisors was

required, usually concluding in a visit in person from the Regional Supervisor to the householder to make him/her aware of legal obligations to complete the Census. For any occupied dwelling where a Census enumerator failed to collect a completed Census form, the Enumerator was required to complete a Reconciliation Form detailing basic demographic information (sex, age & nationality) about each member of the household. This information was usually sourced from contacting neighbours. In order to further discourage use of this procedure, Enumerators who completed a Reconciliation Form in respect of an occupied dwelling were paid one third of the amount they would have received for collecting a completed Census form from the householder.

- Census Enumerators were required to send SMS messages using an app on the phone each day during delivery and collection of Census questionnaires, providing information on the cumulative number of dwellings to which they had delivered forms to or collected forms from up to that day as well as the number of additional 'unlisted' dwellings they had added to their map & ERB. This information was made available to Field Supervisors on a web application. The Field Supervisors could then use the data to monitor how each of their Enumerators was progressing and to facilitate early intervention for Enumerators who were falling behind.
- CSO also monitored the progress of Enumerators and regularly issued reports to Field and Regional Supervisors containing the names of Enumerators who were falling significantly behind in their progress and requesting intervention.
- Several stations in the Census Eflow processing system contained were designed to eradicate and repair poor quality text strings and data (see section 20.5 for more details). In addition supervisors had the facility to view operators screens and watch while they worked, the supervisor could record operator work sessions and replay to train operators where they were making errors such as coding errors. Analysis was also done where by the code profile of data was compared across users to identify operators who were inclined to bucket code or who displayed any bias.

	<ul style="list-style-type: none"> Data exported to the Oracle database file from Eflow was further subject to quality macro checking and analysis by CSO statistical staff using SAS software. This checking took the form of comparing aggregates to 2006 data and cross-tabulation of related variables to ensure consistency of data (See section 20.4 for more details).
12.2. Quality management - assessment	
12.2.1. Coverage assessment	<p>No dedicated coverage assessment was carried out. However, the use of Reconciliation Forms to collect information on occupied dwellings for which no Census form was collected was done to reduce possible undercoverage. A total of 6,927 households and 13,995 persons were enumerated on Reconciliation Forms. There were also an number of checks to ensure that all persons in the household on Census night were reflected in the data. Three separate counts were checked against each other.</p> <p>a) The number of males, females and persons in the household recorded by the enumerator on the front of the form (obtained by a manual count of persons on the form)</p> <p>b) The number of persons listed as being present in the household on page 3 of the form(obtained by doing an Optical Mark Recognition (OMR) count of rows where a persons name was entered)</p> <p>c) The number of persons for which data was entered by the householder . A person was considered to exist by the system if data was detected in any of the key fields Name (OMR), Sex (OMR), Date of Birth(Intelligent Character Recognition) , relationship to Person 1.</p> <p>If the number of persons present from the three counts were inconsistent a message was displayed to operators during census processing. In cases where a person was counted in b) but not in c) a male or female was added to the household depending on the sex of the persons name. Date of birth and other key fields were imputed. If c) was greater than b) and a person had been generated by noise on the form, for example where a person had written not applicable across the form this 'phantom' person was deleted.</p>

12.2.2. Post-enumeration survey(s)	No post enumeration survey was carried out.
13. Relevance	
13.1. Relevance - User Needs	Prefilled text by Eurostat about the relevance of census data
13.2. Relevance - User Satisfaction	Prefilled text by Eurostat about the tools to monitor data extractions and receive feedback from users
13.3. Completeness	Prefilled text by Eurostat providing a broad description of the EU census data transmission plan, making reference to the CES recommendations
14. Accuracy	
14.1. Accuracy - overall	<p>Given the way the Irish Census is conducted without a target population, adjustment for under or overcoverage or a post-enumeration survey, it is impossible to provide an objective measure of accuracy. However, the measures outlined in section 12.1 on Quality Assurance were also designed to improve the accuracy and completeness of the Census count and the data collected. Enumerators had to account for all dwellings in their area either with a completed Census form or a Reconciliation form accounting for the reason a completed census form was not returned.</p> <p>Enumerators were required to continuously call back to households which were occupied on Census night to get a return from the householder. Enumerators received a terminal bonus of €500 on the successful completion of their enumeration work. This acted as a cash incentive to ensure that they pursued householders to the fullest extent possible.</p>

14.1.1. Overall accuracy - Usual residence	There are no particular reasons for data unreliability for this topic
14.1.2. Overall accuracy - Sex	There are no particular reasons for data unreliability for this topic
14.1.3. Overall accuracy - Age	There are no particular reasons for data unreliability for this topic
14.1.4. Overall accuracy - Marital status	There are no particular reasons for data unreliability for this topic
14.1.5. Overall accuracy - Family status	There are no particular reasons for data unreliability for this topic
14.1.6. Overall accuracy - Household status	There are no particular reasons for data unreliability for this topic
14.1.7. Overall accuracy - Current activity status	There are no particular reasons for data unreliability for this topic
14.1.8. Overall accuracy - Occupation	There are no particular reasons for data unreliability for this topic

14.1.9. Overall accuracy - Industry	There are no particular reasons for data unreliability for this topic
14.1.10. Overall accuracy - Status in employment	There are no particular reasons for data unreliability for this topic
14.1.11. Overall accuracy - Place of work	There are no particular reasons for data unreliability for this topic
14.1.12. Overall accuracy - Educational attainment	There are no particular reasons for data unreliability for this topic
14.1.13. Overall accuracy - Size of the locality	There are no particular reasons for data unreliability for this topic
14.1.14. Overall accuracy - Place of birth	There are no particular reasons for data unreliability for this topic
14.1.15. Overall accuracy - Country of citizenship	There are no particular reasons for data unreliability for this topic
14.1.16. Overall accuracy - Year of arrival in the country	There are no particular reasons for data unreliability for this topic
14.1.17. Overall accuracy -	There are no particular reasons for data unreliability for this topic

Residence one year before	
14.1.18. Overall accuracy - Housing arrangements	There are no particular reasons for data unreliability for this topic
14.1.19. Overall accuracy - Type of family nucleus	There are no particular reasons for data unreliability for this topic
14.1.20. Overall accuracy - Size of family nucleus	There are no particular reasons for data unreliability for this topic
14.1.21. Overall accuracy - Type of private household	There are no particular reasons for data unreliability for this topic
14.1.22. Overall accuracy - Size of private household	There are no particular reasons for data unreliability for this topic
14.1.23. Overall accuracy - Tenure status of households	There are no particular reasons for data unreliability for this topic
14.1.24. Overall accuracy - Type of living quarter	There are no particular reasons for data unreliability for this topic
14.1.25. Overall	There are no particular reasons for data unreliability for this topic

accuracy - Occupancy status	
14.1.26. Overall accuracy - Type of ownership	There are no particular reasons for data unreliability for this topic
14.1.27. Overall accuracy - Number of occupants	There are no particular reasons for data unreliability for this topic
14.1.28. Overall accuracy - Useful floor space	There are no particular reasons for data unreliability for this topic
14.1.29. Overall accuracy - Number of rooms	There are no particular reasons for data unreliability for this topic
14.1.30. Overall accuracy - Density standard (floor space)	There are no particular reasons for data unreliability for this topic
14.1.31. Overall accuracy - Density standard (number of rooms)	There are no particular reasons for data unreliability for this topic
14.1.32. Overall accuracy -	There are no particular reasons for data unreliability for this topic

Water supply system	
14.1.33. Overall accuracy - Toilet facilities	There are no particular reasons for data unreliability for this topic
14.1.34. Overall accuracy - Bathing facilities	There are no particular reasons for data unreliability for this topic
14.1.35. Overall accuracy - Type of heating	There are no particular reasons for data unreliability for this topic
14.1.36. Overall accuracy - Type of building	There are no particular reasons for data unreliability for this topic
14.1.37. Overall accuracy - Period of construction	There are no particular reasons for data unreliability for this topic
14.2. Sampling error	
14.3. Non-sampling error	
15. Timeliness and punctuality	
15.1. Timeliness	Hypercubes first submitted 18/12/13.

	Metadata first transmitted 2/12/13.
15.2. Punctuality	
16. Comparability	
16.1. Comparability - geographical	<p>There are a number of definitional issues relating to variables which could compromise geographical comparability.</p> <p><u>Usual residence</u></p> <p>Primary, second level and third level students were instructed to consider their family homes rather than their term time address as their place of usual residence. This may have compromised comparability in the definition of usual residence with other member states.</p> <p><u>Current activity status</u></p> <p>The reference week in the Present Economic Status question on the Census was the week leading up to the date of enumeration, Sunday April 10th 2011. This was implicit in the question and may not have been clear in the previous submission.</p> <p><u>Country of citizenship</u></p> <p>The words citizenship and nationality are used interchangeably in Irish social statistics.</p> <p>Country of citizenship data from the Irish Census is based upon the Census question which asks for the respondent's nationality rather than country of citizenship. See 3.4.15 for more detail.</p> <p>Dual nationality / citizenship is captured, coded and published.</p> <p>All geography on relating to the location of the household or the location of a person's usual residence, a person's place of work school or college are based on data that was geocoded to latitude and longitude. Geography was derived by overlaying accurate geographic boundaries in a GIS or oracle spatial query.</p>
16.2. Comparability -	

over time	
17. Coherence	
17.1. Coherence - cross domain	Prefilled text by Eurostat explain how census data relate to other social statistics
17.2. Coherence - internal	Prefilled text by Eurostat explaining how the EU transmission program for the 2011 census is conceived to obtain coherent data
18. Cost and Burden	<p>The cost of conducting Census 2011 was €60 million spread over 5 years between 2008 and 2013. This equated to €31.41 per household in Ireland over the 5 years.</p> <p>In order to ensure cost effectiveness, several measures were undertaken</p> <ul style="list-style-type: none"> • Wages payable to Regional and Field supervisors were reduced by 10% compared with 2006 as part of a wider reduction in public sector remuneration. • GIS was used to calculate the internal road distance for each rural Enumeration Area and Enumerators were paid a predetermined allowance for travel based upon travelling this distance. No further expense claims were permitted from rural Enumerators. • In urban areas, Enumerators were paid the equivalent of three monthly public transport tickets as a predetermined allowance to cover their travel expenses. No further expense claims were permitted from urban Enumerators. • All expense claims from Field Supervisors, Regional Supervisors and Census Liaison Officers were subject to scrutiny and sign off by their immediate manager as well as a dedicated payments team in Census HQ. Running totals of expenses were available at an individual level for all

	<p>members of field staff to allow early identification of possible excessive claims. By careful monitoring CSO came in €500,000 under budget for field travel.</p> <ul style="list-style-type: none"> • All field staff were instructed to source free accommodation to conduct recruitment and training activities. In instances where this was not possible, rigorous scrutiny was applied by their immediate managers to ensure value for money was attained in securing accommodation • The burden on households remained the same as in 2006. Each household present in the State on Census Night was required to complete the relevant sections of a 24 page form. There were up to 30 questions for each person present, with fewer questions depending on age and economic status.
19. Data revision	
19.1. Data revision - policy	There is no policy to revise Census data. In cases where an error was discovered in published data the data was corrected and a note of the correction was highlighted on the CSO web site.
19.2. Data revision - practice	No revisions to hypercubes have yet been undertaken
20. Statistical processing	
20.1. Source data	Ireland conducts a conventional census which requires all households present on a designated night to complete a set of questions. The dataset compiled from the information contained in the completed questionnaires is the sole source of data for all statistical units.
20.1.1. List of data sources	<p>Ireland conducts a conventional census which requires all persons present on a designated night to complete a set of questions where they spend the designated night. The dataset compiled from the information contained in the completed questionnaires is the sole source of data for all statistical units.</p> <p>The data on the location of the dwelling is derived from building co-ordinates on the Geodirectory in 98% of cases. The location for the other 2% is digitised from the position of the dwelling marked on the enumeration area map by the enumerator .</p>

20.1.1.1. List of data sources - data on persons	Ireland conducts a conventional census which requires all households present on a designated night to complete a set of questions. The dataset compiled from the information contained in the completed questionnaires is the sole source of data for all statistical units.
20.1.1.2. List of data sources - data on households	Ireland conducts a conventional census which requires all households present on a designated night to complete a set of questions. The dataset compiled from the information contained in the completed questionnaires is the sole source of data for all statistical units.
20.1.1.3. List of data sources - data on family nuclei	Ireland conducts a conventional census which requires all households present on a designated night to complete a set of questions. The dataset compiled from the information contained in the completed questionnaires is the sole source of data for all statistical units.
20.1.1.4. List of data sources - data on conventional dwellings	Ireland conducts a conventional census which requires all households present on a designated night to complete a set of questions. The dataset compiled from the information contained in the completed questionnaires is the sole source of data for all statistical units.
20.1.1.5. List of data sources - data on living quarters	Ireland conducts a conventional census which requires all households present on a designated night to complete a set of questions. The dataset compiled from the information contained in the completed questionnaires is the sole source of data for all statistical units.
20.1.2. Classification of data sources	The data source for all statistical units is a conventional census with the exception of geography which is derived from the Geodirectory.
20.1.2.1. Classification of data sources - data on persons	01CONV
20.1.2.2. Classification of data sources - data on	01CONV

households	
20.1.2.3. Classification of data sources - data on family nuclei	01CONV
20.1.2.4. Classification of data sources - data on conventional dwellings	01CONV
20.1.2.5. Classification of data sources - data on living quarters	01CONV
20.2. Frequency of data collection	Ireland conducts a national Census every 5 years. The next Census is due to be held in 2016.
20.3. Data collection	Data was collected by means of a conventional Census, i.e. through questionnaires distributed to every household which was present in Ireland on the night of April 10th 2011, Census Night. Under Irish legislation (Statistics Act 1993 & Statistics Census of Population Order 2010), participation in the Census was compulsory for every household present on Census Night. The Census of Population Order 2010 also put a legal obligation on the manager of communal establishments to co-operate and facilitate the distribution and collection of individual forms to persons who spent Census Night in the establishment.

The Census questionnaire covered a range of demographic, social and economic topics. A number of core questions remain constant from census to census, however the full content of the questionnaire, including any new questions, is arrived at following public consultation and subsequent pilot testing in the field. The Government then makes the final decision on the content of the questionnaire in advance of every Census.

The CSO began public consultation on the content of the Census 2011 questionnaire in August 2008. This involved publishing notices in the national press and writing to stakeholders requesting suggestions on new questions for inclusion or amendments to existing questions. 91 submissions were received covering 39 topics.

Subsequent to this a Census Advisory Group (CAG) was appointed comprising invited experts from across the public sector, trade unions, research bodies and universities. The CAG discussed the submissions received and decided on which questions should be tested in a Census Pilot with a view to their inclusion in Census 2011. The group proposed that new questions on general health and foreign languages spoken in the home should be tested along with amended versions of 13 existing questions from Census 2006.

The Census Pilot was held in April 2011, covering 11,400 dwellings in 32 Enumeration Areas which were chosen to provide a spread of urban and rural areas as well as some areas of socio-economic disadvantage. Two different versions of the Pilot questionnaire were distributed, each randomly to 50% of households, to allow for controlled testing of the new and revised questions. The Census pilot also tested accuracy and completeness of the Geodirectory as the source for the location of dwellings and communal establishments.

The CAG reconvened in October 2009 when the results from the Pilot were made available. Based on the results, the group made recommendations on the content and format of the questions for inclusion in Census 2011. These recommendations were agreed by the Government in December 2009

allowing finalisation of the content of the Census form.

The areas covered in the Census 2011 questionnaire at individual level were (in order of questions):

Q1 Name

Q2 Sex

Q3 Date of birth

Q4 Relationship to other persons in the household

Q5 Marital status

Q6 Place of birth

Q7 Usual residence

Q8 Usual residence one year ago

Q9 Ever lived abroad, country of last previous residence and year of taking up residence in Ireland

Q10 Nationality

Q11 Ethnicity

Q12 Religion,

Q13 Number of children born alive

Q14 Irish language

Q15 Foreign language spoken at home and ability to speak English

Q16 & Q17 Disability

Q18 General health

Q19 Means of travel to work, school or college

Q20 Time departing home for travel to work, school or college

Q21 Duration of journey to work, school or college

Q22 Provision of unpaid personal help to friend or family member

Q 24 Age education ceased

Q 25 Level of education

Q26 Field of study

Q27 Present principal status

Q29 Employment status

Q30 Occupation,

Q32 Industry

Q33 Name and address of place of work, school or college

The areas covered at the level of the household (housing characteristics) were :

H1 Nature of accommodation

H2 Year accommodation built

H3 Ownership status

H4 Rent paid

H5 Number of rooms

H6 Type of central heating

H7 Type of water supply

H8 Type of sewerage facility

H9 Number of cars or vans

H10 PC ownership

H11 Internet access

Form design

The Census questionnaires were specially designed to facilitate scanning and to allow for the automatic capture of data by the processing software. Coloured drop-out ink was used in the printing of the questionnaires and the positioning, dimensions and number of tick and write in boxes was decided with scanning and optimal character recognition in mind. The design process also had to ensure that the information presented on the questionnaire was as readable as possible.

Several different questionnaire types were designed to cater for multiple household types, communal establishments and the legal requirement to provide questionnaires in the Irish language. The questionnaire types produced were as follows :

- English Household Form (24 page standard household form containing 3 pages of Census questions for up to 6 persons in a single household. Also contained space to transcribe the dwelling address and Census geography (see below), information about the Census, instructions on completing the form, a page for listing persons present and absent from the household and a signature box)
- Irish Household Form (The English Household Form translated into the Irish language)
- English Individual Form (Four page form containing Census questions to be completed by additional individuals in households of more than 6 persons, and by all individuals in communal establishments)
- Irish Individual Form (The English Individual Form translated into the Irish

language)

- English Listing Form (A form to be completed by managers of communal establishments, listing all residents of the communal establishment on Census Night and indicating the type of Communal Establishment)
- Irish Listing Form (The English Listing Form translated into the Irish language)

Census geography

For the purposes of the Census, the country was divided into 4,866 geographical Enumeration Areas (EA), each containing an average of 415 dwellings. The addresses of these dwellings were sourced from the An Post (Irish postal service) Geodirectory, a national database of addresses. A Census Enumerator was assigned to each of the EAs and was responsible for the delivery and collection of questionnaires to every occupied dwelling in their area as well as accounting for all unoccupied dwellings. The Enumerators were supervised by 440 locally based Field Supervisors. In turn they reported to 44 Regional Supervisors, who were based in regional offices throughout the country. The top level of field management were 6 Census Liaison Officers who supervised the Regional Supervisors and were based in Census headquarters in Dublin.

Every dwelling in each EA was allocated a 4-digit “D Number”, which was unique to each EA within a county. The D numbers for dwellings identified on the Geodirectory were pre-printed on a map of each EA at the location of the dwelling. They were also listed in ascending order on an associated Enumerator’s Record Book (ERB). The ERB was annotated by Enumerators to build a complete record of their visits to each dwelling. The map and ERB were the key tools for Enumerators in the field and they were given detailed training and documentation on how to use them correctly. The D numbers were also linked to underlying X,Y co-ordinates on the Geodirectory which facilitated production of fully flexible geographic outputs after the Census data had been collected and processed. Data has been published nationally at a number of levels of administrative geography including Province, County, NUTS, Electoral Division, Small Area, Dáil constituencies, Gaeltacht Areas, Local Electoral Areas, Legal

Towns and Cities and Settlements.

Field operation

The Enumerators began their work on Tuesday March 8th 2011, approximately one month before Census night. They were instructed to complete a full visual enumeration of their area before commencing form delivery. This entailed traversing every street, road and publicly accessible thoroughfare in the EA to identify every dwelling in the EA. There were two objectives of the visual enumeration. First, to ensure that the Enumerator could locate every dwelling which appeared on his/her map and ERB. Second, to identify dwellings which may have been missing from the map/ERB. In advance of the field operation, CSO estimated that approximately 4% of actual dwellings were missing from the Geodirectory and would therefore not appear on the map/ERB. In order to produce a full count of households and persons, these missing dwellings had to be added to the map and ERB. On finding a dwelling which was missed on the map & ERB, Enumerators were instructed to allocate a new unused D number to the dwelling and to mark it in both their map and ERB. The location of these new dwellings were digitised from the maps returned by the enumerators.

Once visual enumeration was complete, Enumerators were instructed to make contact with every household in their area and to issue the appropriate questionnaire if the household would be present in the dwelling on Census Night. On handing the Census questionnaire to the householder, the Enumerator was required to transcribe the dwelling address as well as the county, EA and Small Area code (see section 10.5) onto the form as well as the D number. In instances where more than one household occupied a dwelling, Enumerators were instructed to issue a new D number for the second household, to mark it on their map and ERB and to enumerate it separately to the first household (ie with a different Census form). The locations of new households were also digitised from the enumerator maps.

Dwellings which were not occupied were recorded on a Reconciliation Form, and allocated to one of eight categories. These categories were as follows :

1. Occupied but no Census form collected
2. Temporarily absent
3. Vacant house/Communal establishment
4. Vacant flat/apartment
5. Holiday home
6. Under construction
7. Derelict
8. Commercial only
9. Does not exist

(See section 3.4 for explanations of these categories.)

This was done to ensure there was a record for every dwelling in the state, occupied or not. For households who indicated that the entire household would be temporarily absent elsewhere in Ireland on Census night, Enumerators took the address details of where each member of the household would be staying and through a web-based tracking system made contact with the Enumerator of the EA in which the household member would be staying as a verification check. For households who indicated that they would be absent abroad on Census night, Enumerators were required to look for proof of the trip abroad (eg travel tickets, proof of accommodation booking etc). In the case where only some household members were absent on Census night the following details of absent members of the household were collected at the back of the census form:

Name

Sex,

Date of birth,

Relationship to present person 1

Marital status

Duration of absence

Was the person in the Republic of Ireland on Census Night

Is the person a student away at school or college.

Enumerators were instructed that any new dwellings added to their map and ERB which were not on the Geodirectory list could not be allocated dwelling statuses of Under construction, Derelict, Commercial only or Does not exist. This meant only habitable dwellings which were not on the Geodirectory were added.

In the case of vacant houses, flats/apartments and holiday homes, Enumerators were required to visit the dwelling on multiple occasions both before and after Census Night to ensure that they had not missed the householder on a previous visit. They were also directed to leave a 'Calling card' at the dwelling with instructions on how the householder could contact the Enumerator. Enumerators were also instructed to make contact with neighbours to verify that the dwelling was not occupied.

In rare instances where an Enumerator could not collect a completed form from an occupied dwelling after multiple visits, a Reconciliation Form was used to capture sex, age and nationality details of the persons in the dwelling. This was permissible only after intervention from the Regional Supervisor.

For communal establishments (ie managed residential accommodation including hotels, prisons, hospitals, nursing homes etc) Enumerators made contact with the manager of the establishment and requested that he/she list all persons residing in the establishment on Census Night on a Listing Form. The manager was then required to distribute Individual Census Forms to every person spending the night in the establishment. Each completed Individual Form and the Listing Form were then collected by the Enumerator after Census Night. Top priority was given to these early on the morning after Census Night to ensure that persons leaving hotels etc returned a completed Individual Form.

Several field aids were made available to Enumerators in order to maximise the number of households contacted and forms delivered. These included mobile phones for contacting householders, translations of the Census

questionnaire into 19 foreign languages, large print and braille forms, tapes and MP3 sound tracks of the form for the visually impaired.

In order to monitor the progress of the field operation in each EA, Enumerators were required to send an SMS message each day to a central database via their mobile phones, detailing the number of forms they had delivered, the number collected and the number of new dwellings added to their map/ERB. This information was collated by the CSO daily and published on a website accessible to Field and Regional Supervisors. It provided them with a record of how each Enumerator was progressing and whether intervention was required. These statistics were closely monitored at Census head quarters and Supervisors were emailed reports weekly detailing Enumerators who were falling behind so that remedial action could be taken. CSO also ran radio adverts with a free text and phone number to be contacted if the household had not received a form or their form had not been collected.

Publicity

The Census field operation was supported by a nationwide media campaign to raise awareness of the Census. Advertisements were run on national television and on national and regional radio. The CSO also worked with several organisations representing minority groups to ensure that the importance of every household being included on the Census was conveyed and to facilitate full enumeration of persons belonging to these groups. A Census web-site (www.census.ie) was developed containing information on completing the Census form, the benefits of the Census and a facility to log requests for help. In conjunction with this, a national freephone number was established to facilitate members of the public in calling for advice on all matters related to the Census.

Collection and summarisation

Collection of the completed Census questionnaires began on Monday April 11th and ran until Monday May 9th 2011. Enumerators were required to call back to every household and Communal Establishment to which they had delivered a questionnaire, on multiples occasions if required, and also to revisit dwellings categorised as vacant in order to confirm that they were unoccupied on Census Night. On collecting the forms from householders, Enumerators were required to perform a “doorstep check” on

	<p>the form to ensure that no members of the household had been omitted or double counted.</p> <p>Having collected all the completed forms for their area, Enumerators performed a manual summary, sending the total number of males, females, households and dwellings by dwelling status separately each Small Area of their EA to the CSO. On receiving this data from all of the Enumeration Areas, CSO collated the data and published a preliminary population count for 3,414 Electoral Divisions 80 days after Census Night. The difference between this preliminary count and the final count was 6,893 persons or 0.15%.</p> <p>Having completed their manual summary, Enumerators boxed and returned their completed forms to Census HQ for scanning and processing in order to generate the definitive Census results.</p>
20.4. Data validation	<p>Validation was ongoing through the processing system with 256 fatal edit checks, 94 warning error checks and other checks operating on data captured from the collected and scanned Census forms (see section 20.5 on Data compilation for more details). Edits were essentially checks built into the processing software to ensure that all dwellings were accounted for with either the appropriate Census form or a Reconciliation form and that the data captured was logical. When data failed an edit check, it was required to be either verified in the case of warning edits or corrected by the operators.</p> <p>Final data validation was performed by analysing a series of tables generated from the compiled Census data. The tables included cross-tabulations on all Census variables, comparison tables with Census 2006 data, comparison tables with external sources (eg. Surveys & administrative data sets) and tables displaying data pertaining to the processing of Census data. These tables were analysed by statistical staff for possible anomalies and inconsistencies in the data. Where such potential issues arose, the source data was re-examined. This could be done on a macro level through interrogating the Census data set using SAS, and on a micro level by identifying individual Census returns and re-opening them through dedicated viewing software to ensure the forms had been correctly captured and coded. Where miscoding or erroneous data capture was detected, data was amended either on a micro form by form level or by macro editing using SAS. If any data on a form was changed the entire suite of 256 Fatal edit checks was re-run on that household to ensure that no erroneous data got through the system.</p>

20.5. Data compilation

Completed census questionnaires for all 4,866 Enumeration Areas were returned by local field staff to Census HQ where they were registered, sorted and shelved by EA within counties. The questionnaires were then put into batches (average 15 forms per batch), guillotined and passed through a high speed IBML scanner. Images from the scanner were passed to Eflow (an automatic forms processing product designed by Top Image Systems) to capture the responses made by householders and convert them into electronic data. Almost 16,000 boxes were returned from the field, containing 2.1 million Census forms which represented almost 41 million pages. Over 140,000 batches were created from these forms for guillotining and scanning.

The purpose of Eflow was to recognise, clean, repair and code the electronic data before exporting it in XML format to an Oracle database where it would be compiled into a final file to be used for Census dissemination and publications. Eflow consisted of several 'stations' in a work flow, through which each captured batch of data passed and was subject to checks and edits. When data in the batch was not automatically recognised by Eflow, where it failed edits or where an automatic code could not be attributed, the data was presented to a manual operator for coding, validation or amendment before the batch could pass to the next station in the flow. The data presented to the operator varied depending on the station, but generally consisted of scanned images of a Census questionnaire which the operator viewed before making a decision on whether to amend the captured data.

The Eflow stations (including a brief description of their functions) were as follows:

- File portal

Imported scanned batches of households into Eflow

- Form Id

The Form ID station attempted to match each individual image to a specific EFI (empty form image) and checked page and form sequencing. Once the correct page and form had been associated with the image Eflow knew

where to find the data on the page and the data type and rules associated with that field.

- Manual ID

Operators identified any questionnaire pages which had not been automatically identified in Form Id

- Process

The Process station's role was to read data from the form. It relied on the page being identified in the previous stations (Form ID and Manual ID), With this information, the station knew where to look on each page for the relevant data. After receiving a batch, the Process station processed it and sent it to the Tile station.

The Process station was also responsible for character recognition, leaving any unrecognisable data for the manual completion process. It was a standard EFlow station but CorrectText and Exorbyte were integrated into it to improve automatic coding of specified text write-in fields. Standard EFlow processing occurred first using the virtual engines associated with each field. The processed text for selected fields was then presented to CorrectText. If CorrectText was unable to code the unrepaired text for the selected fields, then the text was presented to Exorbyte.

The Process station involved the following stages:

- Field image enhancement
- Field segmentation
- Optical character recognition (OCR) and intelligent character recognition (ICR)
- Voting for optimal results

All identification fields on the front of the form and date of birth were flagged for a higher recognition accuracy threshold during processing

reflecting the high relative impact that false positives have on these fields.

- Tile

The Tile station was used to identify characters that had been identified correctly and those which had not, on a character by character basis. The station displayed the characters in a tile format, which allowed the operator to quickly browse through each character and accept it or reject it. All characters were grouped together to allow for easy identification. By presenting all of the same characters together on a screen it was easier to spot those that had been wrongly recognised (i.e. false positives).

By clicking on a character in the tile window the image of the relevant page was seen in the right hand window. This allowed the user to manually change any inaccurate characters or replace the characters with '*' to flag the errors to the Repair and Code station. All numeric write-in fields were verified in the Tile station. Tiling of alpha field was unnecessary because the automated coding routines could automatically code the bulk of alpha strings even with false positives and still give the correct code.

- HRN integrity

This station ensured that the geography coding was correct across all forms relating to a household and that the sequence of forms within a batch was correct. Manual intervention was permitted where a batch failed these checks

- Repair and Code

The majority of the data coding and correction was performed in this station. Most write-in alpha fields (e.g usual residence, nationality, ethnicity, religion) were assigned codes against pre-defined lookup code lists, either automatically or, where the text was unrecognised or failed an edit, by manual operator intervention.

- CE exceptions

Repaired data associated with communal establishments

- Family Nucleus Coding

This station identified families of persons within households and assigned a family nucleus code to each person. If this could not be done automatically, it was presented to an expert operator for manual coding.

- Industry Station

This station assigned an occupation and industry code based on the occupation and industry descriptions and the enterprise name and address written on the Census questionnaire. Each text string was first processed automatically for both coding and edit rule validations. If a code could not be automatically assigned based on a pre-defined lookup list or if an edit rule was failed, the data was presented to an operator for coding.

- Reconciliation repair

Operators performed repairs where required on Reconciliation Forms.

- ERB processing

This station ensured that an ERB(Enumerator Record Book) entry existed for every dwelling in each EA and matched it to the Census questionnaires for that dwelling. If necessary, repairs were made to deficient data.

- ERB Reconciliation

The penultimate station matched all census forms to the corresponding entry in the ERB and ensured there was a form for each household listed by the Enumerator in the ERB.

	<ul style="list-style-type: none"> • Export <p>From this station, the data in the repaired and coded batches were written to the outputs database. The captured images of the Census questionnaires and metadata about the batch were stored in a separate repository.</p> <ul style="list-style-type: none"> • Census Document Management System(CDMS) <p>This application was not part of the Eflow workflow , but allowed operators to view scanned questionnaires and the associated data and permitted amendment of the captured data if required. All modifications made to data in CDMS were subject to the full suite of edit checks. All changes made in CDMS were output to the final database.</p> <p>Data written to the output database was then subject to the data validation described in Section 20.4.</p> <p>About 40% of place of work and school coding took place when coding the industry code in the Industry Station , The remaining place of work addresses and address of school and college was done using a bespoke CSO application outside of Eflow. The application matched address strings against the Geodirectory and re-output the matched addresses onto the Census master file for each record. The industry station was a computer assisted coding station. Unrepaired company name address and strings were matched against a register using the fuzzy matching software Exorbyte using both the address string and the geo-coordinates of the place of residence and also the company on the register to allow proximity to improve the matching. The operator was presented with the 10 closest matches and either selected the correct one or changed the text to repeat the match. In a number of cases external searches such as Google were used to locate the correct place of work.</p>
20.6. Adjustment	
21. Comment	

