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Housing characteristics

Housing characteristics - Draft text for the Conference of European Statisticians Recommendations for the 2020 census round

Note by the UNECE Task Force on Housing characteristics

Summary

This document presents the draft text on housing characteristics for the new Conference of European Statisticians Recommendations for the 2020 Round of Population and Housing Censuses. It was prepared by the UNECE Task Force on Housing characteristics based on the first proposal discussed at the September 2013 meeting of the UNECE-Eurostat Group of Experts on Population and Housing Censuses, and on further discussion within the Task Force and with the UNECE Steering Group on Population and Housing Censuses.

I. Introduction

1. This chapter focuses on housing topics and on the relationship between the population and the living quarters. Housing topics can be defined as the characteristics of housing units and buildings that are collected on the occasion of the housing census. It should be noted, however, that some topics that can be related to the housing unit (for example the core topic of tenure status and the non-core topics of single or shared occupancy, and rent) have been included amongst the characteristics of private households (and are covered accordingly in the chapter on families and households) since the principle units of enumeration for these topics generally are households. For housing topics presented in this chapter there are two main units of enumeration: conventional dwellings and other

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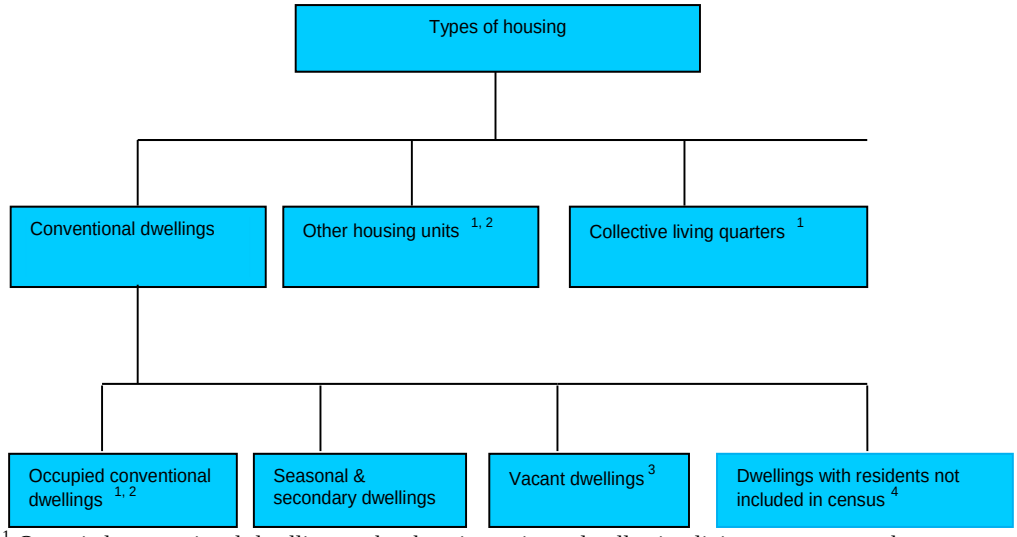
housing units. An exception is the topic 'housing arrangements' which describes the relationship between the population and their living quarters, and which, therefore, can refer equally to either individuals or their housing units. Chart 1 shows all types of housing for the whole population.

Chart 1
Different types of housing



[1] Occupied conventional dwellings, other housing units and collective living quarters together represent "living quarters" and they must be used by at least one person as the usual residence in order to be counted as part of "living quarters".
[2] The sum of occupied conventional dwellings and other housing units represents "housing units".
[3] A dwelling is defined as being 'vacant' if it is unoccupied because it is either (a) for sale or rent, (b) abandoned, (c) due for demolition, or (d) newly built and not yet occupied.
[4] Residents not included in census are temporarily present persons who are not considered part of the total usually resident population [NOTE: Cross reference to the chapter on population bases to be updated]

2. The building is regarded as an indirect but important unit of enumeration for housing censuses since the information concerning the building (building type, material of construction of external walls and certain other characteristics) is required to describe properly the living quarters located within the building. In a housing census, the questions on building characteristics are normally framed in terms of the building in which sets of living quarters being enumerated are located, and the information is recorded for each of the housing units or other sets of living quarters located within it.

3. Not all topics are relevant for all types of housing. Chart 2 below shows for each type of housing, whether the topic is core or non-core and whether or information is collected in the census for that type of housing. The reasons for not measuring a particular topic in the census vary. For some housing types, the topic is not relevant. In other cases the topic is difficult to measure in a census for a particular housing type. This is particularly so for those dwellings that are vacant at the time of the census. Finally, the topic may not be appropriate or necessary for particular types of housing arrangements. An example of this is the collection of information on household amenities in collective living quarters.

4. Throughout this chapter, topics are described as core or non-core based on how occupied conventional dwellings are to be treated. For other types of housing, it is necessary to refer to Chart 2 to determine whether the topic is to be core, non-core, or not collected at all.

Chart 2
Summary table on housing topics

Topic	Enum. units[2]	Types of Housing and Housing Arrangements				
		Homeless[1]	Collective living quarters	Other housing units	Occupied conventional dwellings	Seasonal and secondary dwellings, vacant dwellings, dwellings with residents not included in census
					(CONVENTIONAL DWELLINGS)	
				(HOUSING UNITS)		
			(LIVING QUARTERS)			
Housing arrangements	I, H	Core	Core	Core	Core	●
Type of living quarters	LQ	●	Core	Core	Core	●
Occupancy status of conventional dwellings	D	●	●	●	Core	Core
Availability of secondary, seasonal and vacant dwelling	H, D	●	●	●	●	Non-core
Type of ownership	D	●	●	◐	Core	o
Occupancy by number of private households	HU	●	●	Non-core	Non-core	●
Number of occupants	LQ	●	Core	Core	Core	●
Useful floor space and/or number of rooms	HU	●	◐	Core	Core	o
Density standard		●	◐	Core	Core	●
Type of rooms	HU	●	●	Non-core	Non-core	o
Water supply system	HU	●	◐	Core	Core	o
Toilet facilities	HU	●	◐	Core	Core	o
Bathing facilities	HU	●	◐	Core	Core	o
Hot water	HU	●	◐	Non-core	Non-core	o
Sewage disposal	HU	●	◐	Non-core	Non-core	o
Kitchen	HU	●	◐	Non-core	Non-core	o
Type of heating	HU	●	◐	Core	Core	o
Heating energy	HU	●	◐	Non-core	Non-core	o
Electricity supply	HU	●	◐	Non-core	Non-core	o
Piped gas	HU	●	◐	Non-core	Non-core	o
Air-conditioning	HU	●	◐	Non-core	Non-core	o
Position of dwelling in bldg.	D	●	●	◐	Non-core	o
Accessibility to dwelling	HU	●	●	Non-core	Non-core	o
Lift	D	●	◐	◐	Non-core	o
Type of building	D	●	●	◐	Core	o
Period of construction	D	●	◐	◐	Core	o
No. of floors in the building	D	●	◐	◐	Non-core	o
Materials of the building	D	●	◐	◐	Non-core	o
State of repair of the bldg.	D	●	◐	◐	Non-core	o

● Not measured or not applicable in the census.
o May be difficult to measure in a census. Some countries may collect or have available this information. Information on seasonal and secondary dwellings and the information on vacant dwellings concerning all the characteristics should be shown separately.
◐ Although the topic may be relatively easy to obtain, only some countries would be interested in this information for this type of housing. If information is collected, it should be shown separately for the different types of housing and collective living quarters.
[1] Including all persons who are not usual residents in any living quarter category (see paragraph 6)
[2] Enumeration units: I=Individuals; H=Households; LQ=Living Quarters; HU=Housing Units; D=Dwellings.

II. Definitions

Living quarters

5. Living quarters are those housing types that are the usual residences of one or more persons. The concept of 'living quarters' is qualified by the definitions of the main categories into which they are divided. [NOTE: Changing the concept of living quarters remains an open question]

6. The type of living quarters, together with the principal categories that they comprise are:

(1.0) Occupied conventional dwellings

(2.0) Other housing units – such as a hut, cabin, shack, caravan, houseboat, barn, mill, cave or other shelter used for human habitation at the time of the census

(3.0) Collective living quarters – a hotel, institution, camp, etc.

Housing units

7. A housing unit is a separate and independent place of abode intended for habitation by a single household, or one not intended for habitation but used as a usual residence by a household at the time of the census. This includes occupied conventional dwellings and other housing units.

8. For the purpose of international comparability, it is recommended that information is collected and presented separately for occupied conventional dwellings. Countries are encouraged to also collect information on 'other housing units' where possible, but this information should be presented separately from the same information collected for occupied conventional dwellings.

Conventional dwellings

9. Conventional dwellings are structurally separate and independent premises, which are designed for permanent human habitation at a fixed location and are not used wholly for non-residential purposes at the time of the census. A conventional dwelling consists of a room or suite of rooms and its accessories (for example lobbies, corridors) in a permanent building or structurally separated part thereof. It need not necessarily have a bathroom or toilet available for the exclusive use of its occupants.

10. A dwelling or enclosure is separate if surrounded by walls and covered by a roof so that a person, or a group of persons, can isolate themselves from other persons for the purposes of sleeping, preparing and taking meals or protecting themselves from the hazards of climate and environment. It is independent when it has direct access from the street or from a public or communal staircase, passage, gallery or grounds. That is, when the occupants can enter and leave without passing through another household's accommodation.

11. A "permanent building" is a building that was constructed to be structurally stable for at least ten years [NOTE: In the UNSD Principles and Recommendations, Revision 2, the limit is 15 years]. Some countries may prefer to define permanence in terms of the method of construction or in terms of the building materials used. Detached rooms for habitation, which are clearly designed to be used as part of the dwelling, for example a room or rooms above a detached garage should be included.

12. Conventional dwellings can be classified as occupied, secondary, seasonal and vacant dwellings or dwellings with residents not included in census. A conventional dwelling is defined as an occupied conventional dwelling if it is a usual residence of one or

more persons. An occupant of a conventional dwelling is a person who has usual residence in the dwelling.

13. A conventional dwelling is defined as being vacant if it is unoccupied because it is either for sale or rent, abandoned, due for demolition, or newly built and not yet occupied. Vacant dwellings and dwellings reserved for secondary or seasonal use can be described as unoccupied dwellings.

14. Conventional dwellings which are occupied with temporarily present persons (see para 176. [NOTE: Cross reference to be updated]), are neither considered as occupied conventional dwellings nor as vacant or reserved for seasonal or secondary use (unoccupied) and therefore are classified separately as dwellings with residents not included in census.

15. All conventional dwellings are counted for census purposes whether or not they are occupied (i.e. have at least one usual resident) – although most topics apply only to occupied conventional dwellings.

16. Because of their importance, conventional dwellings are further classified by occupancy and type of building. However, countries can also subdivide occupied conventional dwellings using the core housing infrastructure (presence of a kitchen, water supply, toilet, bathing and heating facilities) to classify how basic the housing is.

Other housing units

17. Some housing units do not come fully within the category of a conventional dwelling either because they are mobile, semi-permanent or improvised, or are not designed for human habitation, but which are nevertheless used at the time of the census as the usual residence of one or more persons who are members of one or more private households.

18. The definitions applicable to other housing units are set out below:

(a) A mobile housing unit is any type of living accommodation which has been made to be transported (such as a tent) or which is a moving unit (such as a ship, yacht, boat, barge or caravan) and which is designed for human habitation and is occupied at the time of the census, that is, it is somebody's usual residence. Nomad camps should be included in this category. Passenger quarters in means of transport such as passenger ships, railroad cars and aircraft should not be considered as other housing units and the persons who happen to be travelling in them at the time of the census should not be counted as living in these vehicles, ships or aircraft.

(b) A semi-permanent housing unit is an independent structure such as a hut or a cabin which has been constructed with locally available crude materials such as wooden planks, sun-dried bricks, straw or any similar vegetable materials for the purpose of habitation by one private household and which is used as the usual residence of at least one person at the time of the census. Such units are not expected to maintain their durability for as long a period of time as a conventional dwelling.

(c) Other housing units designed for habitation comprise independent, makeshift shelters or structures such as shacks and shanties, which have been built of waste materials, which are used as the usual residence of at least one person at the time of the census (‘improvised housing units’).

(d) Other housing units not designed for habitation comprise premises in permanent or semi-permanent buildings such as stables, barns, mills, garages, warehouses, offices, etc. which have not been built, rebuilt, converted or arranged for human habitation but are, nevertheless, used by one or more private households as their usual residence at the

time of the census. This category also includes natural shelters such as caves, which are used by one or more private households as their usual residence at the time of the census.

19. Improvised housing units and other housing units not designed for habitation may also be summarised under the concept of 'informal housing'.

20. Premises not initially designed or constructed for human habitation but which have been converted for the purpose of habitation by a private household and which fulfil the requirements of a conventional dwelling should not be included in this category, but instead classified as a conventional dwelling.

Collective living quarters

21. Collective living quarters comprise 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.

(a) A hotel is a separate and independent set of premises comprising all or part of a permanent building or set of buildings which by the way it has been built, rebuilt or converted is designed to provide accommodation on a fee basis and which is used as the usual residence of at least one person at the time of the census. Motels, inns, boarding houses, pensions, rooming houses and other lodging houses are included in this category. If the accommodation occupied by a private household residing in a hotel or similar establishment fulfils the requirements of a conventional dwelling, it should be classified as such. Otherwise it should be classified with collective living quarters.

(b) An institution is a separate and independent set of premises comprising all or part of a permanent building or set of buildings which by the way it has been built, rebuilt or converted is designed for habitation by a large group of persons who are subject to a common authority or regime or bound by a common objective or personal interest, and which is used as the usual residence of at least one person at the time of the census. Such collective living quarters usually have certain shared common facilities such as cooking and toilet facilities, baths, lounge rooms or dormitories. This category includes premises such as nurses' hostels, student residences, hospitals, sanatoria and convalescent homes, welfare institutions, monasteries, convents, military and police barracks, prisons and reformatories.

(c) A camp is a separate and independent set of premises comprising all or part of a semi-permanent or temporary structure or set of structures which by the way it has been built, rebuilt or converted is designed for the temporary accommodation of groups of persons with common activities or interests, and which is used as the usual residence of at least one person at the time of the census. Such collective living quarters usually have certain common shared facilities such as cooking and toilet facilities, baths, lounge rooms or dormitories. This category includes military camps, refugee camps and camps for housing workers employed by agriculture, logging, mining, construction or other enterprises.

22. Housing units located on the grounds or within a building containing a hotel, institution or camp should be separately identified and counted as dwellings, if they fulfil the requirements of a conventional dwelling.

II. Housing topics

23. The majority of topics in this chapter refer to characteristics and amenities of housing units, which include occupied conventional dwellings and other housing units. A few topics refer to characteristics of living quarters, which include housing units and

collective living quarters (Chart 2) and one topic refers to the housing arrangements of individuals.

24. For some of the topics, countries may wish to collect information also on conventional dwellings which are reserved for seasonal and secondary use, which are vacant or which are occupied with residents not included in census, in addition to occupied conventional dwellings (see paragraphs 42-46). It may be difficult to obtain information on these dwellings as, in many cases, they may not appear on mailing lists of conventional dwellings or, as these dwellings are not (permanently) occupied, there may be no one present at census time. When information is collected, the same classifications described in this chapter, or simplified modifications, are recommended.

25. Information on some of the characteristics of housing units could also be obtained for collective living quarters. However, given the nature of collective living quarters, in some cases the information may not be collected and presented in the same way as for housing units. For instance, with regard to toilet or bathing facilities, relevant information may relate to how many people use on average the same facility.

26. Priority should always be given to obtaining information on occupied conventional dwellings, which should be presented separately from other types of housing (including other housing units, seasonal and secondary dwellings, vacant dwellings, dwellings with residents not included in census and collective living quarters). In this way it would be possible to assess the quality of life associated with the different types of housing. If information is obtained on collective living quarters, where possible it should be presented separately for the different categories of collective living quarters.

Type of living quarters (core topic)

27. Living quarters are defined in paragraph 5. Type of living quarters relate to occupied conventional dwellings, other housing units and collective living quarters.

28. It is recommended that living quarters be classified by type as follows:

- (1.0) Occupied conventional dwellings
- (2.0) Other housing units
  - (2.1) Mobile units
  - (2.2) Semi-permanent units
  - (2.3) Informal housing units
- (3.0) Collective living quarters
  - (3.1) Hotels, rooming houses and other lodging houses
  - (3.2) Institutions
  - (3.3) Camps.

29. This classification is recommended at the one-digit level but optional at the two-digit level.

30. All occupied conventional dwellings and other housing units must be in use by at least one person as their usual residence at the time of the census in order to be counted as part of living quarters.

31. Since institutions can be of different nature, countries may subdivide further category (3.2) in the above classification to present detailed data on different categories of institutions. In this context, consideration could be given to the categories of institutional households presented in the chapter on families and households [NOTE: Add cross

reference to section on institutional households] and to the institutions listed in paragraph 21(b). Countries may also subdivide further category (2.3) in the above classification to present data on improvised housing units ('other units designed for habitation') and other housing units not designed for habitation as is set out in paragraph 18(d) [NOTE: Update cross reference to section on definition of other housing units].

Housing arrangements (derived core topic)

32. Housing arrangements cover the whole population and refers to the type of housing where a person is a usual resident at the time of the census – This covers all persons who are usual residents in different types of living quarters, or who are roofless persons.

33. The concept of 'housing arrangement' is introduced as a core topic to ensure that the whole population is classified according to all the units counted in the housing censuses including the consideration of those who are roofless [NOTE: Add cross reference to section on the homeless/roofless in the chapter on families and households].

34. The following classification by housing arrangement is recommended:

(1.0) Occupants (that is persons with a usual residence) living in a conventional dwelling

(2.0) Occupants (that is persons with a usual residence) living in another housing unit – hut, cabin, shack, caravan, houseboat, or a barn, mill, cave or other shelter used for human habitation at the time of the census

(3.0) Occupants (that is persons with a usual residence) living in a collective living quarter – a hotel, institution, camp, etc.

(4.0) Primary homeless persons (that is persons who are not usual residents in any living quarter category).

35. This classification is considered at the level of individuals.

36. The number of occupants in the first three categories above is the number of persons who usually reside in the housing arrangement, including persons who may be temporarily absent at the census but excluding people temporarily present at the census that usually live elsewhere (see paragraphs the chapter on population bases for the definition of 'place of usual residence' [NOTE: Cross-reference to be updated]). As the living arrangements under categories (2.0) and (3.0) may be of a different nature, countries may subdivide these categories further (see paragraphs 27-31) [NOTE: Cross-reference to be updated]).

Occupancy status of conventional dwellings (core topic)

37. Occupancy status refers to whether or not a conventional dwelling is occupied by a usual resident at the time of the census. For those dwellings not occupied (i.e. vacant or in secondary use), the reason for not being occupied is classified. Dwellings reserved for residents not included in census (temporarily present persons such as visitors, foreign diplomatic personnel and their families) are classified separately.

38. It is recommended that conventional dwellings be classified based on the presence of usual residents and use. The following classification is therefore recommended

(1.0) Occupied conventional dwellings with one or more usual residents

(2.0) Conventional dwelling with no usual residents at time of census

(2.1) Dwellings reserved for seasonal or secondary use

(2.2) Vacant dwellings

(2.2.1) Vacant for sale

(2.2.2) Vacant for rent

(2.2.3) Vacant for demolition

(2.2.4) Other vacant or not known

(3.0) Conventional dwellings with residents not included in census (see the chapter on population bases [NOTE: Cross-reference to be updated])

39. The classification is recommended at the one- and two-digit level but optional at the three-digit level. Categories (2.2.1) and (2.2.2) may be subdivided to show the length of time the dwelling has remained unoccupied - as an indication of the situation in the housing market in the area concerned.

40. Dwellings that are used during the working week only by persons who are resident in another dwelling at their family place should be considered as part of (2.0) "conventional dwellings with no usual residents at time of census" because the persons using the dwelling are not usual residents of the dwelling.

41. To obtain information on dwellings that are vacant or in secondary or seasonal use may be difficult. A possible way of obtaining such information may be to collect the information from households who own, or rent on an annual basis, dwellings used for secondary or seasonal purposes, or vacant dwellings.

Availability of secondary, seasonal and vacant dwellings, characteristics of secondary, seasonal, vacant and of dwellings with no residents at time of census (non-core topic)

42. This topic relates to the household availability of secondary, seasonal and vacant dwellings (unoccupied conventional dwellings). It also allows for the description of some features of unoccupied conventional dwellings and of dwellings with residents not included in census. The number and types of features measured will depend on the individual requirements of countries.

43. The majority of topics in this chapter relate to occupied conventional dwellings. However, there may be interest in collecting information on, at least, some of the main characteristics of all conventional dwellings. In the core topic "Occupancy status of conventional dwellings" the number of all conventional dwellings is obtained including seasonal, secondary, vacant dwellings and dwellings with residents not included in census. In addition to this number, some countries may also wish to collect more information on this part of the dwelling stock to be able to produce more information than just numbers.

44. In this topic, countries may collect information on the household availability of secondary, seasonal and vacant dwellings. The different features of unoccupied conventional dwellings and of conventional dwellings with residents not included in census can be described; for example, number of rooms and useful floor space, amenities (e.g. water, toilet, bathing, hot water, sewage system, heating, electricity) and type of building. The same classifications, or simplified modifications, described in paragraphs 69-134 are recommended [NOTE: Cross-reference to be updated]. This information should be kept separate from information on occupied conventional dwellings and on other housing units.

45. In addition to dwellings fit for habitation year round, countries may also wish to collect similar information on premises that are not designed to be used year round (e.g. mountain huts, primitive cabins). If countries collect this information it must be ensured that the information on these premises is not included in the data on conventional dwellings and thus not in the dwelling stock.

46. The metadata must make the collection of data clear. The main approach should be that the information on secondary and seasonal dwellings covers dwellings at the disposal of one household on an annual basis. For other circumstances double counting must be

avoided; this may occur for example where there is joint ownership of a secondary dwelling by two or more households.

Type of ownership (core topic)

47. This topic refers to the type of ownership of dwellings and not that of the land on which the dwelling stands.

48. The topic "type of ownership" should not be confused with the household characteristic 'tenure status' [NOTE: Add cross reference here] as it measures the status of the dwelling.

49. The following classification of dwellings by type of ownership is recommended:

(1.0) Owner-occupied dwellings

(2.0) In co-operative ownership

(3.0) Rented dwellings

(3.1) In private ownership

(3.2) Owned by the local or central government and/or by non-profit organisations

(3.3) Mixed ownership

(4.0) Other types of ownership

50. This classification is recommended for occupied conventional dwelling at the one-digit level but optional at the two-digit level.

51. If subdivisions of category (1.0) or (2.0) are distinguished for national purposes, the types of ownership included in each of the subdivisions should be clearly described in the census reports.

Occupancy by number of private households (non-core topic)

52. This topic measures occupancy of housing units in terms of the number of occupying households. It is only relevant for countries which use the housekeeping unit concept of the private household [NOTE: Cross-reference to the chapter on families and households to be added])

53. The following classification of housing units by single or shared occupancy is recommended:

(1.0) Housing units occupied by a single household

(2.0) Housing units occupied by two households

(3.0) Housing units occupied by three or more households.

Number of occupants (core topic)

54. The number of occupants of a living quarter is the number of people for whom the living quarter is the usual residence.

55 A classification of the total number of living quarters according to the type (occupied conventional dwellings, other housing units and collective living quarters) and the number of occupants should be included (i.e. dwellings with one person, two persons, etc.). The average number of occupants per each type of living quarter should also be derived.

Useful floor space and/or number of rooms of housing units (core topic)

55. The definition of useful floor space used for census purposes should preferably be the same as that recommended in the *Programme of Current Housing and Building Statistics for Countries in the UNECE Region* (Statistical Standards and Studies No. 43). Useful floor space is defined in that document as the floor space measured inside the outer walls excluding non-habitable cellars and attics and, in multi-dwelling buildings, all common spaces. In the document mentioned above, another concept of living floor space is also used, which is defined as the total floor space of rooms falling under the concept of "room" as defined in paragraph 58 below [NOTE: Cross-reference to be updated]. If this concept is used, it should clearly be mentioned and defined to avoid confusion in international comparisons. If possible, floor space should be used in preference to the number of rooms.

56. Together with information on useful floor space, countries should report the total useful floor space of housing units as well as the average useful floor space per housing unit. Information concerning useful floor space is recommended for housing units so that the density standard using this indicator can be calculated.

57. The following classification of housing units by area of floor space is recommended:

(1.0) Under 30 square metres

(2.0) 30 and less than 40 square metres

(3.0) 40 and less than 50 square metres

(4.0) 50 and less than 60 square metres

(5.0) 60 and less than 80 square metres

(6.0) 80 and less than 100 square metres

(7.0) 100 and less than 120 square metres

(8.0) 120 and less than 150 square metres

(9.0) 150 square metres and over.

58. A “room” is defined as a space in a housing unit enclosed by walls reaching from the floor to the ceiling or roof covering, at least to a height of 2 metres above the ground, 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. Thus, normal bedrooms, dining rooms, living rooms, habitable cellars and attics, servants' rooms, kitchens and other separate spaces used or intended for habitation all count as rooms if they correspond to the definition above. A kitchenette (i.e. a kitchen of less than 4 square metres), verandas, utility rooms (for example boiler rooms, laundry rooms) and lobbies do not count as rooms; nor do bathrooms and toilets (even if they are more than 4 square metres). Rooms without windows, for example cellars below ground – however large – should not generally be counted, unless they are functionally used for domestic purposes – which might include large lobbies with writing tables or internal bedrooms with no windows for example.

59. Countries should report the total number of rooms and the average number of rooms per housing unit.

The following classification of number of rooms is recommended:

(1.0) One room

(2.0) Two rooms

(3.0) Three rooms

(4.0) Four rooms

(5.0) Five rooms

(6.0) Six rooms

(7.0) Seven rooms

(8.0) Eight rooms

(9.0) Nine rooms and over

Classification by number of rooms is recommended for occupied conventional dwellings so that the density standard can be calculated, and optional for other housing units.

60. Rooms used only for business and professional purposes should preferably be counted separately as it is desirable to include them when calculating the number of rooms in a housing unit but to exclude them when calculating, for instance, the number of persons per room. Each country should indicate in its census report and/or relevant metadata how such rooms have been treated. At the lower quality end of dwellings, which constitute ‘other housing units’, there may be difficulties in defining rooms and useful floor space. Countries should then note the number of 'other housing units' for which information could not be collected. These housing units are to be excluded from housing density standards. Information on useful floor space and number of rooms for conventional dwellings should always be reported separately.

Density standard (derived core topic)

61. Useful floor space in square metres divided by the number of occupants in a housing unit is generally regarded as a better measure of density standard than the number of rooms divided by the number of occupants in a housing unit because rooms vary in size. However, in some countries the population may not know, with any degree of accuracy, the useful floor space. For comparative purposes it is better that countries collect both the number of rooms per occupant and the useful floor space in square metres per occupant where possible.

62. Overcrowding indicators can be calculated using a cross-tabulation of the number of occupants in housing units (that is, housing units with one person, two persons, etc), and the housing units classified by number of rooms (that is, one-room housing units, two-room housing units, etc.) or by number of bedrooms. In addition, the average useful floor space per occupant can be counted separately for housing units with one person, housing units with two persons and so on.

63. The following classification of useful floor space per occupant is recommended:

(1.0) Under 10 square metres per occupant

(2.0) 10 and less than 15 square metres per occupant

(3.0) 15 and less than 20 square metres per occupant

(4.0) 20 and less than 30 square metres per occupant

(5.0) 30 and less than 40 square metres per occupant

(6.0) 40 and less than 60 square metres per occupant

(7.0) 60 and less than 80 square metres per occupant

(8.0) 80 square metres and over per occupant

64. The following classification for number of rooms per occupant is recommended:

(1.0) Less than 0.5 room per occupant

(2.0) 0.5 and less than 1.0 room per occupant

(3.0) 1.0 and less than 1.25 rooms per occupant

(4.0) 1.25 and less than 1.5 rooms per occupant

(5.0) 1.5 and less than 2 rooms per occupant

(6.0) 2 and less than 2.5 rooms per occupant

(7.0) 2.5 and less than 3 rooms per occupant

(8.0) 3 or more rooms per occupant.

65. If the information is collected for other housing units or for collective living quarters, it should be shown separately for conventional dwellings, other housing units and collective living quarters.

Type of rooms (non-core topic)

66. Some countries may wish to provide more specific information on overcrowding within housing units by providing information on the number of certain types of rooms within housing units.

67. Some countries consider that the number of bedrooms provides a more accurate indicator of overcrowding, especially where overcrowding is defined by number of bedrooms and age, sex and relationships of members within the household. Rooms, which are used as household living space, should not be included as a bedroom.

68. The count of the following categories of rooms for housing units is suggested:

(1.0) Reception and living rooms

(2.0) Bedrooms

Water supply system (core topic)

69. All countries should report separately on water supply systems for occupied conventional dwellings but information should also be collected for all other housing units.

70. The following classification of occupied conventional dwellings and of other housing units by type of water supply system is recommended:

(1.0) Piped water in the housing unit

(1.1) From a community scheme

(1.2) From a private source

(2.0) No piped water in the housing unit

(2.1) Piped water available within the building but outside the housing unit

(2.1.1) From a community scheme

(2.1.2) From a private source

(2.2) Piped water available outside the building

(2.2.1) From a community scheme

(2.2.2) From a private source

(2.3) No piped water available

71. This classification is recommended at the one-digit level and optional at the two and three-digit levels.

72. A community scheme is one, which is subject to inspection and control by public authorities. A public body generally operates such schemes but in some cases they are operated by a co-operative or a private enterprise.

73. It is recognised that some countries where the proportion of dwellings equipped with piped water is very high, almost 100 per cent nationally, may not feel that the collection of such information in the census is justified in comparison with other more relevant or discriminating topics.

Toilet facilities (core topic)

74. All countries should report separately on toilet facilities for occupied conventional dwellings but information should also be collected for all other housing units.

75. The following classification of occupied conventional dwellings and of other housing units by type of toilet facilities is recommended:

(1.0) Flush toilet in the housing unit

(2.0) No Flush toilet in the housing unit

(2.1) Toilet of other type in the housing unit

(2.2) Flush toilet available within the building but outside the housing unit

(2.2.1) Private (i.e. for the exclusive use of the occupants of the housing unit)

(2.2.2) Shared (i.e. shared with occupants of another housing unit)

(2.3) Flush toilet available outside the building

(2.3.1) Private

(2.3.2) Shared

(2.4) Toilet of other type within the building but outside the housing unit

(2.4.1) Private

(2.4.2) Shared

(2.5) Toilet of other type outside the building

(2.5.1) Private

(2.5.2) Shared.

76. This classification is recommended at the one-digit level and optional at the two and three-digit levels.

77. It is recognised that some countries where the proportion of dwellings equipped with a flush toilet is very high, almost 100 per cent nationally, may not feel that the collection of such information in the census is justified in comparison with other more relevant or discriminating topics.

Bathing facilities (core topic)

78. All countries should report separately on bathing facilities for occupied conventional dwellings but information on the availability of bathing facilities in other housing units should also be reported.

79. It is recommended that the following classification of bathing facilities be used:

(1.0) Fixed bath or shower in the housing unit

(2.0) No fixed bath or shower in the housing unit

(2.1) Fixed bath or shower available within the building but outside the housing unit

(2.1.1) Private

(2.1.2) Shared

(2.2) Fixed bath or shower available outside the building

(2.2.1) Private

(2.2.2) Shared

(2.3) No fixed bath or shower available

80. This classification is recommended at the one-digit level and optional at the two and three-digit levels. A fixed bath or shower is one, which has fixed connections to both a water supply and a waste pipe leading outside the building.

81. It is recognised that some countries where the proportion of dwellings with bathing facilities is very high, almost 100 per cent nationally, may not feel that the collection of such information in the census is justified in comparison with other more relevant or discriminating topics.

Hot water (non-core topic)

82. Information should be given separately on the availability of hot water to occupied conventional dwellings and, depending on the availability of information, to other housing units. Each country should define the concept of “hot water”.

83. A classification similar to that given for the availability of bathing facilities would be appropriate.

(1.0) Hot water tap in the housing unit

(2.0) No hot water tap in the housing unit

(2.1) Hot water tap available within the building but outside the housing unit

(2.2) Hot water tap available outside the building.

(2.3) No hot water tap available.

Type of sewage disposal system (non-core topic)

84. It is preferable that all countries collect information on the type of sewage disposal system in occupied conventional dwellings and report it separately. It is recommended that countries which use the building as a unit of enumeration or of data collection, collect information on the type of sewage disposal system to which the building is connected, and to assign this information to the housing unit.

85. The following classification of occupied conventional dwellings and of other housing units by type of sewage disposal system is recommended:

(1.0) Wastewater empties into a piped system connected to a public sewage disposal plant

(2.0) Wastewater empties into a piped system connected to a private sewage disposal plant (for example a septic tank built for a single housing unit or a small group of dwellings)

(3.0) All other arrangements (for example waste water empties into an open ditch, a pit, a cesspool, a river, the sea, etc.)

(4.0) No sewage disposal system

Kitchen (non-core topic)

86. It is suggested that where occupied conventional dwellings are classified by number of rooms they should also be classified by availability of a kitchen. A kitchen is defined as a room (or part of a room) of at least 4 square metres or two metres wide that has been designed and equipped for the preparation of the principal meals and is used for that purpose, irrespective of whether it is also used for eating, sleeping or living.

87. The kitchen is counted as a room in these recommendations (see paragraphs 0 and 0 [NOTE: Cross-references to be updated]). Since certain countries apply different practices in this respect, it is important to be able to count the number of rooms both with the kitchen included and with the kitchen excluded. This will make international comparisons possible.

88. The definition of a kitchen adopted for the census should be given in detail in the relevant census report and/or metadata, and attention should be drawn to any deviations from the general definition given above. In particular, countries should indicate how they have classified dwellings in which meals are prepared in a room that is also used for other activities.

89. The following classification of dwellings by availability of a kitchen is recommended:

(1.0) With a kitchen

(2.0) With a kitchenette (that is a separate space with less than 4 square metres or two metres width of floor space)

(3.0) Without a kitchen or kitchenette

(4.0) Cooking facilities are provided in another type of room

90. NOTE: It is proposed to delete the non-core topic “Cooking facilities” (paragraph 677 in the CES Recommendations for the 2010 round) as it is not very specific and related to more than one dimension (equipment of the kitchen; fuel used for cooking).

Type of heating (core topic)

91. All countries should report separately the type of heating in occupied conventional dwellings.

92. The following classification of occupied conventional dwellings and of other housing units by type of heating is recommended:

(1.0) Central heating

(1.1) Central heating from an installation in the building or in the housing unit

(1.2) Central heating from a community heating centre

(2.0) No central heating

(2.1) Heating facilities or equipment available in the occupied conventional dwelling/other housing unit

(2.1.1) Stove

(2.1.2) Fireplace

(2.1.3) Portable electric heater

(2.1.4) Other

(2.2) No heating at all

93. This classification is recommended at the one-digit level and optional at the two-digit level.

94. 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. Some countries may wish to include additional sub-categories in this classification so as to obtain information, which can be used for energy planning (see also non-core topic main type of energy used for heating).

Main type of energy used for heating (non-core topic)

95. In addition to the core topic type of heating, some countries may also wish to collect information on the main type of energy used for heating purposes. If this information is available it should be reported separately for occupied conventional dwellings and other housing units.

96. The following classification of occupied conventional dwellings and of other housing units by main type of energy used for heating purposes is recommended:

(1.0) Solid fuels

(1.1) Coal, lignite and products of coal and lignite

(1.2) Wood and other renewable wood-based products

(1.3) Other

(2.0) Oil

(3.0) Gaseous fuels

(3.1) Natural gas

(3.2) Other (including liquefied gases)

(4.0) Electricity

(5.0) Other types of energy used

(5.1) Solar energy

(5.2) Wind energy

(5.3) Geothermal energy

(5.4) Other.

97. Countries should indicate in the census reports and/or relevant metadata how the main type of energy was selected in a housing unit where two types of energy were equally used for heating purposes.

Electricity (non-core topic)

98. Countries collecting information on the availability of electricity should report it separately for occupied conventional dwellings and other housing units.

99. The following classification of occupied conventional dwellings and of other housing units by the availability of electricity is recommended:

(1.0) Electricity available in the housing unit

(2.0) No electricity available in the housing unit

Piped gas (non-core topic)

100. Piped gas should be defined as natural or manufactured gas which is distributed by pipeline and the consumption of which is recorded by gas meters. Countries collecting information on the availability of piped gas should report it separately for occupied conventional dwellings and other housing units.

101. A classification similar to that suggested for availability of electricity would be appropriate.

(1.0) Piped gas available in the housing unit

(1.1) For heating purposes

(1.2) For cooking purposes

(2.0) No piped gas available in the housing unit.

Air-conditioning (non-core topic)

102. Some countries may wish to record air-conditioning as a housing quality measure, but use and importance of this topic as a housing measure may vary across countries. If this information is collected it should be reported separately for occupied conventional dwellings and other housing units.

103. The following classification of air-conditioning is recommended:

(1.0) Air-conditioning available in the housing unit

(1.1) Central air-conditioning from an installation in the building or in the housing unit

(1.2) Independent air-conditioning unit(s) available in the housing unit

(2.0) No air-conditioning available in the housing unit.

Position of dwelling in the building (non-core topic)

104. Some countries may want to collect information on the position of dwellings in the building. This information can be used as an indicator of accessibility to dwellings, possibly in conjunction with the non-core topic accessibility to dwelling**.** Countries collecting this information should report it separately for occupied conventional dwellings.

105. The following classification of dwellings by position in the building is recommended:

(1.0) Dwellings on one floor only

(1.1) Dwelling on the ground floor of the building or lower (below ground level)

(1.2) Dwelling on the first or second floor of the building

(1.3) Dwelling on the third or fourth floor of the building

(1.4) Dwelling on the fifth floor of the building or higher

(2.0) Dwellings on two or more floors

(2.1) Dwelling on the ground floor of the building or lower (below ground level)

(2.2) Dwelling on the first or second floor of the building

(2.3) Dwelling on the third or fourth floor of the building

(2.4) Dwelling on the fifth floor of the building or higher

106. The sub-categories of (2.0) "Dwellings with two or more floors" each refer to the lowest floor of the dwelling with two or more floors.

Accessibility to dwelling (non-core topic)

107. Some countries may want to collect information on the accessibility to dwellings, in particular with reference to accessibility by persons with disabilities. Countries collecting this information should report it separately for occupied conventional dwellings and other housing units.

108. The following classification of accessibility to the front door of the dwelling is recommended, based on the presence of ramps, steps, and lifts:

(1.0) Access with no steps or ramp

(2.0) Access by ramp

(3.0) Access by disabled stair lift

(4.0) Access using lift only (though the building may have staircases as well)

(5.0) Access by using only steps

(6.0) Access only by using both lift and steps

Note: these categories are not mutually exclusive.

Lift (non-core topic)

109. It is suggested that information on the presence of a working lift in multi-storey buildings be collected. Countries collecting this information should report it separately for occupied conventional dwellings. The information should not be limited to the presence of a lift, but it should be indicated if the lift is operational for most of the time and is subject to regular maintenance. It could also be useful to collect information on the size of the lift (for the handicapped persons and ambulance transport), and if the lift goes to the ground floor.

110. Some countries may also want to collect information on the availability of a working lift with reference to the single dwellings in a building. In this case, information should be collected on whether or not the lift stops on the same floor, as is the case for the dwelling.

A. Characteristics of buildings containing dwellings

111. The building is an important unit since information on type of building and period of construction is required to describe the dwellings within the building and for formulating housing programmes. The topics included in this section refer to occupied conventional dwellings as unit of enumeration. The main interest is to report on the characteristics of occupied conventional dwellings. The idea is not to describe the characteristics of buildings per se, but instead to count the number of dwellings in buildings with different characteristics.

112. These recommendations concern buildings that contain conventional dwellings.

113. A building is defined in this context as any independent structure containing one or more dwellings, rooms or other spaces, covered by a roof and enclosed within external walls or dividing walls which extend from the foundations to the roof, whether designed for residential or for agricultural, commercial, industrial or cultural purposes or for the provision of services. Thus a building may be a detached house, apartment building, factory, shop, warehouse, garage, barn, etc.

Dwellings by type of building (core topic)

114. Dwellings may be classified by type of building where they are placed. Countries collecting this information should report it separately for occupied conventional dwellings.

115. The following classification for dwellings by type of building is recommended at the one-, two- and three-digit level.

(1.0) Residential buildings

(1.1) Detached house (houses not attached to any other buildings)

(1.1.1) Detached houses with one dwelling

(1.1.2) Detached houses with two dwellings (with one above the other)

(1.2) Semi-detached house (two attached dwellings)

(1.3) Row (or terraced) house (at least three attached or connected dwellings each with separate access to the outside)

(1.4) Apartment buildings

(1.4.1) Apartment buildings with three to nine dwellings

(1.4.2) Apartment buildings with 10 or more dwellings

(1.5) Other residential buildings

(2.0) Non-residential buildings

116. For some purposes, it might be useful to classify the buildings by the number of dwellings a building contains. The following classification is recommended at the one- and two-digit level:

(1.0) Conventional dwellings in residential buildings

(1.1) Conventional dwellings in residential buildings with one dwelling

(1.2) Conventional dwellings in residential buildings with two dwellings

(1.3) Conventional dwellings in residential buildings with three or more dwellings

(2.0) Conventional dwellings in non-residential buildings.

117. If no information on the classification under paragraph 700 [NOTE: Cross-reference to be updated] is available, the breakdown of buildings by the number of dwellings a building contains might be obtained by direct enumeration.

Dwellings by number of floors in the building (non-core topic)

123. This topic refers to the number of floors of the building. The number of floors is counted from the ground floor upwards.

124. The following classification of the number of floors, counted from ground floor upwards in a building is recommended:

(1.0) 1 floor

(2.0) 2 floors

(3.0) 3 floors

(4.0) 4 floors

(5.0) 5 - 9 floors

(6.0) 10 -19 floors

(7.0) 20 floors or more.

Countries should report separately the number of floor levels of the building for occupied conventional dwellings.

Dwellings by period of construction (core topic)

118. Period of construction is measured in terms of the date when the building was completed. Countries should report separately the information for occupied conventional dwellings.

119. The following classification of occupied conventional dwellings by the period in which the construction of the building containing them was completed is recommended:

(1.0) Before 1919

(2.0) 1919 – 1945

(3.0) 1946 – 1960

(4.0) 1961 – 1970

(5.0) 1971 – 1980

(6.0) 1981 – 1990

(7.0) 1991 – 2000

(8.0) 2001 – 2005

(9.0) 2006 or later

(9.1) 2006

(9.2) 2007

(9.3) 2008

(9.4) 2009

(9.5) 2010

(9.6) 2011.

120. This classification is recommended at the one-digit level, and optional at the two-digit level.

121. Consideration could be given to collecting information on this through an open-ended question. If no exact reply is obtained, the household should be asked to indicate the approximate years (or year) in brackets following a classification, which could be aggregated, into the above specified classification.

122. Dwellings in buildings, which have undergone thorough reconstruction since they were originally built, may be classified to the period in which the building was originally constructed or to the period of latest reconstruction according to national requirements. Each country should indicate in its census report and/or metadata how such dwellings have been classified.

Dwellings by materials of which specific parts of the building are constructed (non-core topic)

126. Information on the materials of which specific parts of buildings containing dwellings are constructed may be used, in conjunction with data on other topics, for assessing the quality of dwellings. Some countries may wish to collect data on the materials of which the outer walls, the roof, the floors, etc. are constructed for this and other purposes. Countries should report separately the information for occupied conventional dwellings but information could also be collected for other housing units.

127. The following classification of dwellings by the main structural material of which the outer walls of the building containing them are constructed is suggested:

(1.0) Wood

(2.0) Unburnt clay (may be omitted by countries where this is not important)

(3.0) Burnt clay (bricks, blocks, panels, etc.), stone, concrete (in situ cast concrete, blocks, panels, etc.), or steel frame

(4.0) Prefabricated units – generally factory constructed and brought to the site and erected

(5.0) Other material (to be specified)

(6.0) Mixed materials (that is a combination of building materials).

128. When this classification is combined with that by period of construction, a classification providing data on the quality of dwellings is obtained. Some countries may wish to have only persons in owner-occupied dwellings respond to questions on this topic, particularly since many tenants and other respondents may not be able to respond accurately.

Dwellings by state of repair of the building (non-core topic)

129. This topic refers to whether the building is in need for repair and the kind of repair needed. Countries should report separately the information for occupied conventional dwellings and other housing units.

130. The recommended classification of dwellings according to the state of repair of buildings is as follows:

(1.0) Repair not needed

(2.0) In need of repair

(2.1) Minor repair

(2.2) Moderate repair

(2.3) Serious repair

(3.0) Irreparable

131. Minor repair refers mostly to the regular maintenance of the building and its components, such as a cracked window or inoperative lock, or removing graffiti from the front wall and so forth.

132. Moderate repair refers to correcting moderate defects such as gutters missing on the roof (where they are normally used), large areas of broken plaster and stairways with no secure hand railing.

133. Serious repairs are needed in case of serious structural defects of the building such as missing covering material (for example shingles, tiles) cracks and holes in the exterior walls and missing stairways.

134. 'Irreparable' refers to buildings that are beyond repair, that is, with so many serious structural defects; it is deemed more appropriate to tear them down than to undertake repairs. This usually refers to buildings with only the frame left standing, without complete external walls and/or roof, windows, doors, etc.