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METHODS AND DEFINITIONS USED TO COLLECT INFORMATION ON ECONOMIC CHARACTERISTICS IN THE ECE 2000 ROUND OF POPULATION AND HOUSING CENSUSES

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BACKGROUND AND SUMMARY

1.   Compilation of economic characteristics is an important issue in population censuses. It allows countries to cross information on the economical activity of individuals with other social and demographic characteristics (example, crossing literacy with professional situation, or wage with access to new information-technologies) and it provides local information that can not be usually extracted from surveys or registers.

2.   International and regional documents have provided guidelines on the collection of economic characteristics in censuses and helped to facilitate this collection considering the different economic backgrounds of countries and improving the comparability of the data at regional and international level. The two key documents used in the ECE region to provide standards for the 2000 round of censuses are the *Recommendations for the 2000 Censuses of*

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population and housing in the ECE Region[1] (in the paper referred as the ECE Recommendations) and the *Principles and Recommendations for Population and Housing Censuses, Revision 1*[2] (in the paper referred as the World Recommendations).

3.   In view of the revision of the ECE Recommendations for the 2010 round of censuses, the paper presents the analysis of questions used to collect economic characteristics in the 2000 census round in the ECE region highlighting communalities and disparities in the approaches used by countries and their compliance with the 2000 Recommendations (see Annex 1). 38 census questionnaires were analyzed. From the material available it was not always possible to review the definitions and the analysis was conducted reviewing only the methods used in the questionnaires. From this analysis the paper attempts to provide some suggestions on the areas where the current ECE Recommendations could be updated for the forthcoming census round.

4.   The analysis starts reviewing the approaches used by countries to introduce the issue of current activity status. Three main approaches are identified and within each approach the different methods used by countries are discussed. Considering classification of countries according to these three approaches the paper also reviews the practices used by countries in relation to the economic characteristics topics included in the 2000 ECE Recommendations. The analysis highlights two main issues that should address in the updating of the Recommendations for the 2010 census round:

- The new recommendations should improve the definition and the distinction between "economic activity status" and "status in employment". A consistent number of countries mixed the two concepts in the same question.
- The new recommendations should also be clear on the role of questions related to sources of income to collect information on economic status and how to allocate sources of livelihood to the classification of economic status and status in employment. Countries that used this approach in the past or are planning to use it in the 2010 census round may also need technical guidelines to move to a different approach keeping the historical trends or to know how to best compare this information with the other approaches used in the region.

5.   The purpose of the analysis is not to evaluate the methodology used by countries but rather to understand if international standards are relevant in the region and to see how they can be improved to better serve the needs of the region and of single countries.

1.   General methodologies of questionnaires to compile information on economic characteristics of individuals

6.   The basic definition of "**economically active**" assumes the capacity of individuals to provide supply of labour. This definition lies on a capacity of supply so that employed and unemployed are both integrated in the "economically active" population. To help countries to classify people in or out of the "economically active" population the ECE Recommendations define the concept of **economic activity** (para 90) considering three main categories:

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[1] United Nations Statistical Commission and Economic Commission for Europe Conference of European Statisticians, Economic Commission for Europe Committee on Human Settlements, Statistical Standards and Studies – No. 49, *"Recommendations for the 2000 Censuses of Population and Housing in the ECE Region* jointly prepared by the United Nations Economic Commission for Europe and the Statistical Office of the European Communities", United Nations, New York and Geneva, 1998.
[2] United Nations Statistical Papers Series M No. 67/Rev.1, New York 1998.

- Production of goods or service (for intermediary or final use) supplied (or intended to be supply) to units other than their producers
- Own-account production of all goods for final consumption or fixed capital formation;
- Own account production of domestic and personal services by employing paid domestic staff.

7.   These three categories of economic activities are intended to guide countries to define the activity status of individuals and classify population according to this concept.
A common representation of the population structure according to economic status is in Figure 1:

Figure 1. Framework of population by activity status
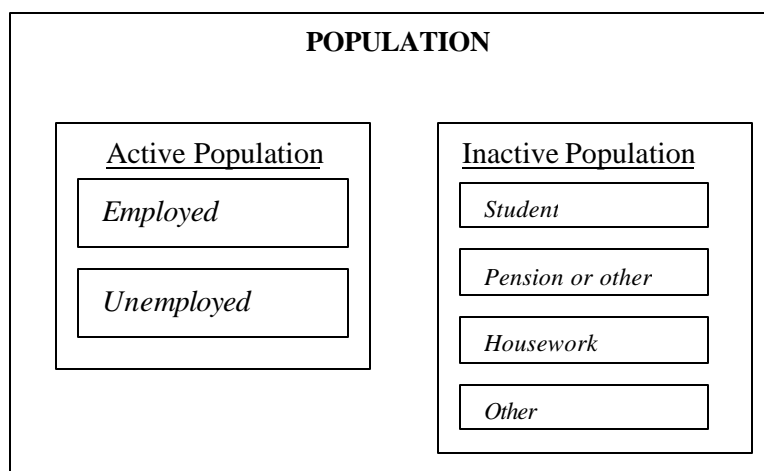
8.   An important issue in a census is to identify the structure of the population according to this framework and use clear definitions and methodology in order to be able to identify in an unambiguous way people in one of the boxes. This is particularly challenging because there are people who could in principle belong to more then one box (for example a student who works part-time). Other information on economic characteristics is also collected in a census for all population (source of livelihood for example) and for the economically or not economically active population (for employed for example: status in employment, occupation, industry, place of work).

9.   Countries used different strategies to design the flow of questions able to identify employed, unemployed and inactive population. Three main approaches can be summarized:

- First approach. The entry point in differentiating employed, unemployed and inactive population is based on the concept of activity status. The first question included in the sequence is of the type *What is your current activity status* and the response focus on the different categories of active and not active population (employed, unemployed, student, retired, unable to work, …)
- Second approach: The entry point is based on the concept of work. The first question included in the sequence is of the type *Did you work last week*?
- Third approaches: The entry point is the concept of source of livelihood and the first question included in the sequence is of the type *What are your sources of livelihood?*

10.   Table 1 reports an example of questions used in each approach and Table 2 reports the countries that belong to the three different groups according to the approach used.
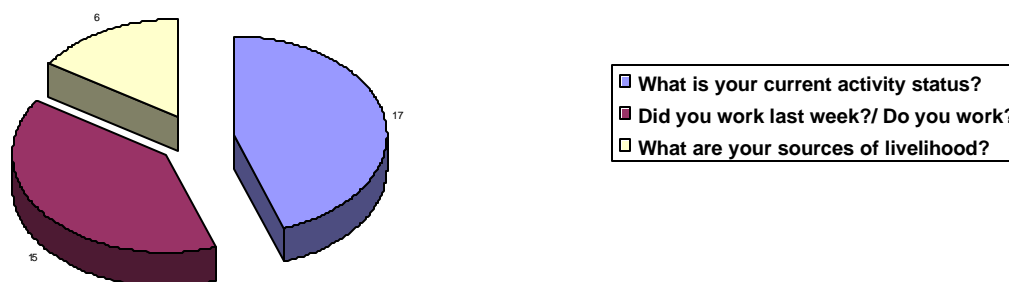
Table 1. Examples of questions used in the three different approaches.

Approach/Group	FIRST	SECOND	THIRD
Country	*IRELAND*	*UNITED KIGDOM*	*HUNGARY*
Type of question	How would you describe your present principal status?	Last week, were you doing any work as employee, self employed or in your own/family business?	What is (are) your source(s) of livelihood?
Available answers	1/Working for payment and profit 2/Looking for first regular job 3/Unemployed 4/Student or pupil 5/Looking after home 6/Retired from payment 7/Unable to work 8/Other	1/ yes 2/ no	1/work 2/regular or reserve military service 3/child care allowance 4/child care fee 5/old age pension 6/disability pension 7/pension or benefit of relative's right 8/unemployment benefit 9/welfare assistance for unemployed 10/other regular benefit 11/from own asset or other source 12/dependent by private person 13/dependent by public institution.

11.   It can be noted that the majority of countries (17) used the first approach while the approach based on the source of livelihood was implemented only in CIS or former transition countries. The approaches based on activity status and work can be related to the framework presented in Figure 1 but the concept of source of livelihood is outside this framework and includes aspects that are not only related to activity status and work. The three approaches above identified group the countries not only in relation to the approach used to collect economic status, but also in relation to the methods used to collect other economic characteristics. As it is report in Section 2, it is often possible to distinguish the use of different methods to collect data on economic topics according to the three groups of countries.

12.   On the basis of the information available it was not possible to understand if the three approaches produce comparable results. There is not a one-to-one correspondence with the classifications of economic status used by the three approaches and it is not clear whether the mapping of the different classifications used into the standard classification presented in the ECE Recommendations produces comparable results. It is also not possible to state what method produces the best results. Comparing Figure 2 and 3 (reported below) it seems that the sequence used in the Second approach requires more questions, but this seems to also be the simplest approach from a conceptual point of view, since respondents are driven by concepts more closely related to their experience (such as work rather then activity status).

<u>Graph 1: Census Methodologies</u>

☐	**What is your current activity status?**
☐	**Did you work last week?/ Do you work?**
☐	**What are your sources of livelihood?**

13.   The three approaches do not only show preferences for different methodologies but they also reflect the different needs of the countries. In the analysis presented in the paper the three groups of countries show consistent different patterns in relation to the inclusion and treatment of economic -related topics in the census. Countries that followed the First approach for example collected less detailed information on unemployment (many of them they did not ask about the nature of unemployment, duration of unemployment, reasons for unemployment, research of a job, reasons for stopping to looking for a job). Countries that used the Second Approach collected on average less detailed information on the inactive population and more on the employment and unemployment situation. The Third approach seems to be very different from the first two but could be linked to the need to maintain trends derived from previous censuses[3].

Table 2. Countries that implemented the first, second and third approach

First Approach (activity status)	**Second Approach** (work)	<u>**Third Approach**</u> (source of livelihood)
Croatia Latvia Malta Serbia and Montenegro Slovenia Albania Austria Belgium Czech republic Greece Ireland Italy Liechtenstein Romania Slovakia Spain Switzerland	Armenia [4] Bulgaria Canada Cyprus Estonia France Israel Luxembourg Monaco Poland Portugal Russian federation Turkey United Kingdom United States	Azerbaijan Georgia Hungary Kyrgyzstan Lithuania Ukraine

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[3] The Third approach was used in the past by the Soviet Union and this may be one of the reasons why some CIS countries adopted it.
[4] The approach is related to having a job rather then to have worked

Implications for the Revision of the ECE Recommendations

The different three methodologies summarized in this paper reflect the different expectations of countries from a census. Should the Recommendations include a short part on the purposes to follow different approaches and on the purposes to collect the topics that will be defined as core?

1.1. The First Approach (based on the concept of activity status)

14.   The 17 countries classified in the first approach used a question based on the concept of activity status to introduce the economic-related topics. Respondents were asked to select one of the categories related to activity status and for the people who were identified as employed, additional questions were asked about their current or last employment (status, occupation, industry, …). The path of questions used to classify persons according to their economic status is summarized in Figure 2.

Figure 2. Sequence of questions used to assess the economic status of the population by Group 1
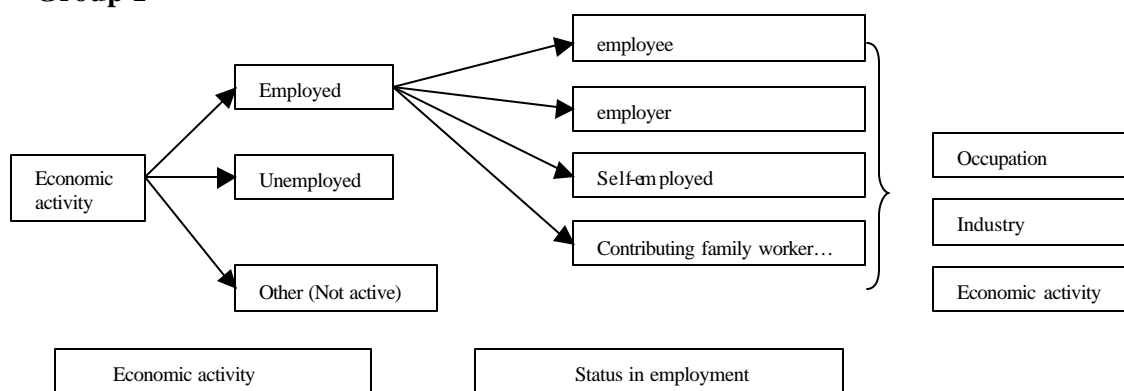
15.   Within this approach, there are differences in the categories included to differentiate people according to their activity status. The majority of the countries, 12, included items only related to activity status (employment, unemployment, not active such as retired, students, …). 5 countries included items related to activity status and status in employment (see Table 3). Table 4 reports the questions used in two countries where these two approaches were used. It can be noted that while in Slovakia there are two separate questions on activity status and status in employment, in Slovenia there is one question including both activity status and status in employment.

Table 3. Countries that used the First Approach according to the type of categories included in the classification of activity status

Countries that included in the same question items related to activity status and status in employment	Countries that included only activity status items
Croatia Latvia Malta Serbia and Montenegro Slovenia	Albania Austria Belgium Czech republic Greece Ireland Italy Liechtenstein Romania Spain Slovakia Switzerland

Table 4. Example of questions used in two countries classified ….two countries that used using together e conomic activity and status in employment and only activity status

SLOVENIA	SLOVAKIA
	Economic activity?
What is your activity status?	*1/working* *2/apprentice* *3/secondary school student* *4/university student* *5/maternity leave* *6/homekeeping* *7/pensioner* *8/Unemployed* *9/child up to 16*
	What is your social group?
1/employed *2/self employed* *3/farmer* *4/child pupil student* *5/pensioner* *6/contributing family member* *7/unemployed* *8/Military service* *9/homemaker* *10/unable to work* *11/prison*	*1/ Employee working for wage, salary, other kind of remuneration* *2/ member of production cooperative* *3/entrepreneur with salaries* *4/entrepreneur without salaries* *5/helping family member*

16.   The two concepts (activity status and status in employment) are described in the ECE recommendations as two separate topics (in paras 100/101 and 134). The mixing of the two concepts in one question may have the following shortcoming:

- The data can not be collected as suggested in the ECE and World Recommendations for all the economically active population but only for the employed population

- The classification resulting for both activity status and status in employment could be distorted by the presence of other categories and the treatment of boarder-line cases could be more difficult.

Implications for the Revision of the ECE Recommendations
Few countries have mixed in one question the concepts of activity status and status in employment. Should the new Recommendations discuss this in more details by emphasizing the difference between the two concepts and specifically state whether this could create confusion or not?

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17.   Graph 2 shows the items listed by the countries as categories to identify activity status including the categories included in the 5 countries on status in employment and their distribution among the 17 countries.

18.   The classification of activity status that emerges from this graphic is very heterogeneous: it is clear the inclusion of different concepts (status in employment, revenue) in the explanation of activity status (this is the case for example of "contributing family worker", "self employed", "income from property" or "own means of support").
Some of the main categories related to activity status (homemakers, students, pension or capital income recipients) are covered by almost all countries, but other categories related for example to unemployment are less similar. The category "unemployment" is covered by about 80% of the countries, and between 35 to 65% of the countries included categories to distinguish unemployment according to: looking for the first job, looking for a job, unemployed not looking for a job. Some of the countries included sub-categories such as maternity leave, conscripts, working student or pensioner that are not of the nature described by the ECE Recommendations[5] and can affect the results of the main categories.

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[5] "Where considered useful, separate sub-categories may be introduced to identify (i) persons engaged in unpaid community and volunteer services and (ii) other persons engaged in activities that fall outside the boundary of economic activities" (para 104).

Graph 2: Categories listed for current activity status in the First Group
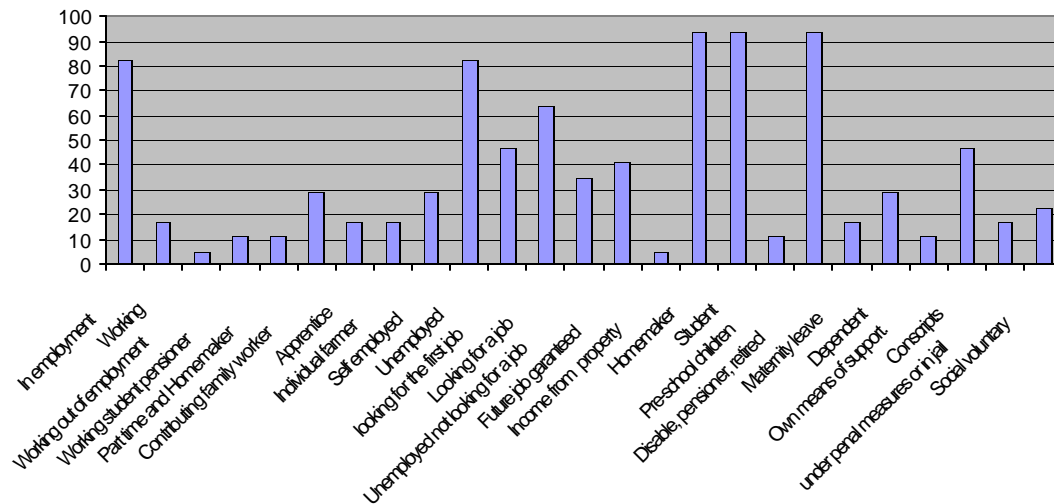
19.   In addition, the classification of current activity status that emerges is incomplete. Although the category of self-employed is included, the two categories of employers and own-account workers are missing.

20.   The classification of status in employment that emerges from the countries that separated the questions on activity status and status in employment (ex: Slovakia in Table 4) is closely related to what it is advised in the recommendations (see Graph 3).

Graph 3: Classification of Status in employment for the countries that adopted two questions to collect activity status and status in employment
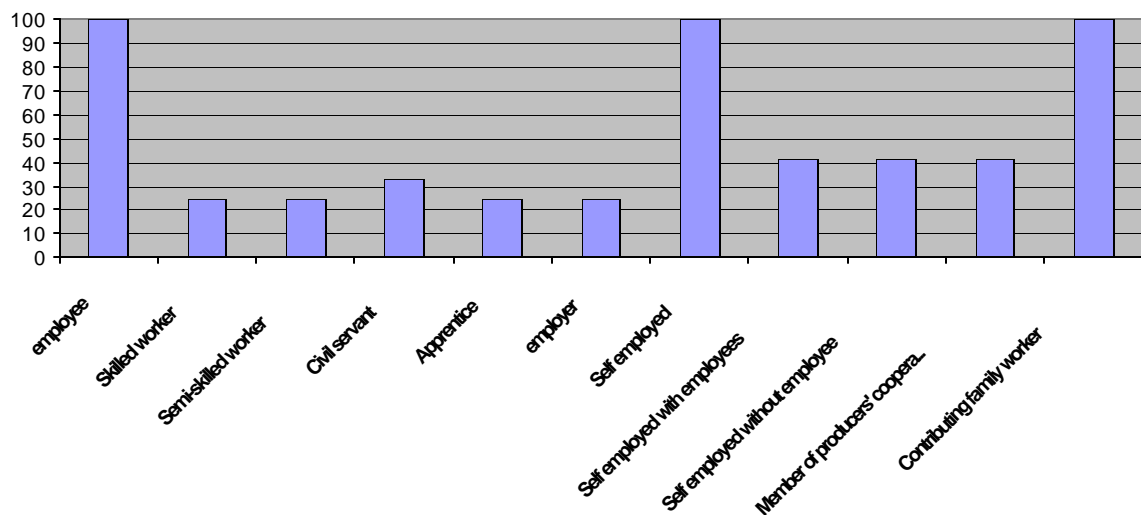
21.   The classification focuses on three main categories: "employee" "self employed" and "contributing family worker". There is within the category "self employed" a distinction between "self-employed with employee" or "without employees" and sometimes the direct category of "employer". There is a lack of precision in considering "apprentice", and "people mainly engaged in non-economic activities who at the same time were in paid employment or in self employment" (para 101).

> ### *Implications for the Revision of the ECE Recommendations*
>
> Some countries introduced some sub-categories to describe activity status that are within the boundary of economic activities. These may affect the data collected in the main categories. Should the new Recommendations expend on this?

1.1.2. The Second Approach (based on the concept of work)

22.   Countries that adopted this approach initiated the sequence of questions to identify people activity status by a question on work. A typical question was: *Did you work during the reference week?*. 15 countries used this approach: Armenia, Bulgaria, Canada, Cyprus, Estonia, France, Israel, Luxembourg, Monaco, Poland, Portugal, Russian federation, Turkey, United kingdom, United States.

23.   Figure 3 shows the path that these countries used to collect information on activity status and other employment characteristics.

**Figure 3. Sequence of questions used by the countries that adopted the Second Approach.**
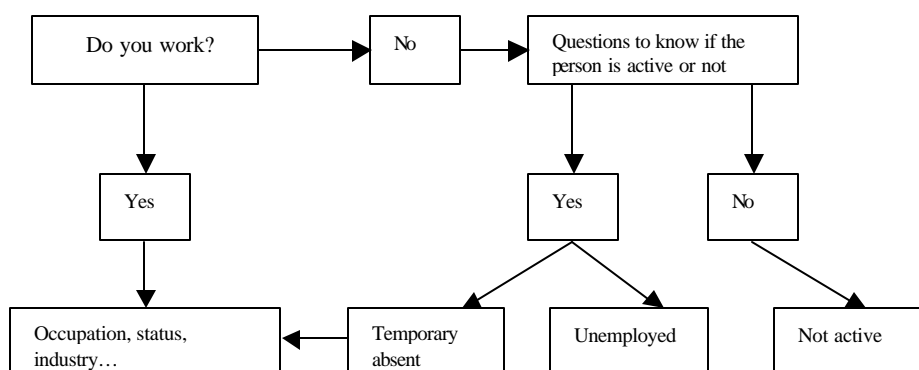
24.   This sequence differs from the one used by the First Group of countries because it does not specifically ask people about their activity status but starting with a question on working it generates the classification through a series of questions.

25.   Looking at the information collected on the people who are not employed in Graph 4, it can be noted that in comparison with the countries that used the First Approach (Graph 2) these countries collected more detailed information for the unemployed population and less for the

inactive population[6]. Given that this approach starts from the concept of work it is easier to open up the category of "unemployed" collecting information on people who are looking for a job or are ready to work, while categories like "student", "homemaker", "pensioner" would require additional questions. Informa tion on when people last work, if they ever worked and when they took last step to seek a job can also be more easily retrieved. If this explains the different features of the methods used, it can also show that countries in the three groups have different national needs.

Graph 4: Information collected for the person who are not working
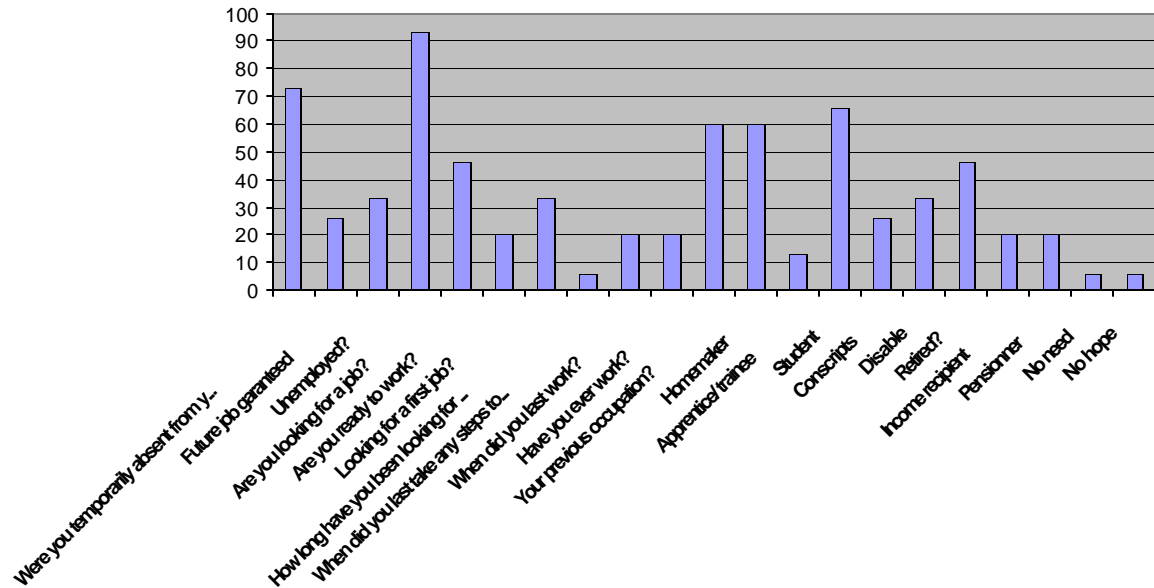
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Graph 5: Information collected for people who are working
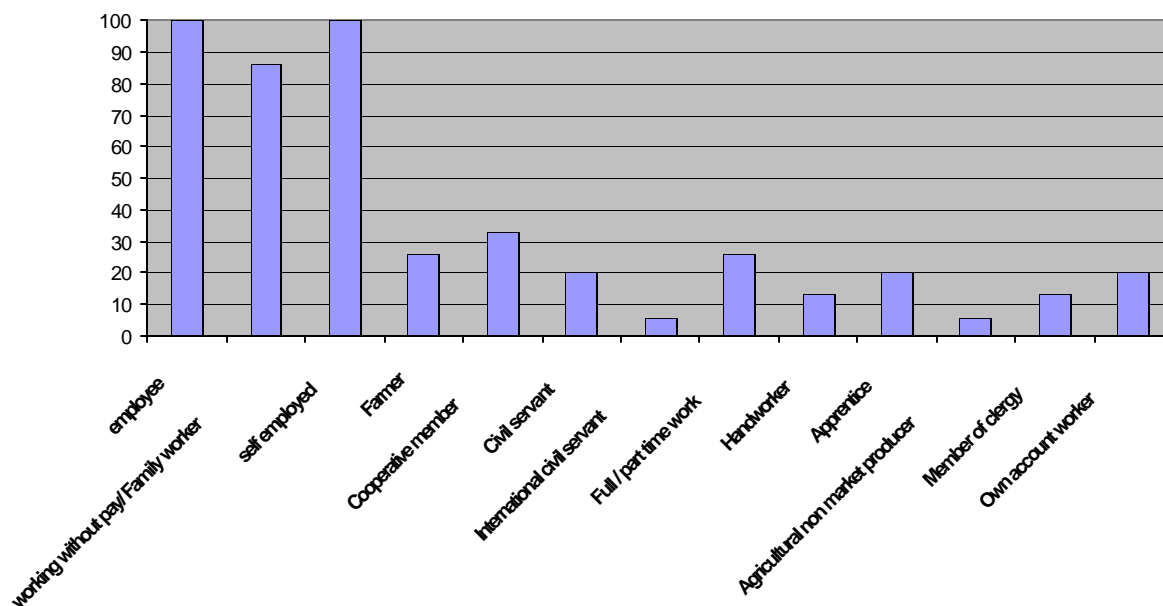
1.3. The Third Approach (based on the concept of sources of livelihood)

26.   The Third Approach used by countries to identify economic status is based on the concept of income and sources of livelihood. 6 countries used this approach: Azerbaijan, Georgia, Hungary, Kyrgyzstan, Lithuania [7] and Ukraine.

Figure 4. Third approach used by countries to identify activity status


Sources of livelihood
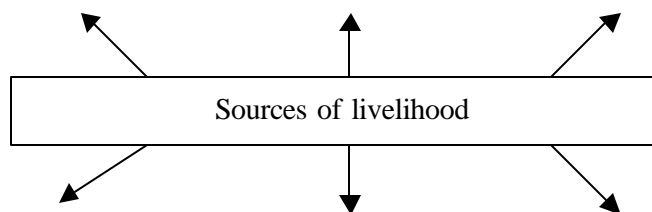
27.   As Figure 4 shows, for countries that used this approach it is not possible to identify a common pattern in the flow of questions asked to distinguish people according to their activity status. After the question on the main source of livelihood, some countries asked about occupation and industry (for those with a source related to employment) or asked questions

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[7] In addition to a question on source of livelihood Lithuania included the question *Are you employed?*

designed to collect information on unemployment or education. The approach used by this group uses a very different concept from work and activity status, and it is not clear if the information collected on activity status or status in employment can be compared with the other two approaches. Graph 6 reports the distribution of the items included in the question on source of livelihood. Waged work, Income prom property, Pension, Unemployment benefit, and Dependant are the only categories that were used by all countries in this group. The other categories vary among the countries and include concepts related to income, status in employment, and industry (farmer).

28.   Using the concept of income to identify people according to their activity status and status in employment may create some inconsistency particularly for people with multiple sources of income.

Graph 6: Categories included in sources of livelihood for Group Three
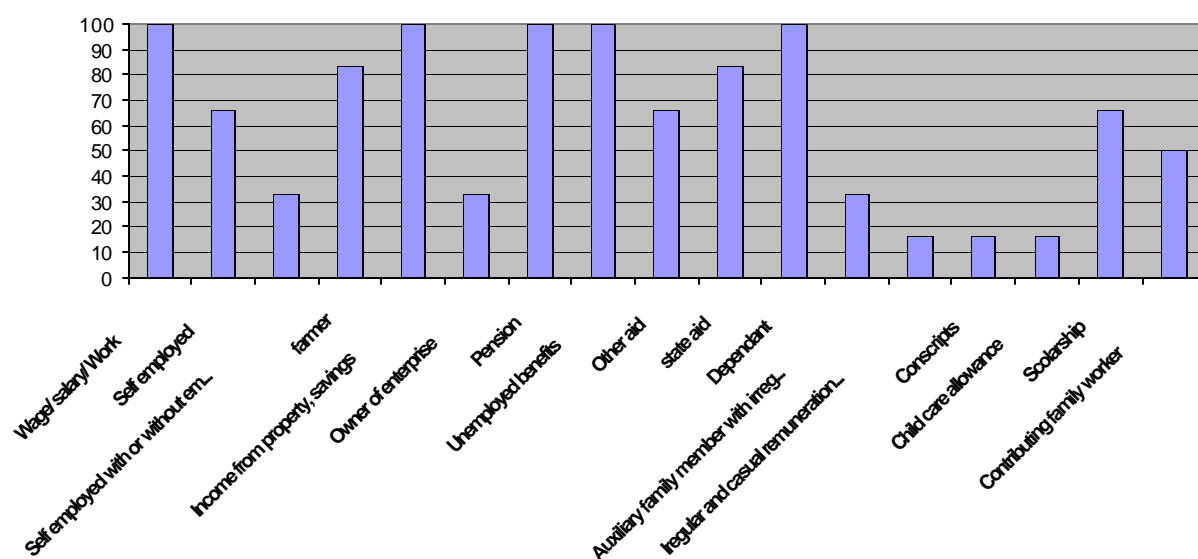
29.   Some of the categories related to the inactive population are similar to the ones used in the first two approaches and for sub-populations such as pensioners it may be possible to have comparable results. For other categories of the non-active population it would be difficult to compare data. It is for example not possible to distinguish students other than those who had e scholarship. As stated in the ECE Recommendations, the identification of economic status through sources of income may also misreport people with multiple sources of income.


Implications for the Revision of the ECE Recommendations

The current ECE Recommendations state that "*Information on main source of livelihood should be obtained for all persons, whether they are economically active or not, and may not necessary coincide with the main activity status or the main economic activity of the person*". Should the recommendations be more explicit in stating that the concepts of income, activity status, status in employment, and institutional unit should be kept separated and that source of livelihood should be collected as a complementary information and not as a core topic? Some guidelines to countries that wish to keep time-series with the approach based on source of livelihood could also be included in the new Recommendations or be developed as a technical document.

2.   Detailed compilation of economic characteristics of People:

2.1 Current Activity Status

Graph 7. Percentage of countries that collected information on Current Activity Status
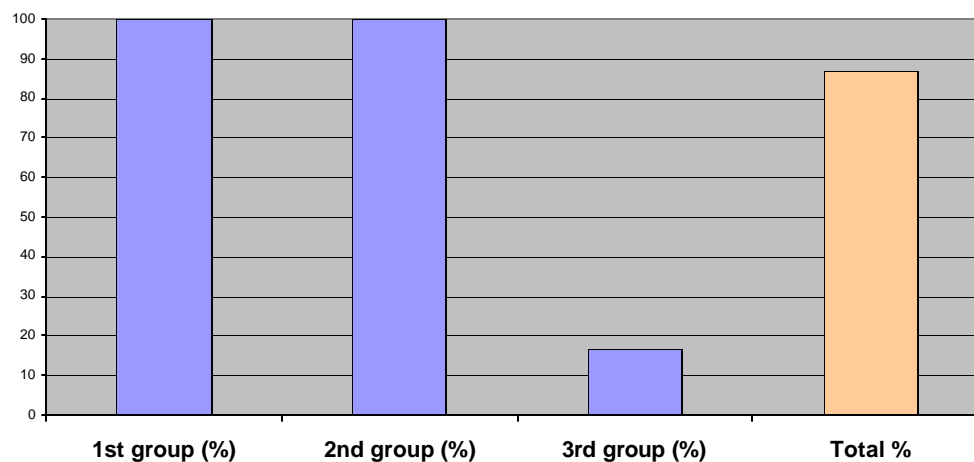
30.   Graph 7 reports the percentage of countries that collected information on current activity status. As it can be noted, the countries (all but Lithuania) that adopted the approach based on source of livelihood did not include activity status as a topic or could not fully retrieve information on the categories of economic activity listed in particularly in para 104 of the ECE Recom mendations (Students, Pension or capital income recipients, Homemakers).

31.   An example of the categories used for sources of livelihood by one of the countries in the Third Group is reported in Table 5 with the purpose to show the difficulties related to the retrieval of information on activity status. As it can be noted the categories related to the inactive population can be allocated to the standard ones only with approximation and although the standard definitions included in the ECE and World Recom mendations are reported in the definitions provided to the interviewers, it is still not clear if the categories listed in the example can provide comparable information on the employed population. However, it could be argue that since the question on sour ce of ;livelihood is asked to everybody and its design may allow to identify categories that in other approaches are more difficult to identify.

Table 4 Example of categories included in the approach based on source of livelihood

***Source of income** (persons with more then one source, specify each source). A box is reported at the end of the question to specify the main source*	
Salaried employment	1. At an enterprise, organization, institution
	2. In a farm
	3. For individuals (including rendering household services
Non-salaried employment Owners of enterprises, farms	4. Employer
	5. On individual basis at family enterprise
	6. Unpaid at farms
	7. Personal subsidiary plots
8.Scholarship 9. Pension 10. Benefits and allowances (excluding unemployment benefits) 11. Unemployment benefits 12. Other type of State maintenance 13. Income from property 14. On the dependence 15. Other sources	

2.1.1.Employment

32.   To compile information on employment, the ECE Recommendations advise countries to apply some criteria such that an age threshold and the "one hour criterion".

▪   Age threshold (para 94 of the ECE Recommendations):

As reported in Table 5[8] the 15 year-old-threshold advocated in the Recommendations for the compilation of economic activity is followed by almost 60% of the countries. The countries that did not apply any age limits are the ones that used the approach on sources of livelihood. In order to compare their data with the other countries in ECE data may have been tabulated using the 15 years threshold, but this information was not available in the ECE Secretariat.

[8] The table reported the age limit of only 31 countries where this information was available

Table 5. Age limit applied in countries to collect information on employment

Age limit	Countries
No age limit, questions asked to everybody	Azerbaijan, Georgia, Hungary, Kyrgyzstan, Ukraine
11 and over	Greece
12 and over	Turkey
14 and over	France
15 and over	Albania, Armenia, Austria, Belgium, Canada, Croatia, Cyprus, Czech Republic, Estonia, Finland, Ireland, Israel, Italy, Lithuania, Poland, Portugal, Russian Federation, Switzerland
16 and over	United-Kingdom, Spain, Slovakia, Monaco, Malta

- One hour criterion (para 100 of the ECE Recommendations)

33.   From the available material it was not possible to analyze if countries included in the census instructions the one-hour criterion in the measurement of employment. However, it was possible to review the questions asked and the response items included in the questionnaires. Graph 8 reports the results of this analysis. A total of 17 countries made explicit the one-hour criterion in their census questionnaires. Among these, it is interesting to note that there is an equal percentage of countries from the First Group and the Second Group and none from the Third Group. Although it may seem easier to introduce the concept of the one-hour limit in countries where it is asked about Work, it looks like it is equally acceptable to do so when asking the activity status.

Graph 8: Percentage of countries that made esplicit in the questionnaire the one-hour criteria for employment
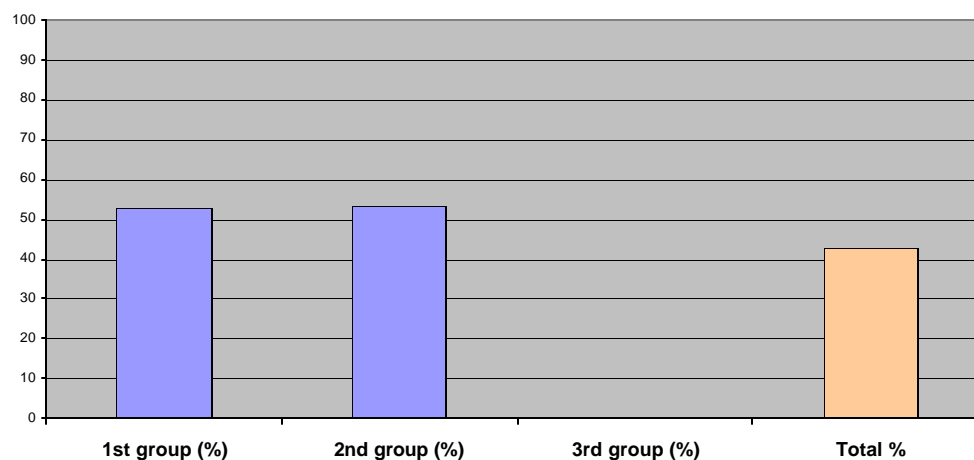
- Treatment of specific groups (para 101 of the ECE Recommendations):

34.   The ECE Recommendations list the following special groups of individuals that could be considered as boarder-lines and give guidelines on how to treat them to make sure they are included in the employed population.

- ✓ "Person in paid employment temporarily not at work"
- ✓ "Self employed"
- ✓ "Contributing family worker"
- ✓ " Own account producer of goods and services for final own final use"
- ✓ "Apprentices and trainees"
- ✓ "Participants in job training scheme"
- ✓ "Person mainly engaged in non economic activities (working student or homemakers for example)"
- ✓ "Members of the armed forces".

35.   Countries may have considered these guidelines and included them in the census instructions, but unfortunately this could not be reviewed. Graph 9 however, reports the percentage of countries where some of these groups could be identified as a special sub-group of the employed population.

Graph 9: Percentage of countries that identify some sub-groups of the employed population
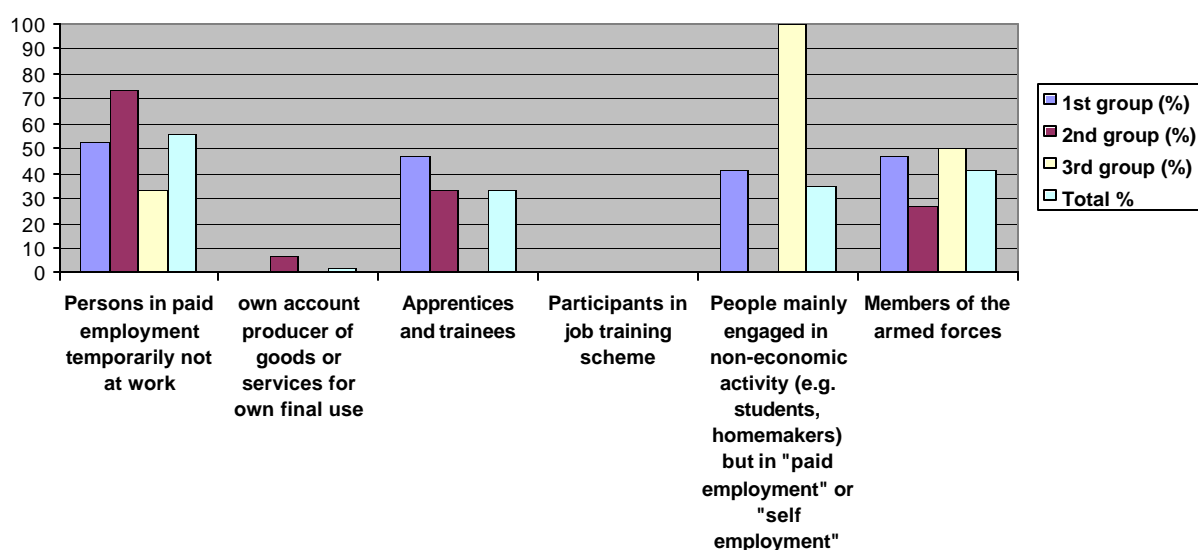
Persons in paid employment temporary not at work
Some of the countries that did not identify persons in paid employment temporary not at work used an approach related to "having a job" rather then to "working". In these cases this category becomes less relevant even it is not clear if the conditions reported in the Recommendations were taken in consideration.

Own account producer for own final use
This category is generally not included in census questionnaires. The only country mentioning this category in the question related to work was Bulgaria.

Apprentices and trainees
The category of individuals is mainly considered in questionnaires using the "current activity status" approach.
Participant in job training scheme
This sub-group was not identified by any of the analysed countries.
Mainly engaged in non-economic activities who has a paid employment or self employment
The way countries identified this sub-group of population was different:

♦ The sub-group was considered in response items related to activity status[9]. This methodology was used mainly in countries where the "current activity status approach" was followed (Belgium[10], Czech Republic, and Malta).

♦ More than one activity status could be chosen and therefore individuals could identify themselves in both inactive and employed items. 4 countries used this methodology: Austria, Liechtenstein, Spain, and Switzerland.

♦ Through the method of source of livelihood individuals can select more than one category and therefore pensioners who are working can be easily identify. All the 6 countries that used this approach (Azerbaijan, Georgia, Hungary, Lithuania, Kyrgyzstan, and Ukraine) can identify the category pensioners with employment.

Members of the armed forces 40 % the countries identified this category: Austria, Croatia, Cyprus, Georgia, Greece, Hungary, Israel, Italy, Latvia, Lithuania, Portugal Slovakia, Slovenia, Spain, and United States.

2.1.2. Unemployment (para 102 of the ECE Recommendations)

36.   The ECE Recommendations report the three conditions that need to be met in order to consider an individual as unemployed: "being without work", "being available to work" and "actively seeking work".

37.   Graph 10 reports the percentage of countries that included specific questions to ask about the two last conditions to people who were already identified as not working.

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[9] One example is the question used in Malta: *What is your economic activity status?* Where among the response items there are: i) Was in full time education and working part time; ii) Was working part time and looking after the home and family
[10] Considering only Pensioners with part time job

Graph 10: Percentage of countries that asked questions on the Unemployment Criteria
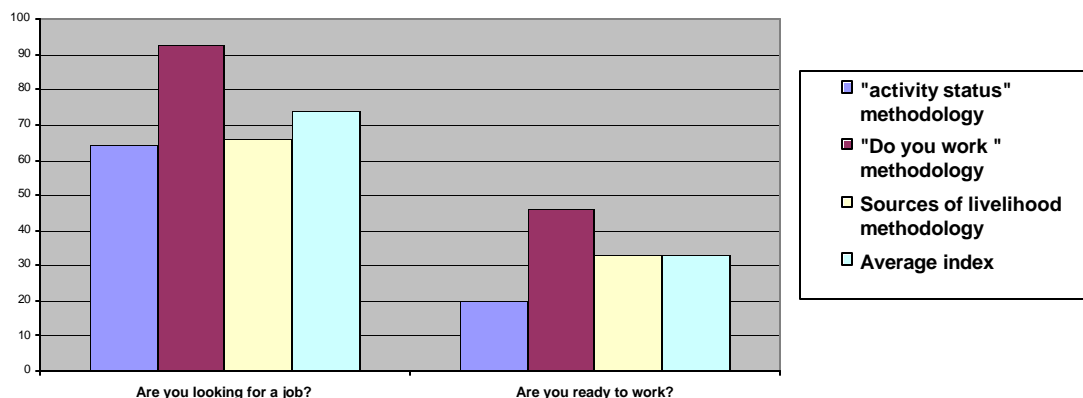
38.   The Graph shows that unemployment criteria were mostly asked in the countries of the second group. In the First Group if these criteria were asked were included as special items in the classification of activity status: Unemployed looking for a job, or unemployed not looking for a job. In countries of the Second and Third groups special questions were asked to people identified as not working: "Do you work?", "Are you looking for a job?", "Are you willing to start working within two weeks?"

2.1.3. Complementary information on unemployment

39.   The ECE Recommendations suggest to carefully handle some sub-groups of the unemployed population (para 103):
   ✓ "Person without work who had made arrangements to take up paid employment or undertake self employment activity"
   ✓ "Temporarily absent with no job attachment"
   ✓ "Person mainly engaged in non economic activities".

40.   From the questionnaire it can be noted that the category of "people unemployed and not looking for a job since they have arrangements to take up a paid or a self employed job" is considered in about one third of countries (usually mentioned as "future job guaranteed").

41.   Additional information on the nature of unemployment was collected in some countries with additional questions:
   ▪ *Are you looking for the first job?*
   ▪ *How long have you been looking for a job?*
   ▪ *When did you last take any steps to seek a work?*
   ▪ *Have you ever work?*
   ▪ *Did you stop looking for a job and what are the reasons?*

42.   The last question was introduced in the Armenian census and it is of particular interest. Response categories such as "*no need*" and "*no hope*" can give a better view of the labour market opportunities.

43.   Many countries (Belgium, Bulgaria, Czech Republic, Cyprus, France, Greece, Hungary, Ireland, Israel, Luxembourg, Portugal, Romania, United Kingdom and United States) collected

information on the previous employment asking the same questions related to the employed population (see Graph 11).

Graphic 11: Percentage of countries that collected information on
previous employment (for unemployed population)
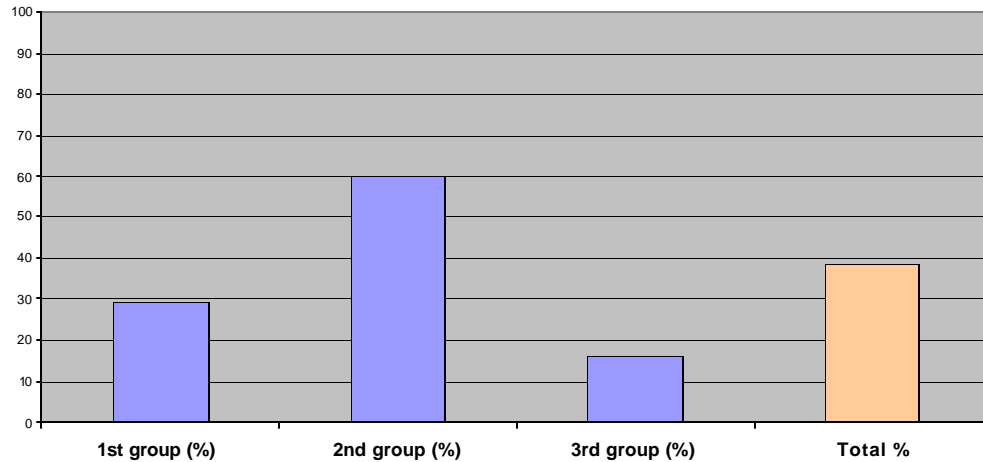
44.   Sometimes countries put a time limit to consider previous employment: Israel collected information on previous employment only if the individuals were working in the previous 12 months and the United States previous employment was considered within the previous 5 years.

2.2. Duration of Unemployment

45.   Graph 12 shows the percentage of countries that collected information on duration of unemployment. A total of 13 countries included this topic in the census (Azerbaijan, Canada, Cyprus, France, Georgia, Hungary, Italy, Monaco, Poland, Portugal, Romania, United Kingdom, and United States) asking questions on the time since when the individual was not working and/or was looking for a job or on the duration of unemployment (in months or more then one year).

Graph 12: Percentage of countries that collected data on Duration of unemployment
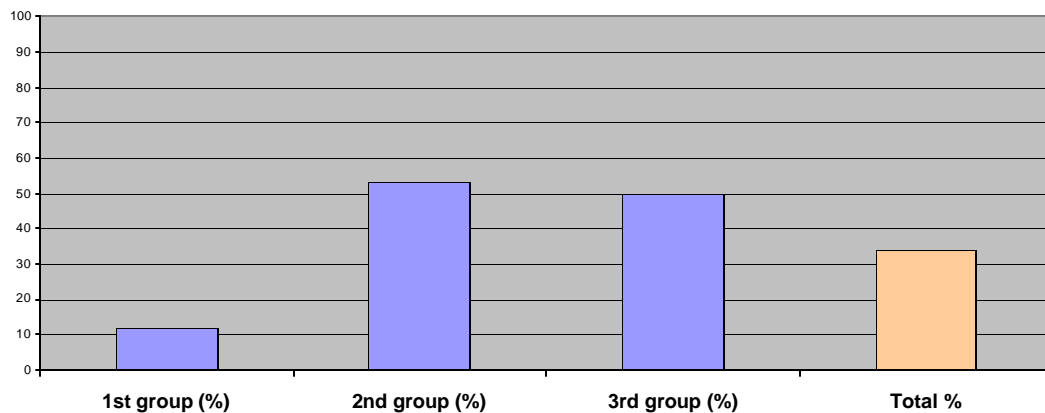
46.   Information on duration of unemployment is particularly missing for the countries that used the First Approach where less details were collected in general on unemployment.

***Implications for the Revision of the ECE Recommendations***

About 40% of the countries asked the unemployed population information about previous employment. The current ECE Recommendations do not include reference to the collection of information on previous employment. The World Recommendations mention that "An unemployed person should be coded to occupation, industry, status in employment and sector on the basis of the last job" (para 2.212). Should this be considered for the new Recommendations as well? Should a time limit be also included?

2.3. Population not currently active

47.   The ECE Recommendations included the following categories to characterize the non-active population:

- ✓ "Students"
- ✓ "Pension or capital income recipient"
- ✓ "Homemakers" and
- ✓ "Others".

Graph 13 Percentage of countries that collected data on the categories of the non-active population
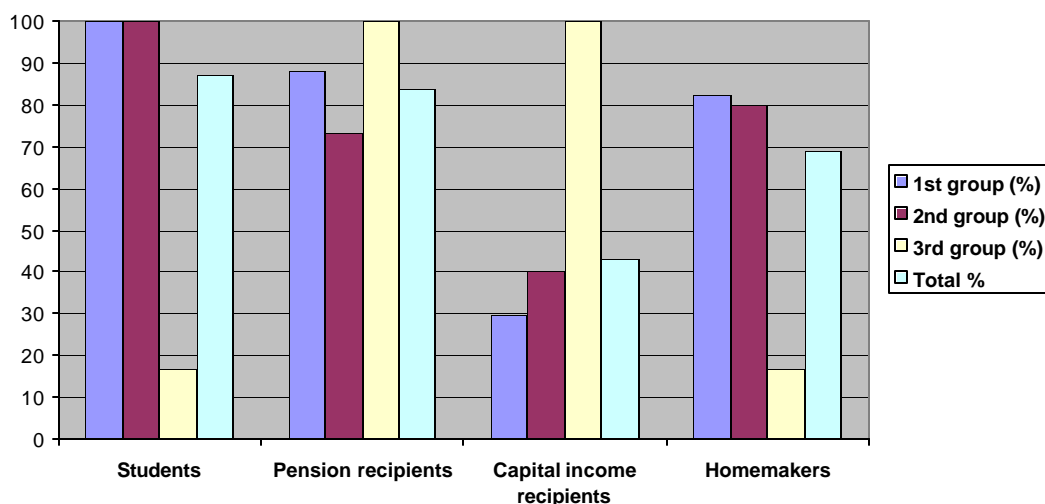
48.   Graph 13 describes the distribution of the countries that collected information on the four categories suggested in the ECE Recommendations. It shows the advantages and disadvantages of each of the tree approaches in collecting the information on each category. The Graph proves the validity of the statement included in the ECE Recommendations in para 113 "the main source

of livelihood topic, when included in the census can be used as a basis for determining the persons to be classified to categories b) Pension or capital income recipients and d) Others".

Students
The category of students appears in almost all questionnaires with the exception of the countries where the approach based on sources of livelihood was used (where there is only the category scholarship).
Pension or capital income recipients
Given the nature of the income-based category all the countries in the Third Group collected information on both pensioners and capital income recipients. In some countries this category explicitly included also people with disabilities (example: "retired and disable people").
Homemakers
This category was introduced by the majority of the countries that used the First and Second approach, but could not be identified by the countries that used the Third approach.

> Implications for the Revision of the ECE Recommendations
>
> Countries have adopted different terminology (and possibly different definitions) for the category "Pension or capital income recipients". Often the term pension includes people that receive government subsidiaries for invalidity or other. The new Recommendations could be more explicit on this and specifically advise on what should or should not be included. The Recommendations should also suggest countries not to use the term disabled or people with disability under the category of the inactive population since people with disability could well be part of the active population

2.4. Usual Activity Status (para 105)

49.   The concept of usual activity status is defined on the same basis of the current activity status. The only difference is that the current activity status is based on the experience of the individuals in one-week time (linked to reference census period) and usual activity status is based on a longer period of time (usually 12 months). Given the possibility in this longer period of time to chance activity status, it is important that a main activity status be identified.

**Graph 14: Percentage of countries that collected information on
Usual activity status**
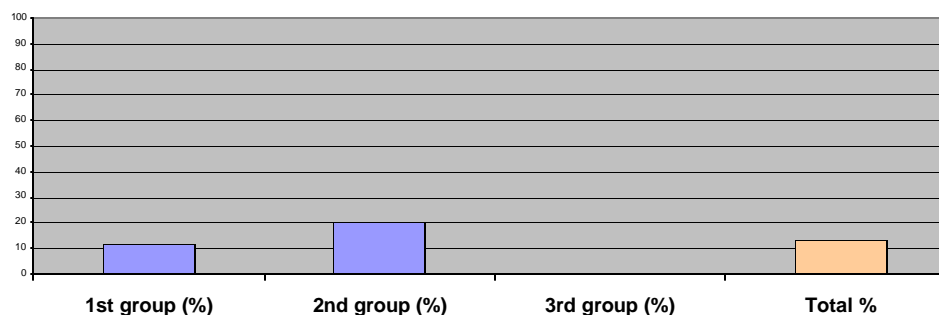
50.   As it is shown in Graph 14 not many countries (a total of 5) included this topic in the census. Among the countries that did include it, different methods were used particularly in considering the changes that could occur in economic status over the one year period:
  - 3 countries (Romania, Greece, and United States) included questions considering the economic status of the individuals at one year previous the census.
  - 2 countries (Bulgaria and Canada), asked the number of weeks or months worked during the previous 12 months. This approach is in line with the suggestions provided in the ECE Recommendations.

2.5. Time usually worked (para 116)

51.   The topic of time usually worked was included in 26 countries. Few countries specified in the questionnaire the hours worked in the main and secondary activity (Belgium and Estonia) or the sum of the hours worked in all activities (Israel). The majority of the countries (Belgium, Canada, Cyprus, Estonia, Greece, Hungary, Ireland, Italy, Liechtenstein, Luxembourg, Malta, Portugal, Romania, Serbia and Montenegro, Spain, Switzerland, United States, United Kingdom) included a generic question on working hours during a predefined week. 11 countries (Belgium, Canada, Croatia, France, Italy, Latvia, Liechtenstein, Malta, Monaco, Poland, Switzerland) asked the question in terms of *full time or part time contract*. It was not possible to understand from the documents available if absence or overtime were included or not in the measurement of the total number of hours worked. (as suggested in para 119 of the ECE Recommendations).

Graph 15: Percentage of countries that collected information on Time usually worked
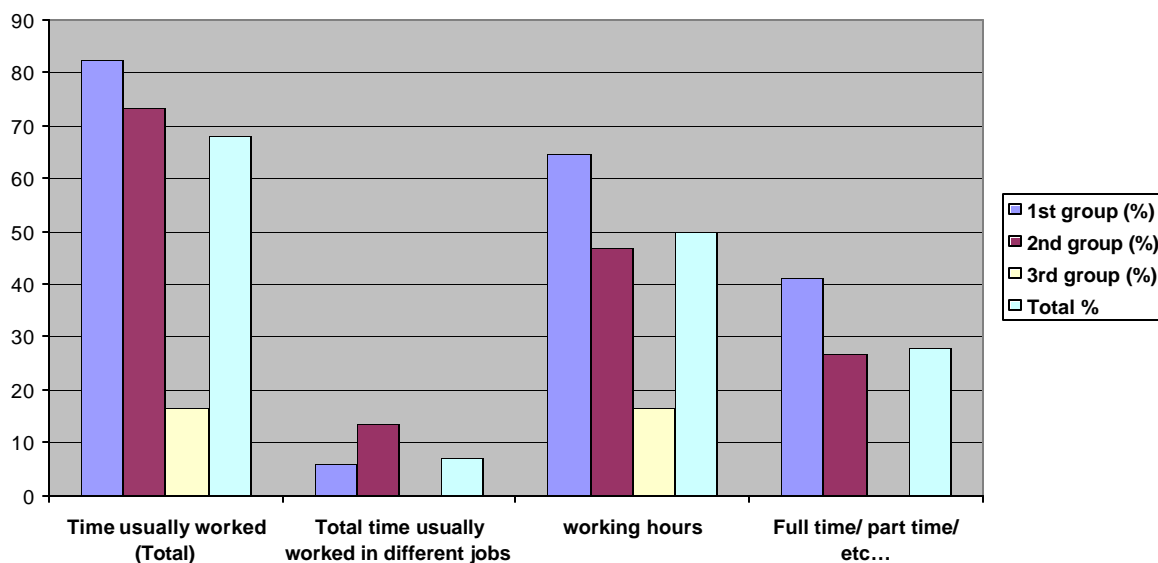

As Graph 15 shows, only one country in the Third Group collected information on the time usually worked. In general few countries from Eastern Europe and Central Asia included it in the census.

2.6. Occupation (para 124)

52.   The topic of occupation was included in all countries except Slovenia through open questions and pre-coded questions (used only in Italy and Spain). Graph 16 shows the distribution of the countries according to the different types of questions on occupation. With the documents available in the ECE Secretariat it is not possible to assess the extend to which countries classified occupation according to the International Classification concerning Occupation (ISCO-88) as suggested in the ECE Recommendations.

Graph: 16: Percentage of countries that collected data on Occupation
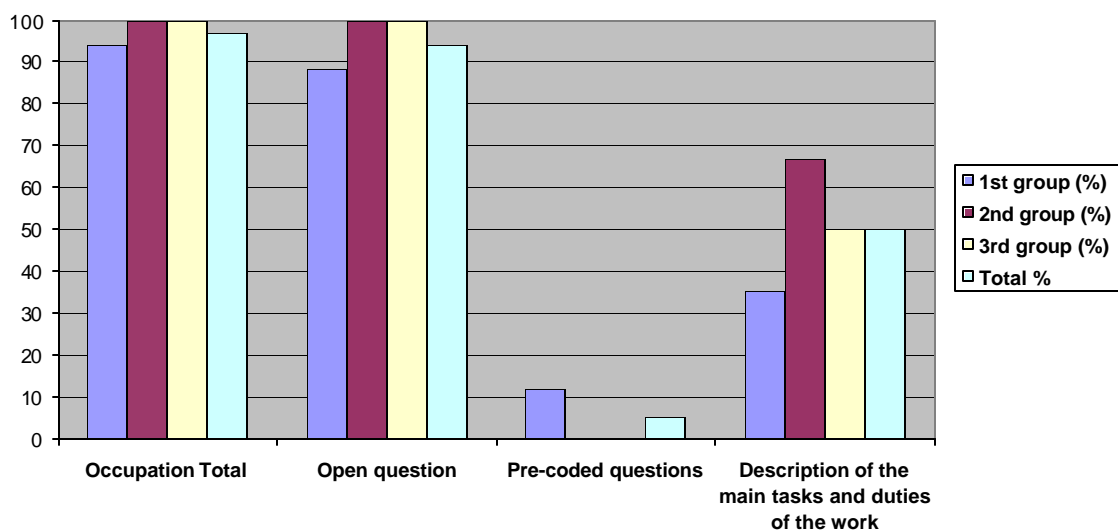

2.7. Industry and Branch of Activity (para 128)

53.   The topic of industry was included in 35 countries (see Graph 17) mainly through open questions. However in some of the 3 countries[11] that did not include a reference to industry, individuals were asked to report the name and address of the place where they performed their main job. It is not clear if this information was coded and processed to define the topic of industry.

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[11] Georgia, Slovakia, Slovenia.

**Graph 17: Percentage of countries that collected data on Industry and
Branch of activity**
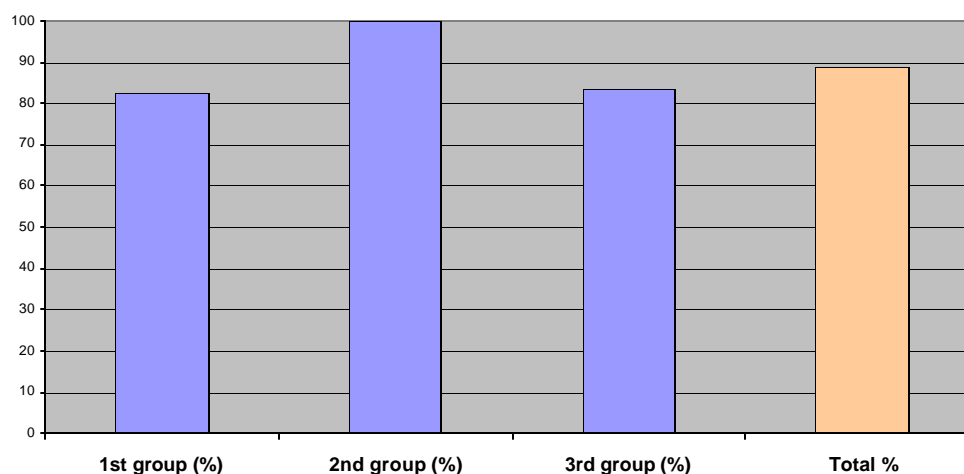
2.8. Sector-institutional unit (para 132)

54.   The topic type of sector (institutional unit) was included in 11 countries using two
different approaches:

- Including a pre-coded question asking about the institutional unit. This approach was
  used in Serbia and Montenegro, Romania and United States
- Utilizing the question on status in employment and including response items that
  would differentiate individuals according also to the sector[12]. This approach was used
  in Austria, Belgium, France [13], Liechtenstein, Luxembourg, Monaco, Slovakia and
  Switzerland.

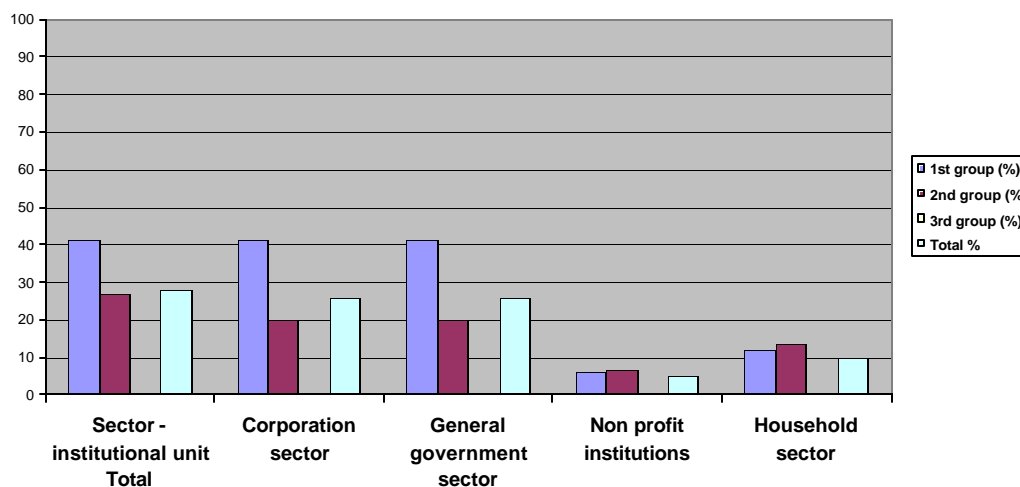55.   The ECE Recommendations advise to adopt the following classification:
  ✓ Corporate sector
  ✓ General government sector
  ✓ Non profit institution
  ✓ Household sector

56.   Graph 18 presents the percentage of countries that collected information on the topic of
institutional unit and the distribution of the countries that could identify the four sectors described
in the ECE Recommendations. If all the countries that collected data on sector could distinguish
the corporate and the general government, the other two sectors, non-profit and household were
disregarded by almost all countries. None of the countries in the Third Group included
information on sector in the census.

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[12] An example is the question used in Belgium: *What is your professional status?* Civil servant, Civil servant not in
the public sector, Managing director, employer, Other employee in the private sector, Worker in the private sector,
apprentice, Managing director, self employed, Self employed working mainly for one person or company, Other own
account worker, liberal profession, Contributing family worker, Household servant or domestic staff, Other statute,
Without statute
[13] Asking also the grade if working in the public sector

**Graph 18: Percentage of countries that collected data on
Institutional-unit**

2.9. Status in Employment (para 134)

57.   The status in employment is a topic that was included by almost all countries (36[14] out of 38). The ECE Recommendations advise countries to consider the following classification (para 135):
   ✓   Employees,
   ✓   Employers
   ✓   Own account worker
   ✓   Contributing family workers
   ✓   Members of producer's co-operatives
   ✓   Persons not classified by status

58.   Graph 19 shows the distribution of the countries in reporting about the topic of status in employment and the categories suggested in the ECE Recommendations. Employee and Self-employed is a category that is reported by all the countries that included status in employment.

Employee
In some of the questionnaires the items related to employee distinguish the type of contract (see further)
Self-employed
There is in the countries a different use of the same terminology. Following Eurostat practices, European countries use the world "self-employed" or "self-employed without employees" meaning own-account workers although the international classification of the status in employment describes self-employed as the categories that includes all but employees.

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[14] The three countries that did not include this topic are Azerbaijan, Georgia, and Kyrgyzstan.. These countries however used the approach based on sources of livelihood and some of the categories for status in employment could be retrieved from the question on source of livelihood.

> ### *Implications for the Revision of the ECE Recommendations*
>
> There seems to be in the region a different use of the same terminology with regard to self-employed and own-account workers. Some countries follow the ILO classification where self-employed includes all the categories except employees and other follow the Eurostat classification where self-employed is linked to the concept of own-account workers (and employers for self-employed with employees). The new Recommendations should consider these practices and give clear guidelines on how to handle these differences.

Employer
This category is usually included as a sub category of "self employed" (as used by Eurostat) where countries make the difference between "self employed with employees" and "self employed without employees". For this sub-group some countries collected information on the number of employees.
Contributing family worker
This category was included by all but two countries.
Members of producers' cooperatives
This category was considered by only 14 countries mainly from East and South of Europe. This category is included under self-employed in the Eurostat classification.

2.10. Type of contract

59.   Few countries (eight[15]) collected information on the Type of Contract through pre-coded questions [16]. Graph 20 reports the distribution of the countries that included this topic, which does not seem to depend from the approaches used to classify people according to their activity status.

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[15] Albania, Belgium, Canada, France, Hungary, Italy, Luxembourg, Monaco.
[16] As example in Albania the following categories were included: Permanent job
Temporary job, Occasional job, Seasonal job

Graph 20: Percentage of countries that collected information on Type of contract
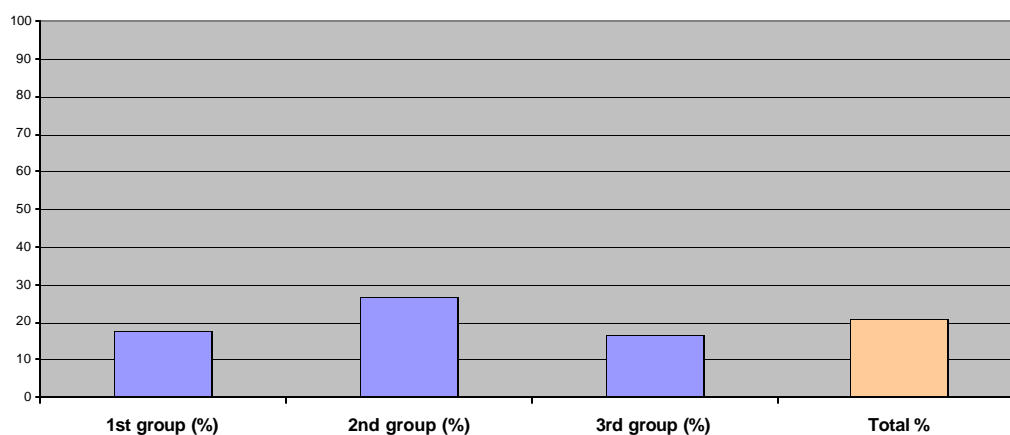
2.11. Number of persons working in the local unit of the establishment (para 143)

60.   Eight countries[17] collected information on the Number of persons working in the local unit of the establishment. Graph 21 reports the distribution of these countries according to the group they belong to.

Graph 21: Percentage of countries that collected information on Number of people working in the local unit
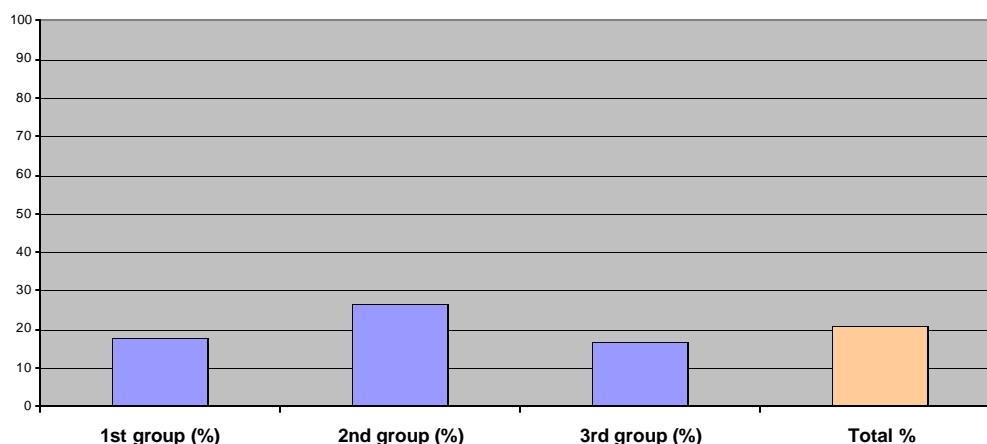
2.12. Main sources of livelihood (para 145)

61.   Graph 22 presents the distribution of the countries that collected data on sources of livelihood. This topic is of course included in all the countries in the Third Group[18] (source of livelihood approach), but it is almost absent in countries belonging to the First Group[19]. In the Second group, the topic was asked in 9 countries[20].

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[17] Austria, Belgium, France, Greece, Hungary, Luxembourg, Portugal, United Kingdom.

[18] Azerbaijan, Georgia, Hungary, Lithuania, Kyrgyzstan, and Ukraine.

[19] From this group only Croatia collected information on sources of livelihood.

[20] Armenia, Bulgaria, Canada, Estonia, Israel, Poland, Portugal, Russian Federation, United States.

**Graph 22: Percentage of countries that collected data on
Sources of income**
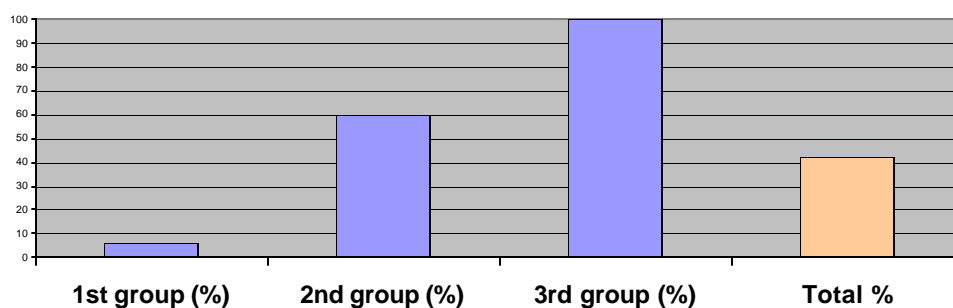
62.   Looking at the countries that used the categories suggested in the ECE Recommendations (para 147)[21] Graph 23 shows that the first three categories are included in all countries that collected information on sources of livelihood. While the last two had limited coverage.

**Graph 23: Percentage of countries that included the ECE
Recommended items for Sources of livelihood**
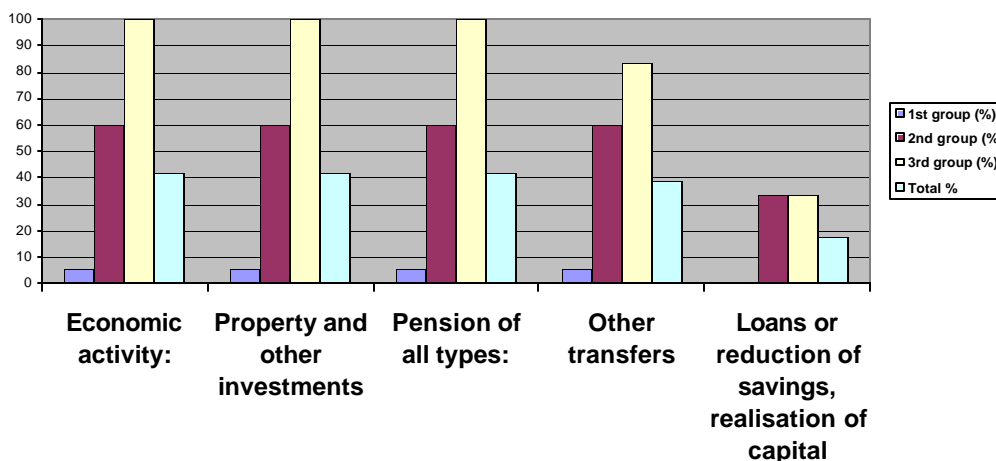
63.   The period of 12 months suggested by the ECE Recommendations as reference period was used only by four countries: Canada, Estonia, Lithuania, and United States. Israel used one month as reference period and the other countries did not include in the questionnaire any reference period.

64.   As suggested by the Recommendations, the topic was asked to all the persons. In some countries it was possible to select all the relevant sources (with identification of the main), in others only a limited number of sources could be selected (in general 3).

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[21] 1.0 Economic Activity: Paid employment, self-employed; 2.0 Property and other investment; 3.0 Pensions of all types: paid by the State, paid by enterprises, institutions; 4.0 Other transfers: sickness and maternity allowances, unemployment benefits, benefits and assistance other than pensions, unemployment benefits, sickness and maternity allowances; 5.0 Loans or reduction of saviong; 6.0 Other sources.

2.13. Dependency relationship (para 148)

65.   The dependency relationship was collected by 13 countries[22] mainly through the topic of sources of live lihood. Graph 24 shows that this topic was not really present in the census questionnaire except in the Third Group. There is here something quite similar to the distribution of sources of livelihood, since these two concepts are directly linked together.

**Graph 24: Percentage of countries that collected information on
Dependency relationship**
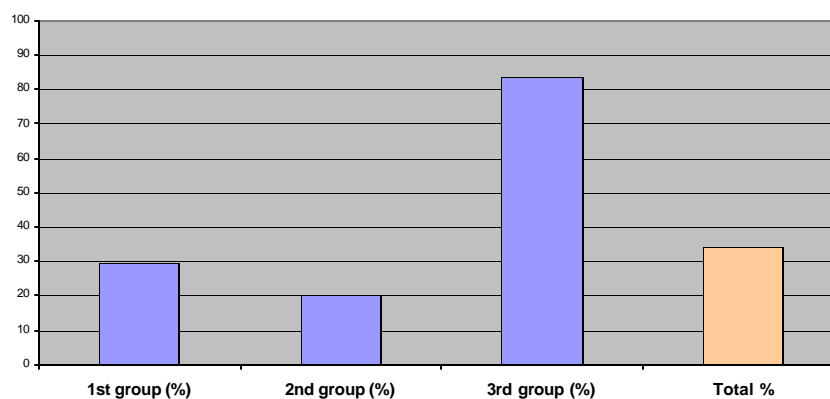
2.14. Income (para 152)

66.   The question on income could be considered too sensible to be included in a census and only 4 countries (United States, Canada, Malta and Israel) included in the 2000 census round. In Canada and in the United States income was collected for each source of income.

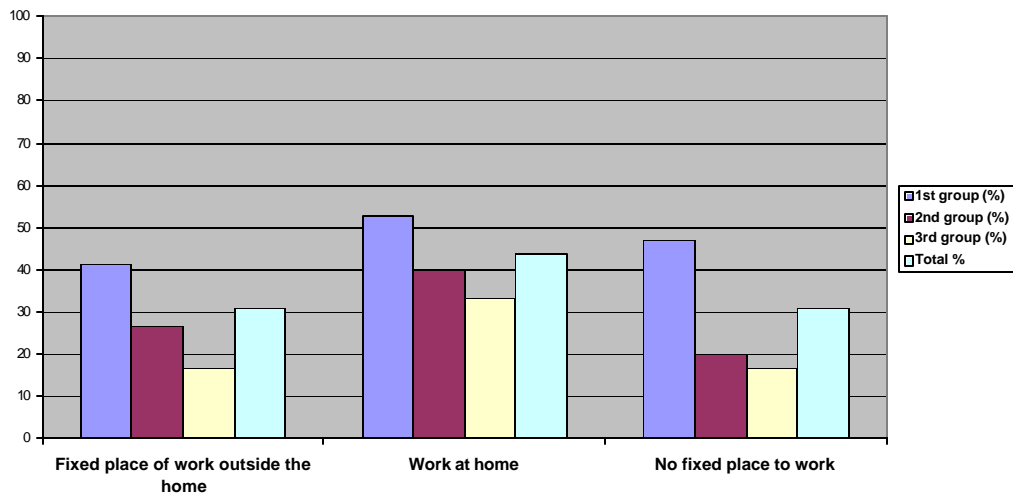**Graph 25: Percentage of countries that collected data on Income**
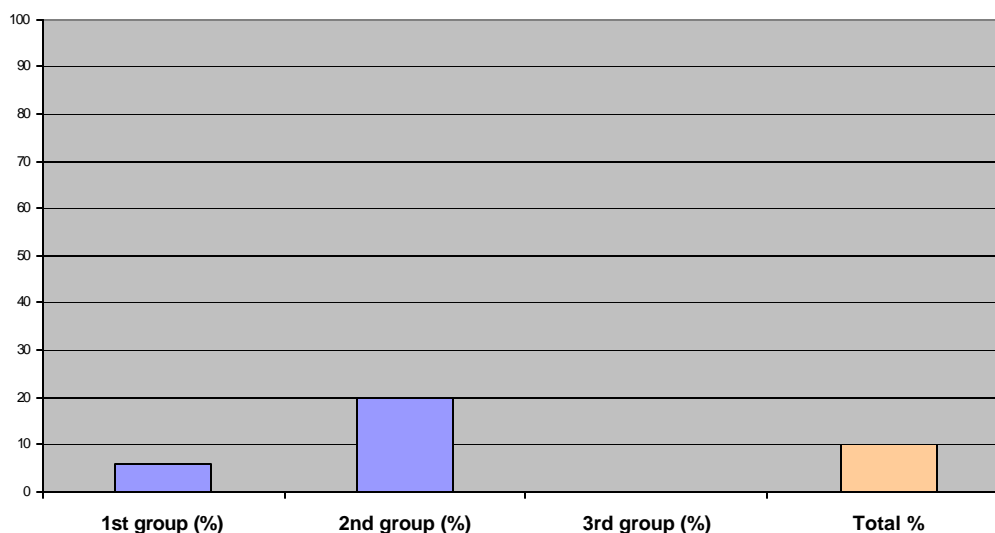
2.15. Place of Work (para 156)

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[22] Croatia, Estonia, Georgia, Hungary, Kyrgyzstan, Lithuania, Poland, Romania, Russian Federation, Serbia and Montenegro, Slovenia, Spain and Ukraine.

67.   32 countries collected data on place of work. Some asked about the name of the
establishment or enterprise, and address of the place where individuals work, and others included
a pre-coded question to define the type of work place as reported in Graph 26 (para 157 of the
ECE Recommendations).

**Graph 26: Percentage of countries that used different categories to
collect data on Place of Work**

2.16. Mode of transport to work

68.   19 countries included the topic of Mode of transport to work in their census with a higher
number of countries belonging to the First Group.
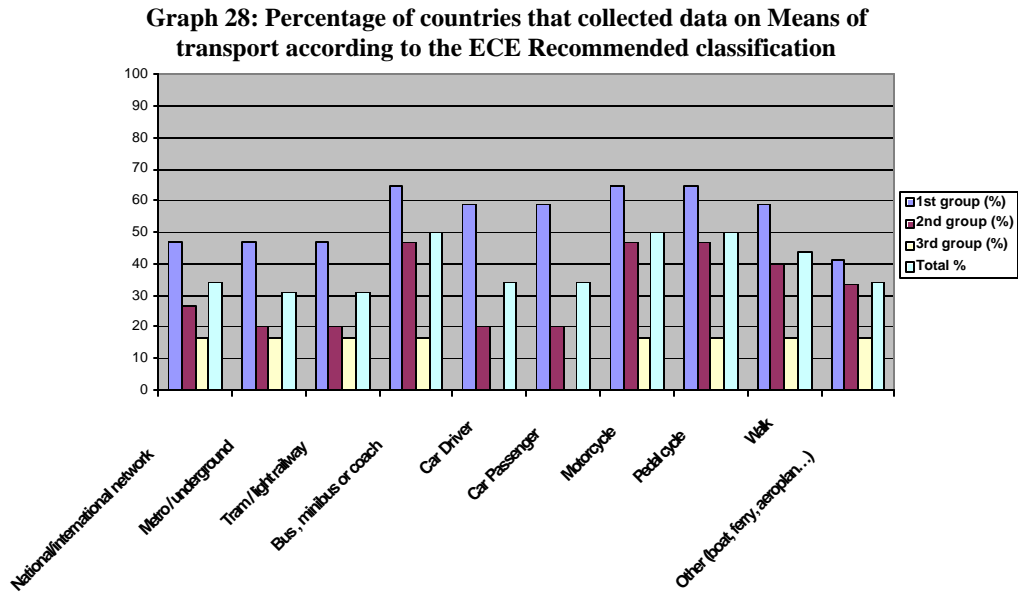
**Graph 27: Percentage of countries that collected data on Mode of
transport to work**
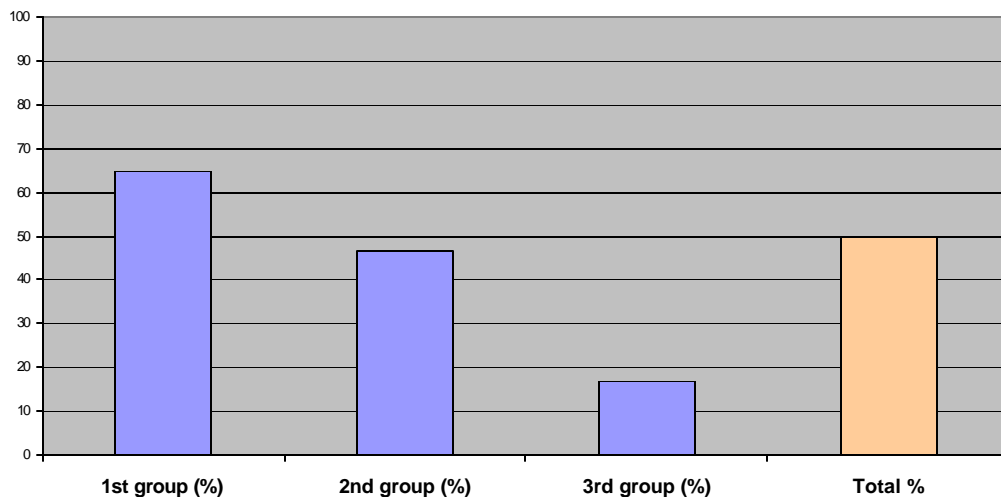
69.   Graph 28 reports the percentage of countries that identify means of transportation
according to the classification provided by the ECE Recommendations (para 159). It can be noted

that all countries that collected data on mode of transport included the categories bus, Motorcycle, and Pedal cycle.

Graph 28: Percentage of countries that collected data on Means of transport according to the ECE Recommended classification

2.17. Length and frequency of journey to work

70.   15 countries included questions related to the length and frequency of journey to work and the majority of them belong to the Third Group.

Graph 29: Percentage of countries that collected data on Lenght and frequency of journey to work
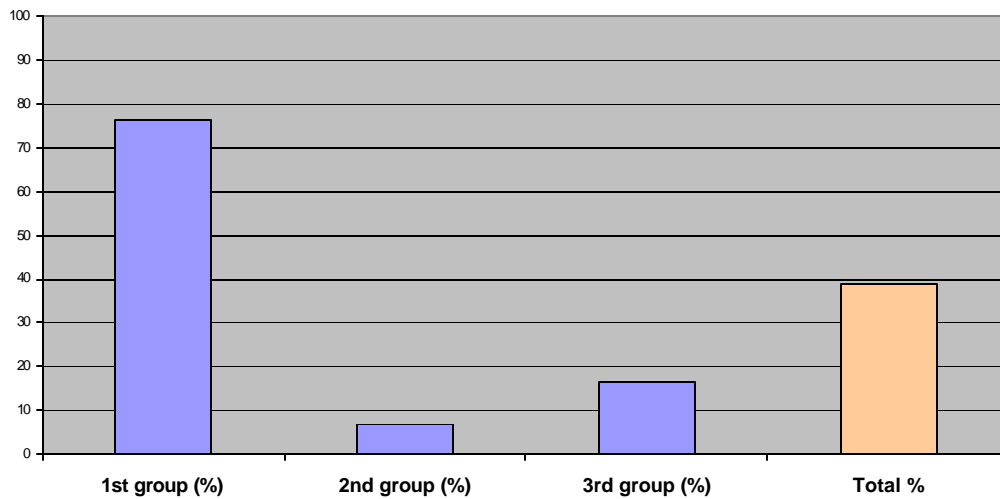
2.18. Departure point

71.   Eight countries included the topic of Departure Point in their census according to the distribution given in Graph 30.

**Graph 30: Percentange of countries that collected data on
Departure point**

Annex 1

Percentage of countries that collected economic characteristics according to the topics included in the 2000 ECE Recommendations

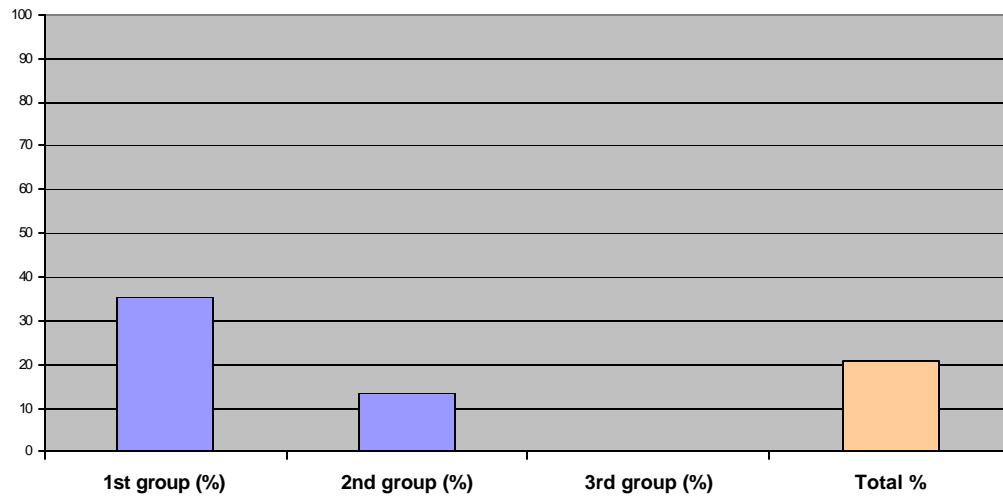| Topic	Percentage of countries that included the topic in the questionnaire	Percentage of countries that followed the ECE Recommendations
Current activity status	87	
age reference (15 y o)		48
worked-hours threshold (1h)		43
Employed Persons	100	
Persons in paid employment temporarily not at work		56
own account producer of goods or services for own final use		2
Apprentices and trainees		33
Participants in job training scheme		0
People mainly engaged in non-economic activity (e.g. students, homemakers) but in "paid employment" or "self employment"		35
Members of the armed forces		41
Unemployed Persons	100	
Mentioned categories	58	
Person temporarily without work who had made arrangement to take up a paid or self employment activity at a date subsequent to the ref period		30
Person absent from their work with no formal job attachment		5
Looking for a first job		30
Persons mainly engaged in non-economic activities (e.g student, homemakers)		28
Population not currently active	100	
Mentioned categories	100	
Students		87
Pension recipients		84
Capital income recipients		43
Homemakers		69
Usual activity status	13	
information collected on secondary activities		7
definition used for secondary activities		
Usually active population, Status in employment	2	
Number of worked months or weeks during the last 12 months	10	
Providers of non paid social and person al services	13	
Time usually worked	68	

Total time usually worked in different jobs		7
working hours		50
Full time/ part time/ etc…		28
Exclude absences		0
Include overtime		0
Duration of unemployment	34	
Occupation Total	97	
Open question		94
Pre-coded questions		5
Description of the main tasks and duties of the work		50
Industry - branch of activity	89	
Sector - institutional unit	28	
Open answer		0
Pre-coded	23	
Corporation sector		26
General government sector		26
Non profit institutions		5
Household sector		10
Other		
Status in employment (CT12)	92	
Employee		92
Employer		71
Self employed/own account workers		94
Contributing family worker		86
Members of producers' co-operatives		36
Person not classified by status		36
Type of contract (seasonal casual , interim)	21	
Data collected on the previous employment for unemployed	39	
Local unit questionnaire	2	
name and address		100
designation of the local unit		100
designation of people working in the local unit		100
Activity of the local unit		100
Number of persons working in the local unit or establishment	21	
Main source of livelihood	42	
Distinction with economic status of the person		23
Use of direct open questions		0
Use of a classification	42	
Economic activity:	42	
Paid employment		39
Self employment		34
Property and other investments	42	
Pension of all types:	42	
Paid by State and other public body		36
Paid by enterprise, institutions, cooperative org, other		23
Other transfers	39	

Sickness and maternity allowances		26
Unemployment benefits and relief		36
Other benefits and assistance provided by State or other public bodies, coop org, enterprise or institution		28
Loans or reduction of savings, realisation of capital	18	
Dependency relationship	34	
Is the person attached to his main supporter		16
If not, do we have precision about the supporter		25
Income	10	
Income in cash or kind		75
Individual income		100
Household income		0
Socio-economic groups	2	
Place of Work	84	
Distinction between place of the firm and place where the person works		28
Direct open question (Name/address)		71
Fixed place of work outside the home		31
Work at home		44
No fixed place to work		31
Other		
Mode of transport to work	50	
Rail		44
National/international network		34
Metro / underground		31
Tram / light railway		31
Bus , minibus or coach	50	
Car or van		50
Car Driver		34
Car Passenger		34
Other		50
Motorcycle		50
Pedal cycle		50
Walk		44
Other (boat, ferry, aeroplan…)		34
Length and frequency of journey to work	39	
Departure point	21	
Methodology group:		
What is your current activity status?	44	
Did you work last week?/ Do you work?	39	
What are your sources of livelihood?	15	

*****