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#### Session 8 – Invited paper

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

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## **BACKGROUND AND SUMMARY**

- 1. Recommendations on how to collect information on educational characteristics in the 2000 round of censuses are included in both the "Recommendations for the 2000 Censuses of population and housing in the ECE Region" (in the paper referred as the ECE Recommendations) and in the "Principles and Recommendations for Population and Housing Censuses Revision 1" (in the paper referred as the World Recommendations).
- 2. The ECE Recommendations provides guidelines on the following topics on educational characteristics:

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<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> United Nations Statistical Papers Series M No. 67/Rev.1, New York 1998.

- Educational attainment (core topic);
- Educational qualifications (non-core topic);
- Field of study (non-core topic);
- School attendance (non-core topic);
- Literacy (non-core topic);
- 3. UNECE analyzed 43 census questionnaires<sup>3</sup> and available definitions used in the 2000 Censuses of population in respect to the questions included on education. The paper reports the results of this analysis and points out some of the issues that based on this analysis could be considered during the revision of the ECE Recommendations for the 2010 round. The main points highlighted in the paper are the following:
- t) Although the World Recommendations suggest that "Data on school attendance, educational attainment and literacy status should be collected and tabulated separately and independently of each other, without (...) any assumption of linkages between them", there is still a consistent number of countries in the ECE region that collects educational data without distinguishing these different concepts. Educational attainment is often presented in conjunction with educational qualifications and school attendance, while literacy is sometimes assessed through response items included in the educational attainment. New census recommendations should address this issue more specifically and provide guidelines on how these different concepts can be approached separately.
- tt) There are no common approaches in the region as regard to who should be covered in the collection of data on the different educational topics. The current recommendations make suggestions on the age limits to apply to each topic, but a consistent number of countries did not follow them.
- tut) The concept of school attendance is hardly measured by countries in their census. Although using the word attendance, countries often collect data on enrolment or on concepts such as "studying". The new recommendations should look into this and if there is the commitment in the region to continue the collection of data on attendance, more specific definitions should be provided.
- iv) Although in many countries of the region literacy rates are high there is still a consistent number of countries (18) that are planning to collect data on this topic in the 2010 round of censuses. Countries need to reflect about the literacy concept that is most relevant for the region and can be collected in a census. Following the steps that UNESCO is undertaking toward the measurement of functional literacy, it should be discussed if it would be relevant and feasible to include some reference to functional literacy in the new census recommendations.
- 4. 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.

<sup>&</sup>lt;sup>3</sup> The following ECE countries are excluded from the analysis: i) Andorra, Denmark, Finland, Norway, and Netherlands, in these countries census was undertaken using registers or a combination of registers and surveys without a traditional census questionnaire; ii) Bosnia and Herzegovina, Germany, Iceland, San Marino, Sweden, Uzbekistan, in these countries a census was not conducted in the 2000 round; iii) Turkmenistan, this country undertook a census in 1995 but the questionnaire was not available to the ECE secretariat; iv) Republic of Moldova, the census was carried out on 5-12 October 2004 and the questionnaire was not available at the tyme of this analysis.

#### 1. EDUCATIONAL ATTAINMENT

5. The ECE Recommendations define this core topic as follows:

Educational attainment' refers essentially to the highest level successfully completed in the educational system of the country where the education was received

6. 35 out of 42 countries that were analyzed included the topic of educational attainment in their 2000 round census questionnaires. 6 out of 42 countries, did not ask a question on Educational attainment, but only on Educational qualifications referring to the highest certificate or diploma obtained<sup>4</sup>. In the United States, a question referred both to the highest <u>level</u> completed and to the highest certificate or <u>diploma</u> obtained<sup>5</sup> but in the explanation note it is clear that the question relates to qualifications rather then attainment<sup>6</sup>. However, the classification used for the qualifications in secondary school is very detailed and data can be extracted to provide comparable information on the attainment but only for secondary school.

# 1.1. Implementation of the concept of educational attainment

- 7. The countries that included educational attainment did so using different modalities. Some countries asked about the highest level completed (as recommended) and some asked about all levels of education completed. About 65% of the 36 countries that included the topic in the cens us followed the recommendations. 20 countries included questions on the highest level of education <u>completed</u> (see Annex 1) and 4 (Canada, France<sup>7</sup>, Malta <sup>8</sup>, Portugal<sup>9</sup>) on the highest level of education completed or not completed (attended).
- 8. 4 countries (Austria, Hungary, Liechtenstein, Switzerland) did not asked about the highest level but about **all** levels of education completed.

For 7 countries (Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Tajikistan, Ukraine, Latvia) it was not possible to understand the nature of the question on Educational attainment since it generically referred to "Education" or "Education attainment".

<sup>7</sup> France included a question on the highest diploma obtained (Indiquez votre dernier diplome obtenu) and a question on the level of education attended (Quel niveau d'études avez -vous attaint: École primaire, Classes de seconde, première ou terminale, Collège, classes de 6e à 3e, CAP, BEP, Études supérieures").

<sup>&</sup>lt;sup>4</sup> Albania: What is the highest diploma obtained?, Armenia Your scientific degree or education, Israel: What is the highest Diploma (or degree) you achieved during your studies?, Italy: Indicate the highest educational degree obtained, Monaco: Indiquez votre diplome le plus élevé, United Kingdom: Which of these qualifications do you have?. In the Italian census other questions related to educational qualifications were included: Indicate the certificate or degree obtained; Indicate whether in possession of post-university specialization and/or research doctorate.

<sup>&</sup>lt;sup>5</sup> What is the highest degree or level of school this person has completed?

<sup>&</sup>lt;sup>6</sup> If currently enrolled, mark the previous

<sup>&</sup>lt;sup>8</sup> "Educational attainment" defined as "the most advanced level that a person has reached (completed or not)". The classification includes both categories referred to who completed the levels of education and categories concerning who did not complete them, so makes possible a distinction between such different groups.

<sup>&</sup>lt;sup>9</sup> "Highest education level that you attend or have attended: Pre-primary, Basic-1st degree, Basic-2nd degree, Basic-3rd degree, Secondary, Post-secondary, Tertiary-1st degree (Bac), Tertiary-2nd degree (lic), Tertiary-3rd degree (Mas), Tertiary 4th degree (Phd)"; "Did you complete the education level indicated in previous question?"; "Respond 'Yes' if you have successfully completed the level of education indicated (...), 'Not' if you have not completed the level (...) because you are still studying in order to complete that level of education or because you have dropped out without completing that level of education".

- 9. Two countries, Bulgaria and Canada, asked different questions for people with different educational levels. In the Bulgarian census, the question on Educational attainment was divided in two parts identifying all levels completed for persons with at least secondary education, and the highest level completed with persons with lower education<sup>10</sup>.
- 10. In the questionnaire for Cana da, the following questions on Educational attainment were included:
- 1. "What is the highest grade of secondary (high school) or elementary school attended by this person (completed or not)?
- Number (1 to 13) of grades of secondary or elementary school
- Never attended school or attended kindergarten only"
- 2. The number of years of education completed at university;
- 3. The number of years of schooling completed at an institution other than a university, a secondary (high) school or an elementary school.

#### 1.2 Additional information collected

- Many countries, particularly from the CIS and Eastern Europe complemented the question on Educational attainment with other information. Some countries (Croatia 11, Latvia, Serbia and Montenegro <sup>12</sup>, Slovakia <sup>13</sup>, The FYR of Macedonia <sup>14</sup>, Ukraine) asked about the name or the type (Romania) of school where the highest level was completed, others (Austria 15, Belgium 16, Canada 17, Kyrgyzstan, Ukraine 18, and Russian Federation 19) asked a specific question on vocational training.
- Information on the year when the highest level was completed was asked in 5 countries (Belgium<sup>20</sup>, Bulgaria<sup>21</sup>, Hungary<sup>22</sup>, Monaco<sup>23</sup> (footnote: not the year but the age when people with secondary or tertiary education stopped their education was asked), Ukraine<sup>24</sup>) while the number of years of schooling was asked in only three countries (Albania<sup>25</sup>, Belgium and Israel).

<sup>10 &</sup>quot;Level and year of completed education", to record all the levels completed (with the respective year of completion) by persons who attained at least the secondary level; "Completed education", to record the highest level completed by persons with a lower education.

Type and title of the school and Course or occupation were recorded.

Name of secondary, higher or high school was recorded.

<sup>&</sup>lt;sup>13</sup> Faculties were also recorded.

<sup>&</sup>lt;sup>14</sup> Name of the completed secondary, high or higher school, faculty, and academy was recorded.

<sup>&</sup>lt;sup>15</sup> The category "Apprenticeship training" is included in the classification by levels completed for question on

<sup>&</sup>lt;sup>16</sup> "Are you receiving education or have you received education (in school or elsewhere)? Y/N": To be completed by everyone who took a certificate after a recognised vocational training of at least 600 hours (equals a full time of 6 months)). It concerned a: i) vocational training by FOREM, IBFFP, etc; ii) training in the framework of your profession; iii) vocational training followed on your own initiative".

How many years of schooling has this person ever completed at an institution other than a university, a secondary (high) school or an elementary school? - None - Less than 1 year (of completed courses) - Number of completed years at community colleges, trade schools, CEGEPs, etc.

18 The educational institution where the person graduated and the number of courses were recorded.

<sup>19</sup> Have you finished a vocational or trade school? Y/N ('Yes' should indicate those who completed the course of basic vocational training)

20 The age when the highest level of education was completed was recorded.

<sup>&</sup>lt;sup>21</sup> For persons who completed at least the secondary level.

Not for elementary school, but for higher elementary school, high school, post-graduation in high school, university, post-graduation in university.

The age when secondary or tertiary education was stopped was recorded.

<sup>&</sup>lt;sup>24</sup> The *year of graduation* was recorded.

<sup>&</sup>lt;sup>25</sup> Only for university degrees.

3 countries (Belgium, Greece, Italy  $^{26}$ , Luxembourg) asked about the country where the studies were completed.

#### 1.3 Classification of levels of education

13. With regards to the <u>classification of levels of education</u>, the <u>ECE Recommendations</u> suggest the following:

Four levels of education should be distinguished: primary; secondary – first stage; secondary – second stage; and post secondary. No subdivision is required for primary or post secondary education. Persons who have received no formal schooling should also be identified

- 14. 33 out of 35 countries that included the topic of educational attainment characterized the question concerning Educational attainment with a classification by levels of education. The remaining two countries (Canada and Romania) had an open question to record the highest grade or level completed.
- 15. The classifications used by the countries reflect the diversity of educational systems in the region. They are in some cases very detailed (distinguishing different grades within primary, secondary and tertiary) and in other cases very general. The highest level of details is usually within secondary school. Some countries (five) included in the classification items related to vocational and professional training.
- 16. In some countries there was not a clear distinction in the classification between "levels" and "qualifications" and it was not always easy to distinguish these two concepts. Table 1 reports examples where educational qualifications were included in the classification of educational attainment. There may be a problem of translation from national language to English, but it is not clear if all the classifications used can be aggregated in the four levels suggested in the recommendations. In some of the countries (Austria <sup>27</sup> and Hungary<sup>28</sup>) where all the levels were reported (and not only the highest), it was asked to identify both levels completed and qualifications.

<sup>&</sup>lt;sup>26</sup> Italy and Belgium: only if the highest educational level was attained abroad.

<sup>&</sup>lt;sup>27</sup> The instructions for the question on "Education completed" reported: "Please indicate all degrees obtained or levels of education completed".

The instructions of the question on grades, levels or classes completed reported: "All educational qualifications have to be taken into account. It is not enough if you give the highest level one only.

Table 1. Examples of educational attainment categories where qualifications were also included

Greece	Ireland	Luxembourg	Poland
Education (write the highest	What is the highest level of		
level of studies completed by	education (full-time or par⊧time),	What is the highest	What is your education level?
the respondent)	which you have completed to	level of studies you	Higher:
1. PhD	date?	successfully	At least doctorate
2. Master's	. No formal education	completed?	2. Master's degree
3. Higher education degree	. Primary education	. Primary education	3. Non-university certificate or
4. Technical education college,	Second level:	. Lower stage of	<u>diploma</u>
religious education degree	. Lower secondary	secondary education	Post-secondary:
<ol><li>Post secondary education</li></ol>	. Upper secondary	or technical sec.	4. Post-secondary with
<u>degree</u>	. Technical or Vocational	education	secondary school certificate
6.Secondary education	qualification	. Vocational diploma	5. Post-secondary without
certificate	. Both Upper secondary and	. Diploma of master	secondary school certificate
7.Technical school certificate	Technical or Vocational	craftsman	Secondary:
8.Technical college certificate	qualification	. Secondary school	6. Vocational with certificate
9.Lower secondary school	Third level:	leaving certificate	7. Vocational without
certificate	. Non Degree	. Technician's	certificate
<ol><li>Primary school <u>certificate</u></li></ol>	. Primary <u>Degree</u>	<u>diploma</u>	8. General with certificate
<ol><li>Attends primary school</li></ol>	. Professional qualification (of	. Higher education (-	General without certificate
12. Has left primary school, but	Degree status at least)	4 years)	10. Basic vocational
knows how to read and write	. Both a <u>Degree</u> and a	. Higher education (+	Primary:
13. Does not know to read and	Professional qualification	4 years)	11. Primary completed
write	. Postgraduate Certificate or	. Other	Others:
	<u>Diploma</u>		12. Primary not completed and
	. Postgraduate <u>Degree</u> (Masters)		no school education
	. Doctorate (Ph.D)		

17. It is interesting to note that in Austria, Hungary, Liechtenstein, Portugal and Switzerland, the classification used for Educational attainment is the same used for School Attendance. This may help in the efforts to cross-classify attendance with data on educational attainment, according to the person's current level and grade as suggested by the world recommendations.

#### Implications for the Revision of the ECE Recommendations

There is seems to be a confusion in the use of levels of educational attainment and educational qualifications both in the wording of the questions and in the classification used. There may be the need to better specify how the two topics are related. The definition of educational attainment is very hermetic in the current ECE Recommendations and could also be expanded.

Since few countries asked about **all** levels of education completed (in the questions or in the classifications used), it may be relevant to explain how to relate the highest level completed with all levels completed

18. In order to facilitate the respondent to focus on attainment rather then qualifications, 27 countries included in the classification of educational attainment levels of education <u>not</u> <u>completed</u> However, this was not systematically done by all countries and in all educational levels and problems of comparability may rise where this approach is used in a different manner. The inclusion of an item for not completed primary school was adopted more often then for secondary and tertiary school. 18 countries included one or more categories to record persons who did not complete the primary level (see Annex 2) while only 10 countries included one or more categories to identify persons who did not complete the secondary level (see Annex 3) and/or the tertiary level (see Annex 4).

# Implications for the Revision of the ECE Recommendations

Some countries asked about the highest level completed OR not completed/attended. The ECE Recommendations mention only the highest level **completed**, but the world recommendations say that: "Some countries may also find it useful to present data on educational attainment in terms of highest grade attended". A high number of countries (27) included in their classification also levels not completed making it possible to have a distribution of people by level completed AND by level not completed. Should the recommendations be more explicit on how to deal with levels completed and not completed?

- 19. Both the ECE and the world recommendations highlight the importance of identifying "Person who have received **no formal schooling**". However, only about half of the countries (21) that classified educational attainment included an item able to identify persons who have not received formal schooling (see Annex 5). 3 countries<sup>29</sup> included one category to record persons who did <u>not complete any level</u> and 4 countries (Albania, France<sup>30</sup>, Israel, and Italy) report people <u>without any diploma</u> but this does not allow to identify people with no formal schooling since there may be may be a group of people who attended school without completing it. Although the global recommendations advocate that "Data on school attendance, educational attainment and literacy status should be collected and tabulated separately and independently of each other", many countries mixed these concepts in the classification of educational attainment. 13 out of the 36 countries that collected information on attainment included items concerning literacy in the response categories (see Annex 6). And One country included school attendance (*Attends primary school*) in the same classification.
- 20. Only 4 out of 36 countries included in the classification for Educational attainment a category concerning <u>pre-primary school</u>, some countries did so including pre-primary with primary and others as a standalone category<sup>31</sup>.

#### 1.4 Age limit

21. With regards to the age of persons for whom Educational attainment should be collected, the ECE Recommendations suggest the following:

Information on educational attainment should be collected for all persons above the maximum age for starting compulsory schooling

22. The World Recommendations suggest:

Information on educational attainment should preferably be collected for all persons 5 years of age and over

23. As it appears from the questionnaires where information on the cut-off age could be retrieved, only 8 countries followed the ECE recommendations and none followed the world

<sup>&</sup>lt;sup>29</sup> **Hungary**: Do not attend school, never completed any class; **Turkey**: No school completed; **United States**: No schooling completed.

The category "Aucun diplome" is included in the classification by highest level reached.

<sup>&</sup>lt;sup>31</sup> **Austria**: Primary school (including pre-primary stage); **Cyprus**: "Pre-primary"; **Portugal**: "Pre-primary"; **United States**: "Nursery school to 4th grade".

recommendations. The approaches used also vary considerably among the countries and it is hard to identify a common regional approach. Table 2 shows the different approaches used.

Table 2. Age limit applied in countries to collect information on educational attainment

Age limit	Countries		
No age limit, questions asked to	Azerbaijan, Bulgaria <sup>32</sup> , Croatia, Hungary, Liechtenstein,		
everybody	Luxembourg, Spain, Switzerland, Tajikistan, United States		
6 and over	Georgia, Greece, Kazakhstan, Kyrgyzstan, Portugal, Turkey,		
	Ukraine		
7 and over	Latvia		
10 and over Estonia, Lithuania, Russian Federation			
11 and over Romania			
13 and over Poland			
14 and over	France		
15 and over	Austria, Belarus, Belgium, Canada, Cyprus, Czech		
	Republic, Ireland, Slovenia		
16 and over	Malta, Slovakia		
Not for pre-school and primary school	Serbia and Montenegro, The FYR of Macedonia		
children			

# Implications for the Revision of the ECE Recommendations

The age limit to ask information on attainment varies considerably among the countries of the region. Few countries followed the current ECE recommendations. Should the recommendations be revisited or making more explicit why it would be important to collect educational attainment for all people above the maximum age of compulsory education?

### 2. EDUCATIONAL QUALIFICATIONS

#### 24. The ECE Recommendations define this topic as follows:

Educational qualifications' are the degrees, diplomas, certificates, etc. which have been conferred on a person by educational authorities, special examining bodies or professional bodies in his/her home country or abroad on the successful completion of a course of full-time, part-time or private study.(...) Such information should include the title of the highest degree, diploma or certificate received, with an indication of the field of study if the title does not make this clear

25. 21 countries (Albania, Armenia, Austria, Belgium, Canada, Finland<sup>33</sup>, France, Greece, Hungary, Ireland, Israel, Italy, Kyrgyzstan<sup>34</sup>, Liechtenstein, Luxembourg, Malta, Monaco, Poland, Switzerland, United Kingdom, United States) included this topic in the questionnaire. As it was mentioned in the session related to educational attainment, it is sometimes difficult to

<sup>&</sup>lt;sup>32</sup> In the classification by highest level completed there is the category "Child" (for children up to 7 years).

The specific question on Educational qualifications used by Finland is not available; nevertheless, *Population Census 2000 Handbook* attests (see on p. 14) that this topic has been included in the questionnaire.

34 The topic Educational qualification has been included in the questionnaire.

<sup>&</sup>lt;sup>34</sup> The topic Educational qualification has just been included by means of the following question: "Educational qualification specified in diploma", sub-question of the question on Educational attainment.

clearly distinguish questions and items related to attainment and qualifications. In only 6 countries (Belgium<sup>35</sup>, Canada <sup>36</sup>, Finland<sup>37</sup>, Kyrgyzstan<sup>38</sup>, Malta<sup>39</sup>, and United Kingdom<sup>40</sup>) there is a clear difference between the two types of information collected.

#### 2.1 Information collected

- 26. In relation to the information collected about the educational qualifications the recommendations suggest to collect data on educational qualifications including the title of the highest qualification received (with an indication of the field of study<sup>41</sup> if the title does not make this clear). It can be noted that 6 countries (Albania, Belgium, Hungary, Italy, Kyrgyzstan, Liechtenstein, and Switzerland) recorded the title of the qualifications and 4 countries (Austria, Belgium, Canada, and Ireland) recorded the field of study. In 5 countries (Belarus, Georgia, Italy, Kazakhstan, and Kyr gyzstan) information <sup>42</sup> about upper-tertiary education was also asked.
- With regards to the age of persons to whom the question on educational qualifications 27. should be asked, the ECE Recommendations suggest the following:

It is suggested that information on educational qualifications be collected at least for all persons who have successfully completed a course of study at the post-secondary level of education

As it is for educational attainment, the situation in respect to the cut-off age for answering the question is very heterogeneous. Table 3 reports the different approaches used by countries.

Table 3. Age limit applied in countries to collect information on e	educational qualifications
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Age limit	Countries		
No age limit, questions asked to	Hungary, Luxembourg, United States		
everybody			
6 and over	Albania, Greece, Italy, Kyrgyzstan		
7 and over Armenia			
10 and over Estonia, Lithuania, Russian Federation			
13 and over	Poland		
14 and over	France		
15 and over	Austria, Belgium, Canada, Ireland, Israel,		
	Liechtenstein, Switzerland		
16 and over Malta, Monaco			
16-74	United Kingdom		

<sup>&</sup>lt;sup>35</sup> Tick ALL certificates that you took in higher education; What is the full name of (these) certificates?

<sup>&</sup>lt;sup>36</sup> What certificates, diplomas or degrees has this person ever obtained? It includes all qualifications obtained from secondary (high) schools, or trade schools and other postsecondary educational institutions. In the classification by qualifications achieved, the category "None" for persons who did not obtain any qualification is also included.

<sup>&</sup>lt;sup>37</sup> See *Population Census 2000 Handbook* on p. 14. <sup>38</sup> *Educational qualification specified in diploma* 

<sup>&</sup>lt;sup>39</sup> Indicate the highest certificate, diploma or degree which this person has ever attained

<sup>&</sup>lt;sup>40</sup> Which of these qualifications do you have? (Mark all the qualifications that apply or, if not specified, the nearest equivalent)

Any information that countries have collected on Field of study has been analysed also in the next paragraph concerning this topic.

42 People with a university degree were asked if they were Candidates of Science, Doctors of Science, or Ph.D

graduates.

29. It is interesting to note that for all countries except Switzerland and Liechtenstein where both educational attainment and educational qualifications were asked, the same age limit was used.

#### Implications for the Revision of the ECE Recommendations

Given the wide range of approaches used by countries in setting the age limit for the question on educational qualification, how can the recommendations be improved? Is it realistic to agree on a common approach?

#### 3. FIELD OF STUDY

30. The <u>ECE Recommendations</u> define this topic as follows:

The most common method is to ask the person during census enumeration to identify only one principal field of study, and this may result in loss of information on the other fields. The second solution is to accept multiple responses to the question, in which case appropriate data processing facilities for handling and tabulating multiple responses must be put into place. If necessary, the data collection and processing procedures could be adapted to enable the distinction between principal and secondary fields of study. Another possible solution would be to establish a separate category for each multi-disciplinary field within the classification

- 31. Only 9 countries (Austria, Belgium<sup>43</sup>, Canada<sup>44</sup>, Czech Republic, Finland<sup>45</sup>, Ireland, Spain, Portugal, The FYR of Macedonia) out of the 43 analyzed included this topic in the questionnaire. In Ireland the respondents were asked to identify all the subject areas taken part of the final examination, but the rest of the countries allow the identification of only the main field of study.
- 32. In relation to the classification of the field of study the ECE Recommendations report the following:

Countries may follow established national nomenclature or to facilitate international comparison adopt the classifications and coding of fields of study of the most recent version of ISCED

33. 4 countries (Belgium, Finland<sup>46</sup>, Ireland, Spain) used pre-coded questions in line with ISCED while others used open questions. Information on how the open questions were coded and their relation with ISCED was not available in the available documentation.

 $<sup>^{43}</sup>$  Persons who had a certificate of vocational training or technical secondary education were asked to specify the branch of study

<sup>&</sup>lt;sup>44</sup> The question refer to the *major field of study or training* of the *highest degree*, *certificate or diploma* (*excluding secondary or high school graduation certificates*) obtained by the respondent

<sup>&</sup>lt;sup>45</sup> The specific question on Field of study used by Finland is not available; nevertheless, *Population Census 2000 Handbook* attests (see the classification by fields of education on p. 53) that this topic has been included in the questionnaire.

<sup>&</sup>lt;sup>46</sup> See *Population Census 2000 Handbook* on p. 53.

#### 3.1 Age limit

34. With regards to the <u>age of persons whom countries should refer the question on Field of study</u>, the recommendations suggest as follows:

Information on the 'field of study' should be collected primarily for persons within the adult population who have attained secondary education or above. This would mean that the question is to be principally addressed to persons aged 15 years and over who have completed secondary education or higher or other organized educational and training programmes at equivalent levels of education

35. Although countries did not use the same age threshold for the question on field of study (see Table 4), it can be noted that almost all are in line with the recommendations.

Table 4. Age limit applied in countries to collect information on field of study

Age limit	Countries
No age limit, questions asked to	Spain
everybody	
15 and over	Austria, Belgium, Canada, Ireland
Persons with higher than elementary	Czech Republic
education	
Persons that are tertiary level	Portugal
graduates	
Not for pre-school children and	The FYR of Macedonia
pupils attending primary school	

#### 4. SCHOOL ATTENDANCE

36. The ECE recommendations define this topic as follows:

School attendance' is defined as attendance at any accredited educational institution or programme, public or private, for organized learning at any level of education. The term 'education' is understood to comprise all deliberate, systematic and organized communication designed to bring about learning. Data on school attendance should refer to the time of the census. (...) Instruction in particular skills, which is not part of the recognised educational structure of the country (e.g. in -service training courses in factories), is not considered "school attendance" for census purposes. (...) The concept of school attendance is different from but complementary to that of enrolment as normally covered by school statistics. A person may be enrolled but does not attend; and a person attending a training programme may not be formally enrolled in a school or an educational institutions

37. 34 countrie s (Armenia, Austria, Azerbaijan, Belarus, Belgium, Canada, Croatia, Estonia, France 47, Georgia, Greece, Hungary, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Liechtenstein, Lithuania, Luxembourg, Monaco, Poland, Portugal, Romania, Russian Federation, Serbia e Montenegro, Slovenia, Spain, Switzerland, Tajikistan, The FYR of Macedonia, Ukraine, United Kingdom, and United States) included school attendance in their census questionnaires. As reported in the ECE and World Recommendations it is important that the concept of attendance be identified as a different concept of enrolment. However, it was not possible from the documentation available to understand if all countries actually measured such a different

<sup>&</sup>lt;sup>47</sup> In the questionnaire for France, this topic has been included by the question on enrolment, as specified later on.

concept. From the countries where information is available it seems that often behind the use of the word attendance there is the concept of enrolment. The approaches used to measure attendance that could be identified from the available questionnaires can be summarized as follows:

- Attendance was measured through the identification of the level/type of school they were attending. This approach was used by 20 countries (Austria, Belarus, Canada <sup>48</sup>, Croatia, Estonia, Hungary<sup>49</sup>, Kazakhstan, Kyrgyzstan, Liechtenstein, Lithuania, Poland<sup>50</sup>, Romania, Serbia and Montenegro, Slovenia, Spain, Switzerland, Tajikistan, The FYR of Macedonia, Ukraine, United States)
- Attendance was assessed with a Yes/No question were respondents were asked if they were attending school or had attended school in the past, without specifying the level currently attended. This approach was used by 3 countries: Belgium, Israel, and Portugal
- The respondents were asked about the level/type of school where they were studying. This approach was used by Armenia, Azerbaijan<sup>51</sup>, Georgia, and Russian Federation<sup>52</sup>
- Other approaches not of types described above were used in Luxembourg<sup>53</sup>, Greece<sup>54</sup>, Monaco<sup>55</sup>, and United Kingdom.
- 38. For 4 countries it was possible to note that only information on enrolment was collected.

Canada: "In the past nine months (that is, since last September), was this person attending a school, college or university? Instructions: "Report the attendance of persons who have been enrolled in school or an educational institution at any since September 2000, even if they were registered but subsequently dropped out".

France: "Etes-vous inscrit(e) pour l'année scolaire 1998-1999 dans un établissement d'enseignement? (OUI/NON)"

"si oui, l'établissement est-il situé: - Dans la commune ou vous residez - Dans une autre commune (Indiquez cette autre commune)".

**Hungary**: the instructions for the question about School attendance specify "Currently someone goes to school if he/she is enrolled for the 2000/2001 school year in one of the listed types of school".

**Italy:** "Indicate whether the person is enrolled in primary school, secondary school or University (or a post-diploma non-university course) (Y/N)".

<sup>&</sup>lt;sup>48</sup> Respondents are asked about school attendance during 9 months before census data and people who reported to attend school had to specify if the attendance was *full time* or *part time* (*day or evening*).

The question included information on regular/not regular attendance

Respondents who attended school had to specify if they went to day school or evening school (or week-end school or in extramural system).

51 For Armenia and Azerbaijan the instructions are not translated.

<sup>&</sup>lt;sup>52</sup> The question was reported in a different way in the instructions: "Do you attend an educational institution (school, technical secondary school, college, higher educational establishment, etc.)?".

<sup>&</sup>lt;sup>54</sup> School attendance (only for primary school) was included in the classification of educational attainment <sup>55</sup> L'enfant est-il: a) En nourrice?- Dans une creche? Dans un établissement préscolaire? Dans un établissement scolaire? b) A Monaco? Hors de Monaco? c) Dans un établissement: Public? Privé?

#### Implications for the Revision of the ECE Recommendations

There is the impression that the concept of school attendance as described in the ECE and World Recommendations was used by few countries in the region. Some countries asked about enrolment (even if they called it attendance) and some used the concept of "studying" which is difficult to compare with both enrolment and attendance. This should be taken in consideration when revising the ECE Recommendations. There is the need to understand if it is possible to suggest a common approach in the region based on attendance. If so, more detailed recommendations should be developed to define the boundary of attendance and **HOW** attendance differs from enrolment.

#### 4.1 Classification of level of school attended

- 39. Different classifications were used to identify the level of school attended 24 countries (Armenia, Austria, Azerbaijan, Belgium, Croatia, Estonia, Hungary, Italy<sup>56</sup>, Kazakhstan, Kyrgyzstan, Liechtenstein, Lithuania, Luxembourg, Monaco, Portugal, Russian Federation, Serbia and Montenegro, Slovenia, Spain, Switzerland, Tajikistan, The FYR of Macedonia, Ukraine, United States). As in the educational attainment, this difference reflects the diversity of educational systems. Analyzing these differences, the following key issues can be highlighted:
- In 5 countries (Austria, Hungary, Liechtenstein, Portugal and Switzerland), the classifications used for school attendance coincides with the ones used for Educational attainment
- 15 countries collected data on attendance in pre-primary school
  - ♦ Belarus and Kazakhstan included as sub-question
  - ◆ Austria, Belgium, Estonia, Luxembourg, Monaco, Portugal, United States included as a category in the classification by type of school attended;
  - Georgia, Hungary, Italy, Kyrgyzstan, Russian Federation, Ukraine: included a separate question for pre-primary
- 40. 16 countries (Austria, Belgium, Bulgaria, Croatia, Czech Republic, France, Hungary, Italy, Liechtenstein, Luxembourg, Portugal, Serbia and Montenegro, Slovakia, Slovenia, Spain, Switzerland) have also included questions about the place of school attended.

#### 4.2 Age limit

41. With regards to the age range of the people for whom School attendance should be collected, the ECE Recommendations suggest the following:

It is suggested that information on school attendance be collected for persons of all ages. It relates in particular to the population of official school age, which ranges from 5 to 29 years old in general but varies from country to country depending on the national education structure. In cases where data collection is to be extended to cover attendance in pre-primary education and/or other systematic educational and training programmes organized for adults in productive and service enterprises, community based organizations and other non educational institutions, the age range may be adjusted as appropriate

42. As it is shown in Table 5 countries asked the question on school attendance for different population groups. However, almost half of the countries applied the age limit suggested in the Recommendations

<sup>&</sup>lt;sup>56</sup> Respondents are asked about the type of the vocational training/updating course attended.

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

Age limit	Countries		
No age limit, questions asked to	Azerbaijan, Croatia, Hungary, Italy <sup>57</sup> ,		
everybody	Liechtenstein, Portugal, Serbia and Montenegro,		
	Slovenia, Switzerland, Tajikistan, The FYR of		
	Macedonia, United States		
3 and over	Estonia		
5 and over	Lithuania		
6 and over	Georgia, Greece, Kazakhstan, Kyrgyzstan, Russian		
	Federation, Ukraine		
7 and over	Armenia		
13 and over	Poland		
11 and over	Romania		
15 and over	Canada, Ireland, Israel		
16 and over	Spain		
Less then 16	Monaco		
For pupils and university students	Austria		
For pupils and students	Luxembourg		
For persons aged 6-60	Belarus		
To be completed by everyone who	Belgium		
takes classes or follows a vocational			
training, irrespective of whether			
he/she is working			

#### 5. LITERACY

### 43. The ECE Recommendations define this topic as follows:

Literacy' is defined as the ability both to read and to write. If this topic is included in the census, the information collected should be designed to distinguish persons who are literate from those who are <u>illiterate</u>. A person who can, with understanding, both read and write a short, simple statement on his everyday life is <u>literate</u>. A person who cannot, with understanding, both read and write a short, simple statement on his everyday life is illiterate

44. 24 countries (Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Croatia, Cyprus, Estonia, Georgia, Greece, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malta, Portugal, Russian Federation, Serbia and Montenegro, Spain, Tajikistan, The FYR of Macedonia, Turkey, Ukraine) included some measurement of literacy in their 2000 round census questionnaire using different methods. Some countries included a specific question on literacy, as recommended in the World Recommendations, asking the ability to read and write a short sentence while other countries assessed literacy through items included in the question related to educational attainment. More specifically:

<sup>&</sup>lt;sup>57</sup> This refers to the question on the attendance of vocational training/ updating courses. The question on the enrolment of respondent in school is for persons aged 6 and above.

- 11 countries (Albania, Armenia, Croatia, Cyprus, Kazakhstan<sup>58</sup>, Malta, Portugal, Russian Federation, Serbia and Montenegro, The FYR of Macedonia, Turkey) used a specific question on literacy
  - ♦ 6 countries (Albania, Cyprus, Kazakhstan, Malta, Portugal, Russian Federation) asked specifically about *the ability both to read and to write* in the questionnaires
  - ◆ 5 countries (Armenia, Croatia, Serbia and Montenegro, The FYR of Macedonia, Turkey) used only the categories *literate/illiterate*
- 13 countries (Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Greece, Italy, Kyrgyzstan, Latvia, Lithuania, Spain, Tajikistan, Ukraine) recorded data on literacy inside the question of educational attainment (see Annex 6).

### 5.1 Age limit

45. With regards to whom the question on literacy should be addressed, the ECE Recommendations suggest the following:

It is suggested that data on literacy be collected for all persons 10 years of age and over. In order to permit international comparisons of data on literacy, however, any tabulations of literacy not cross-classified by detailed age should at least distinguish between persons under 15 years of age and those 15 years of age and over

46. As shown in Table 6 countries adopted different age limits to collect data on literacy. Only 4 countries followed the suggested threshold of 10 years.

Table 6. Age	limit applied	l in countries	to collect	information	on literacy

Age limit	Countries	
No age limit, questions asked to	Azerbaijan, Bulgaria, Croatia, Portugal, Spain,	
everybody	Tajikistan	
6 and over	Albania, Georgia, Italy, Kazakhstan, Kyrgyzstan,	
	Turkey, Ukraine	
and over Armenia, Latvia		
10 and over Estonia, Lithuania, Malta, The FYR of Macedon		
15 and over	Belarus, Cyprus	

# Implications for the Revision of the ECE Recommendations

As suggested in the World Recommendations literacy should be assessed "irrespective of school attendance or highest grade or level completed". In the ECE region there is still a consistent number of countries that did not separate these three concepts. Would it be relevant to stress the need to separate these concepts in the Recommendations for the 2010 round? Being ECE a region with a relatively high levels of literacy, should the concept of literacy be revised and make it more relevant for the region? 18 countries are planning to introduce this topic in the 2010 census round. Should the possibility to introduce the concept of functional literacy in the census be explored for our region?

<sup>&</sup>lt;sup>58</sup> "For those with no primary education, indicate if can read and write" is a sub-question of the question on Educational attainment.

# Annex 1 Countries that included questions on the highest level of education completed

**Belgium**: "Tick the highest level of education that you have successfully completed";

**Croatia, Czech Republic**: "Highest level of completed education";

**Cyprus**: "What is the highest level of education attained?";

- Estonia: "What is your highest level of vocational or professional education completed?"; "Education attained in a school of general education?";

**Georgia**: "Education level" defined as "the highest level of the education obtained";

**Greece**: "Education (write the highest level of studies completed by the respondent)";

**Ireland**: "What is the highest level of education (full-time or part-time) which you have completed to date?";

**Lithuania, Slovakia**: "Educational attainment" defined as the "highest educational attainment"; **Luxembourg**: "What is the highest level of studies you successfully completed?";

**Poland**: "What is your education level? (Give the highest level of education completed in the educational system)";

**Romania**: "Educational attainment: name and type of institution the person has graduated from";

Russian Federation: "Your education" defined as "The highest educational attainment";

**Serbia and Montenegro**: "The highest completed education";

**Slovenia**: "What is the highest recognised education you have achieved?";

**Spain**: "Estudios de mayor nivel que ha completado";

The FYR of Macedonia: "The highest completed school"; Turkey. "What is the last school you have completed?",

#### Annex 2

# Countries that included an item for persons who did not complete primary level

**Belarus**: "Unfinished general<sup>59</sup>";

Bulgaria, Cyprus, Lithuania, Malta: Primary level not completed;

Czech Republic: "Without education", "Incomplete elementary education"; Estonia: "No primary education, literate", "No primary education, illiterate"

Georgia: "Has no primary education, but can read and write" 63

**Greece**: "Has left primary school, but knows how to read and write";

**Ireland**: "Primary education", **Latvia**: "Less than 4 grades";

**Poland**: "Primary not completed and no school education";

**Serbia and Montenegro**: "1-3 grade of primary school", "4 grade of primary school", "5-7 grade of primary school";

**Slovakia**: "Elementary<sup>65</sup>";

**Slovenia**: "Incomplete basic education: 1-3 grades of primary school; 4-7 grades of primary school; unfinished primary school and work training";

**Spain**: "Can read and write, but less than 5 years of school"; "5 years of school, but not completed";

**The FYR of Macedonia**: "1-4 grades of primary school"; "5-7 grades of primary school";

<sup>&</sup>lt;sup>59</sup> The classification for Educational attainment is the following:

Higher professional
 Average professional

<sup>3.</sup> Primary professional4. General average

<sup>5.</sup> Unfinished general6. Primary general

<sup>7.</sup> Illiterate

<sup>&</sup>lt;sup>60</sup> To be filled in by persons who have not completed the first grade of elementary education

<sup>&</sup>lt;sup>61</sup> It is recorded for a person who has not completed the level corresponding to primary education but is literate.

<sup>&</sup>lt;sup>62</sup> It is recorded for a person who has not completed the level corresponding to primary education but is illiterate.

<sup>&</sup>lt;sup>63</sup> It is a note for a person who completed just 1-2 classes or completed 3 classes until 1971/1972 or earlier, or did not finish 13-3 or 4 classes in 1989/1990 academic year later, or did not go to school at all, but may read and write.

<sup>&</sup>lt;sup>64</sup> A person who attended primary level only should select Primary education.

To be filled by persons with incomplete elementary education, i. e. persons who finished the compulsory schooling without completing all grades and they are older than 16.

# Annex 3 Countries that included an item for persons who did not complete the secondary level

**Azerbaijan, Tajikistan:** *Incomplete secondary education;* 

**Estonia:** "Basic education (uncompleted secondary education)";

**Malta**: "Secondary level not completed (general)"; "Secondary level not completed (vocational)";

**Poland**: "Secondary (vocational without certificate)"; "Secondary (general without certificate)";

**Georgia, Russian Federation**: "Basic general (incomplete secondary)";

**Slovakia**: "Apprentice (without leaving exam); Vocational (without leaving exam)";

**The FYR of Macedonia**: "Secondary school - 2 years"; "Secondary school - 3 years"; "Secondary school - 4 years":

"Secondary school - 4 years"; United States: 7<sup>th</sup> grade, 8<sup>th</sup> grade, 9<sup>th</sup> grade, 10<sup>th</sup> grade, 11<sup>th</sup> grade, 12th grade NO DIPLOMA";

# Annex 4 Countries that included an item for persons who did not complete the tertiary level

Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan: Unfinished higher education;

Malta: "Tertiary level not completed"; "Post-graduate level not completed";

**Russian Federation:** "Incomplete higher professional (unfinished higher)";

**Ukraine:** "Uncompleted high education";

United States: "Some college credit, but less than 1 year"; "1 or more years of college, no degree";

# Annex 5 Countries that identified people with no formal schooling

**Armenia**: "No elementary";

**Azerbaijan:** "Without education, but can write and read";

**Canada:** "Never attended school or attended kindergarten only"<sup>66</sup>:

Croatia, Malta: "No schooling"; **Cyprus**: "Never attended school";

Czech Republic<sup>67</sup>, Serbia and Montenegro, Slovenia: Without education;

**Estonia**: "No primary education, literate" <sup>68</sup>; "No primary education, illiterate";

**Georgia**<sup>70</sup>, **Tajikistan**: Without primary education, but can read and write;

**Ireland, Latvia**: "No formal education";

**Kyrgyzstan**: "Without elementary general education";

Liechtenstein, Switzerland: "None" 71; **Lithuania**: "Literate (no formal schooling)";

**Poland**: "Primary not completed and no school education"

Slovakia: "Without educational attainment"; The FYR of Macedonia: "Without school"; **Ukraine**: "Do not have primary education";

<sup>&</sup>lt;sup>66</sup> It is a category of the classification by highest level attended (completed or not).

This category has also "To be filled in by persons who have not completed the first grade of elementary

education".

68 This category is also used to record people who have not completed the level corresponding to primary education, but are literate.

<sup>&</sup>lt;sup>69</sup> This category is also used to record people who have not completed the level corresponding to primary education, but are illiterate.

<sup>&</sup>lt;sup>70</sup> The category "Has no primary education, but can read and write" "Is a note for a person who completed just 1-2 classes or completed 3 classes until 1971/1972 or earlier, or did not finish 13-3 or 4 classes in 1989/1990 academic year later, or <u>did not go to school at all</u>, but may read and write".

The category is included in the classification by all levels of education/training completed.

# Annex 6 Countries that included the concept of literacy in the classification of educational attainment

E D U C A T I O N A L A T T A I N M E N T	Kyrgyzstan  1. Higher  2. Higher incomplete 3. Secondary specialized 4. Secondary general 5. Basic (compulsory general) 6. Elementary general 7. Without elementary general education 8. Illiterate	Italy 1. No educational degree, cannot read nor write 2. No educational degree, but can read and write 3. Primary school certificate 4. Lower secondary school certificate 5. Secondary school diploma (different courses to obtain it are specified) 6. Post graduate non-University Diploma 7. University diploma 8. Degree	Latvia 1. Higher 2. Secondary specialised 3. Secondary, 2nd stage 4. Secondary, 1st stage 5. Primary 6. Less than 4 grades 7. No formal education 8. Illiterate	Lithuania 1. Higher 2. College-type school 3. Technicum 4. Professional secondary 5. Secondary 6. Professional basic 7. Basic 8. Primary 9. Not finished primary 10. Literate 11. Illiterate
		Spain  1. No sabe leer o escribir  2. Sabe leer y escribir pero fue meno 5 anos a la escuela  3. Fue a la escuela 5 anos o mas pero sin completar EGB, ESO o Bachillerato Elemental  4. Bachiller Elemental, EGB o ESO completa (Graduado Escolar)  5. Bachiller superior, BUP, Bachiller LOGSE, COU, PREU  6. FPI, FP grado medio, Oficialia Industrial o equivalente  7. FPII, FP superior, Maestria industrial o equivalente  8. Diplomatura, Arquitectura o Ingenieria Tecnica; 3 cursos aprobados de Licenciatura, Ingenieria o Arquitectura  9. Arquitectura  9. Arquitectura, Ingenieria, Licenciatura o equivalente  10. Doctorado	Tajikistan 1. Illiterate 2. Without primary education, but can read and write 3. Primary education 4. Unfinished secondary education 5. Secondary education 6. Professional (technical education) 7. Special secondary education 8. Unfinished higher education 9. Higher 10. Candidate of science (post graduate) 11. Doctorate	Ukraine 1. Completed high education 2. Basic high education 3. Primary high education 4. Uncompleted high education 5. Completed secondary education 6. Basic secondary education 7. Primary education 8. Do not have primary education 9. Can't write