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**Reports, guidelines and recommendations prepared under the umbrella of the Conference:  
Population and housing censuses beyond 2020****Summary of comments from the consultation on the  
document *New frontiers for censuses beyond 2020*****Prepared by the Secretariat***Summary*

This document summarizes the comments by members of the Conference of European Statisticians (CES) on the document *New frontiers for censuses beyond 2020*. The Secretariat carried out an electronic consultation on the document in March–April 2020.

A total of 39 countries and 2 organizations replied to the request for comments. All responding countries and organizations considered the document ready for the approval of the Conference of European Statisticians, subject to incorporation of the comments made during this consultation. This note presents the substantive comments received, together with the replies of the UNECE Steering Group on population and housing censuses, including suggestions for amendments to the document to address the comments.

In view of the support received, the Conference of European Statisticians is invited to endorse the document *New frontiers for censuses beyond 2020*, subject to the amendments outlined in this document.



## I. Introduction

1. The document summarizes the comments by members of the Conference of European Statisticians (CES) on the document *New frontiers for censuses beyond 2020*. The Secretariat carried out an electronic consultation on the document in March–April 2020.
2. The Bureau of the Conference of European Statisticians (CES) reviewed the draft document in February 2020 and requested the Secretariat to send it to all CES members for electronic consultation.
3. The following 41 countries and international organizations replied to the consultation: Albania, Armenia, Australia, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, Croatia, Denmark, Finland, Germany, Greece, Hungary, Israel, Italy, Japan, Kazakhstan, Latvia, Lithuania, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, United Kingdom, Eurostat, and United Nations Statistics Division (UNSD).
4. The CES members were asked to provide general comments regarding the usefulness of the document and chapter-specific comments on each of the ten chapters. Substantive comments and Steering Group responses are summarized in the present note. Some countries provided minor editorial comments. These are not presented in this note but have been taken into account in the revision of the document. Comments on the specific situation in individual countries which have no direct reference to the content of the document are also not reflected in this note.

## II. General comments

5. All responding countries and organizations considered the document ready for approval by CES, subject to the amendments resulting from the comments provided in the consultation.
6. All responding countries and organizations also indicated that the document is useful in providing an analysis of the challenges and issues for the future of population and housing censuses after the 2020 round.
7. Many countries acknowledged the value of the document. For example:
  - (a) Australia: “It is particularly good to see that [the document] now caters more to the challenges facing countries without statistical person or dwelling registers”;
  - (b) Brazil: “All topics are relevant and really need to be discussed. The document presents a very good set of themes to be addressed... The text is clear and direct, and certainly will be very useful for the construction of the Principles and Recommendations for the next census round”;
  - (c) Finland: “The document gives a good and comprehensive view of the future challenges as well as future new opportunities to improve and develop census statistics and their production for the census round 2030”;
  - (d) Germany: “The document is very useful in addressing the challenges and issues for the post-2020 censuses”;
  - (e) Lithuania: “Very clear and informative... This document provides a good basis for timely preparation of the recommendations for the 2030 round of censuses”;
  - (f) Serbia: “Sincere compliments for extremely dedicated work on creating such a comprehensive document... Certainly, the guidelines contained in this document will make a significant contribution to the future census activities within the Statistical Office of the Republic of Serbia”;
  - (g) Ukraine: “Taking into account an increasing use of administrative data and registers, we believe that this document has the great practical significance to provide assistance while planning and conducting population and housing censuses.”

8. Brazil observed that countries with traditional censuses would benefit from guidance on the issues to resolve before proposing a change, such as ensuring a unique record number for the citizens.

9. Germany noted that the document could be more concrete as regards solutions suitable in different census systems, and that – when revisiting definitions – the main focus should be to provide definitions suitable for register-based censuses.

#### **Response by the Steering Group**

10. Guidance on how to make a transition to a non-traditional census method is already available in the UNECE Guidelines on the use of registers and administrative data for population and housing censuses (2018).

11. The document recognises the fact that different countries adopt different census systems, as described in chapter II. The new Recommendations will have to reflect this diversity also with regard to concepts and definitions, taking into account the growing number of countries that use registers and administrative sources.

### **III. Chapter-specific comments**

#### **A. Chapter I – Introduction**

12. Israel suggested adding references to the underlying working assumption of engaging new and adjusted statistical methodologies, and to the need to pay attention to the quality of census outputs.

13. Latvia expressed some reservations about the inclusion in the 2030 census round of topics such as secondary residence and pendulum migration.

14. New Zealand suggested referring to the role and challenges of coverage measurement to emphasise measurement of the quality of census results in the next revision of the census recommendations.

15. The Republic of Moldova mentioned the need to provide guidance in the next census recommendations on publicity campaign and communication with different type of users about changing the census methodology, and on how to convince the owners of administrative data sources to be more cooperative with the statistical offices.

16. Romania suggested that a new section could explain what information is lost when a fully register based census is conducted, and if this information is important for the census.

17. The United Kingdom suggested replacing “multi-mode” with “multi-source” in para. 5b, and “data collections” with “data collections and outputs” in para. 5d.

#### **Response by the Steering Group**

18. Concerning the relevance of possible new topics like the secondary residence or pendulum migration, the Steering Group noted that when the new Recommendations will be prepared, consideration will be given to the relevance of all topics.

19. The Steering Group noted that the CES Recommendations for the 2020 census round include a section on communication and publicity, and this will be revised taking into account the implications of changing census methodology. Concerning the cooperation with the owners of administrative data sources, guidance is provided in the UNECE *Guidelines on the use of registers and administrative data for population and housing censuses* (2018).

20. Regarding the information that can be lost when registers are used, the Steering Group noted that the issue can be considered under the existing point “Cover more extensively the challenges associated with the use of multiple sources in the production of census output”.

21. The Steering Group accepted the other suggestions and added new text on the quality of census outputs, the trade-offs in the various dimensions of quality, and the role and challenges of coverage measurement.

## **B. Chapter II – The situation in the United Nations Economic Commission for Europe region – summary of survey results**

22. Mexico noted that in para. 8 it is reported that 47 countries responded to the survey, but in table 1 information is presented only on 46 countries. Moreover, according to paragraphs 10–11, 26 countries declared possible changes in the methodology for the 2030 Census, while according to Table 1 this number is 22.

### **Response by the Steering Group**

23. Regarding the first comment, responses were received from 47 countries, but one questionnaire did not contain information for the substantive questions. The Steering Group propose to amend the text in para. 8, to indicate that 46 valid responses were received.

24. Concerning the second comment, the results mentioned derive from the responses to different questions, that in some cases were not consistent. These results seem to indicate that some countries are tentatively contemplating changes in the methodology, but they still consider more likely that the same method will be used in the 2020 and 2030 rounds.

## **C. Chapter III – Evolution of approaches to population censuses – a paradigm shift?**

25. Croatia noted the importance that, in register-based censuses, the main administrative source from which the information is derived be clearly defined for each census variable.

26. Norway noted that it is important to develop good methods for measuring coverage within the framework of register-based censuses.

27. With regard to the paradigm shift discussed in this chapter, Israel noted that this should also be reflected in the organization of the production and the required proficiencies. The United Kingdom suggested amending the 3rd sentence in para. 28 to read: “Statistical registers or combined administrative data sets are being developed...”

### **Responses by the Steering Group**

28. Concerning the methods for measuring coverage within the framework of register-based censuses, the Steering Group noted that this important issue is currently being discussed by the UNECE Task Force on Measuring the Quality of Administrative Sources for Use in Censuses.

29. The Steering Group accepted the other suggestions and added new text on the need for countries to define the main administrative source for each variable, and to reflect the paradigm shift in the organization of the census production.

## **D. Chapter IV – Population base – challenges with new methods based on administrative sources**

30. Israel made the following comments: regarding simultaneity (para. 30), some of the weaknesses mentioned may be overcome by a model-based approach including for example now-casting; concerning the place of residence (para. 31) it should be mentioned that the place of residence refers to global (country) and to local level (within a country); for pendulum migration (para. 38), there is a spill over effect on measuring migration flows, and the challenge will be the synchronization of (annual) census stock with population flows; finally, transnationality (para. 42) may also refer to potential migration, especially in cases of dual citizenship.

31. Mexico suggested analysing the methodologies adopted by the countries that have carried out a census based on administrative records, to establish the reference date, and review the advantages and disadvantages to be considered for the 2030 recommendations.

32. New Zealand suggested that para. 33 could mention the benefits as well as challenges of using combined sources.

33. The United Kingdom noted, with reference to para. 35, that in the UK a 30-day threshold is used for a second residence. Since lengths of time may vary between countries, it suggests that the phrase "a sufficiently long time" be replaced by "a period the length of which is determined by local or national needs". The UK also suggested that the term 'circular migration' be given as a synonym for 'pendulum migration', as most of their respondents use the former term.

#### **Responses by the Steering Group**

34. Regarding the review of advantages and disadvantages of methods based on administrative sources, the Steering Group noted that they are discussed in the UNECE *Guidelines on the Use of Registers and Administrative Data for Population and Housing Censuses* (2018).

35. The Steering Group noted that pendulum migration is considered as a particular kind of circular migration (as mentioned in footnote 2) and proposed to specify this at the beginning of the relevant section.

36. The Steering Group accepted all the other suggestions and added new text to the document accordingly.

### **E. Chapter V – Ensuring coverage and quality with new approaches**

37. Croatia supported that future Recommendations should have an increased emphasis on the measurement of the quality of census results with special focus on precision, under-coverage and over-coverage of population, that means, to ascertain how population coverage should be measured. Croatia also observed that due to the different approaches in data collection, coverage errors (over and under-coverage) may also occur between countries and not just within a country.

38. Germany suggested to clarify in paras. 46 and/or 50 that the use of multiple sources does not necessarily lead to over-coverage and that administrative signs of life can be very appropriate to correct for over-coverage found in a single administrative source.

39. Israel noted that under and over-coverage caused by linking different sources has to be referred to, independently of the quality of the record linkage. The quality of content is also in question, especially if several sources are used to augment a single characteristic for all individuals (like education, or profession/occupation).

40. Mexico observed that the recommendations should address the measurement of the quality of the register-based census results with greater emphasis.

41. Romania suggested that the next Recommendations should have a section on best practices to adapt administrative data sources as good sources for producing official statistics. The section should describe which are the characteristics of administrative sources that should be modified, added or improved to allow their use for producing statistics.

42. The United Kingdom suggested renaming the title of this section to 'Ensuring quality with new approaches: a focus on coverage', proposed some minor amendments to paras. 46 and 47.

#### **Responses by the Steering Group**

43. In order to address the issues raised by Croatia, Germany and Israel, the Steering Group will add text to paragraphs 51, 50, and 45–46 respectively.

44. The Steering Group noted that guidance on how to use administrative data for census purposes is available in the UNECE *Guidelines on the use of registers and administrative data for population and housing censuses* (2018). Moreover, the current UNECE Task Force on Measuring the Quality of Administrative Sources for Use in Censuses is also working on this subject, and on the measurement of the quality of the register-based census.

45. The Steering Group accepted the proposals by the United Kingdom and will amend the text accordingly.

46. The Steering Group accepted all the other suggestions (including the change of title of the chapter), and added new text as suggested, on under-coverage and over-coverage, the quality of content, and the analysis of administrative signs of life.

## **F. Chapter VI – The need to modernize geospatial statistics**

47. Israel observed that there is a need to emphasize the role of GIS as data integrator at the collection stage, especially when different data sources carrying different spatial entities are used. Anchoring each source to the geo-spatial infrastructure provides geo-spatial record linkage that is not possible otherwise.

### **Responses by the Steering Group**

48. The Steering Group added new text to para. 52, as suggested.

## **G. Chapter VII – Increased reliance on estimation models in the production of census outputs**

49. Israel suggested that, where information from sample sources or geo-spatial information is not detailed enough, then small area estimation could be used.

50. Mexico suggested considering the list of the variables that could be lost when using administrative records as data source for the 2030 census round, and assessing the capacity to produce estimates for small areas.

51. New Zealand noted that indigenous populations are another example of a group that may have different concepts for what constitutes a household.

### **Responses by the Steering Group**

52. Concerning the variables that could be lost when using administrative data source for the census, and the capacity to produce estimates for small areas, the Steering Group noted that these issues are being discussed by the UNECE Task Force on Measuring the Quality of Administrative Sources for Use in Censuses.

53. The Steering Group accepted all the other suggestions, and added new text as suggested, on the use of small area estimation, and the fact that the concept of household may also differ between different population groups within a country.

## **H. Chapter VIII – Use of big data for censuses**

54. Brazil commented that perhaps the use of big data for producing statistics in general (not specifically for censuses) should be discussed first, using data in aggregated form, and not linking them with other personal information. Brazil also noted that there are many challenges involving the use of these data, and that for future census recommendations it is very important to consider with all due care the issues listed at the end of the chapter.

55. Croatia noted that there is big potential for big data in Croatia (mobile operators, electricity suppliers, water suppliers, etc.), but there is no legal base yet for using such data for statistical purposes.

56. Israel observed that using big data and other data sources requires the development of processing methods by professionals, and that there is an increasing number of partnerships between NSOs and academia and the private sector.

57. New Zealand noted the need for an appropriate legislative environment (like Croatia) and for public acceptability of the use of big data, and suggested highlighting these challenges.

### **Responses by the Steering Group**

58. The Steering Group noted that the use of big data in general is expected to be limited in the 2020 census round due to the challenges mentioned above, but in the long term it can

be considered that these challenges could be overcome, perhaps making possible a more extensive use of big data.

59. Concerning the other comments, the Steering Group added new text on the need for legal base and public acceptability, the development of processing methods, and the partnerships with the academia and the private industry.

## **I. Chapter IX – Ethics, privacy and public acceptability**

60. Israel noted the importance of informing the public about the secondary use of data, as this may not be covered by the informed consent when the data are collected. Moreover, the balance between privacy and usability of data is a very important point that should be considered. Israel also suggested changing the title of the chapter to “Privacy, public acceptability and ethics”.

61. The United Kingdom requested that para. 91, referring to the UK, be limited to just the first sentence, with the rest of the paragraph removed as it contains information no longer accurate, and the following text added: “...until certain conditions, such as data processing, data encryption, data architecture and data access, have been met by the NSO”.

### **Responses by the Steering Group**

62. The Steering Group accepted all the proposals and added new text on informing the public about the secondary use of data, and on the balance between privacy and usability of data.

## **J. Chapter X – Conclusions**

63. Mexico commented that it is necessary to address the conceptual scope and maximum disaggregation that can be obtained with the census based on administrative records and combined approach, taking in consideration the problems to match the information from various sources and the records that may remain without data.

### **Responses by the Steering Group**

64. The Steering Group noted that the rather technical issue mentioned in the comment was not in the scope of the present document, but it is currently being discussed by the UNECE Task Force on Measuring the Quality of Administrative Sources for Use in Censuses.

## **K. Additional comments**

65. Hungary noted that the document did not reflect on the latest worldwide events (i.e. the global Coronavirus pandemic), as clearly this was not in the scope of the assignment of the Steering Group. As a result of this global crisis, according to Hungary it could be assumed that IT technologies might develop even faster, respondents could possibly be more open to answer online, and the importance of good quality administrative registers could be even more apparent.

### **Responses by the Steering Group**

66. The Steering Group noted that reflecting on the recent worldwide events was not in the scope of the assignment (as it was recognized in the comment), and that it will take a long time to assess the long term effects of the Coronavirus crisis on statistical activities, and on censuses in particular.

#### **IV. Proposal to the Conference**

67. In consideration of the overall support to the document *New frontiers for censuses beyond 2020 expressed* by the CES members, the Conference is invited to endorse the document subject to the amendments described in the present document.

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