



Economic and Social Council

Distr.: General
2 July 2019
English
Original: Russian

Economic Commission for Europe

Conference of European Statisticians

Group of Experts on Population and Housing Censuses

Twenty-first Meeting

Geneva, 18–20 September 2019

Item 2 of the provisional agenda

Results of tests with regard to methodology, technology, participation and other aspects

Results of the 2018 pilot population census in Russia

Note by the Federal State Statistics Service of the Russian Federation*

Summary

A pilot population census in the Russian Federation was conducted in October 2018. The main purpose of the pilot census was to check the methodological, organizational and technological issues surrounding the national population census, including data collection and data processing technologies. The method of a separate population census via the Internet was tested for the first time in Russia. The information was then collected by enumerators. Enumerators used electronic questionnaires on tablet computers in large cities and paper questionnaire forms in the rest of the country. Outsourcing of data collection was tested in some pilot census areas. The consolidation of primary data from all sources has been identified as an important technological issue for the general population census. The experience of the pilot census was used to optimize the organizational and technological design of the 2020 national population census.

* Prepared by Galina Sheverdova.



I. Introduction

1. A pilot population census was conducted in Russia in October 2018. The main purpose of the pilot was to check the methodological, organizational and technological issues involving the collection of information on the population and to take stock of the 2020 national population census.
2. The following methods were used to collect population data:
 - Stage I:
 - From 1 to 10 October – independent filling in of the census forms by the population via the Internet through the Unified Portal of Public Services (e-government)
 - From 11 to 15 October – transmittal to enumerators of codes attesting to the population having filled in the census via the Internet
 - Stage II – from 16 to 31 October:
 - Interviews with people who have not provided information about themselves on the Internet during the visits to dwellings
 - Interviews with persons in census stations
 - Filling in electronic or paper census forms for persons who have not provided information about themselves at their place of residence or stay on the basis of administrative data on the last day of the pilot population census

II. Internet census

3. The first stage of the pilot census, held from 1 to 10 October, made it possible to test a new means of involving the public in the census: independent completion of the census forms on the public services portal. The service was available to all residents of the country who had a validated account on the portal.
4. Awareness-raising activities in the preparation and conduct of the 2018 pilot census were aimed at involving all categories of the population in the pilot census and conducting the census via the Internet.
5. In the regions covered by the pilot census, where an active advertising campaign was conducted, the share of participants in the Internet census was 2.8% of the population. The share of participants in the Internet census in the Russian Federation as a whole was 0.8%.
6. The majority of users who completed the feedback questionnaire after the Internet census was conducted rated the quality of the service as good, excellent or satisfactory (95%). The time spent on the Internet census was considered acceptable by 90% of the respondents. More than 90% of them positively assessed the interface of the service, the clarity of the wording of the questions and the availability of information on the service.
7. According to the feedback questionnaires, 4% of respondents did not list all members of their household online. Furthermore, the practice of the pilot census showed that the enumerators found on their visits that some residents had been listed twice when one member of the family completed the census at work and another at home or when people who had not waited to receive a code attesting to their having taken the census listed them again. Thus, the results of the pilot census confirmed the need for additional study of the issue of enumerators' visiting all the premises in the enumeration area.
8. The pilot census showed that respondents who had learned from the enumerators about the possibility of taking the census online after 16 October would like to do so if the Internet census service remained available for a longer period of time.

III. Traditional data collection

9. The pilot census enumerators noted that electronic census forms on tablet computers are preferable to machine-readable paper census forms. Tablet computers feature automatic navigation for questions on the census, real-time validation of data and logic checks, a lack of strict requirements to enter machine-readable symbols and marks in the forms, automatic integration of documents in the enumeration district and the convenience of being portable during travels between addresses in the enumeration district. However, paper questionnaires are needed as a backup data collection tool in exceptional cases.

10. The pilot population census also confirmed the need for census stations as a place where population data can be collected. More than 5% of the respondents to the pilot census used this census method. At the same time, respondents expressed their desire to use the services of census stations not only at the second stage of collection of population data, but also during the Internet census.

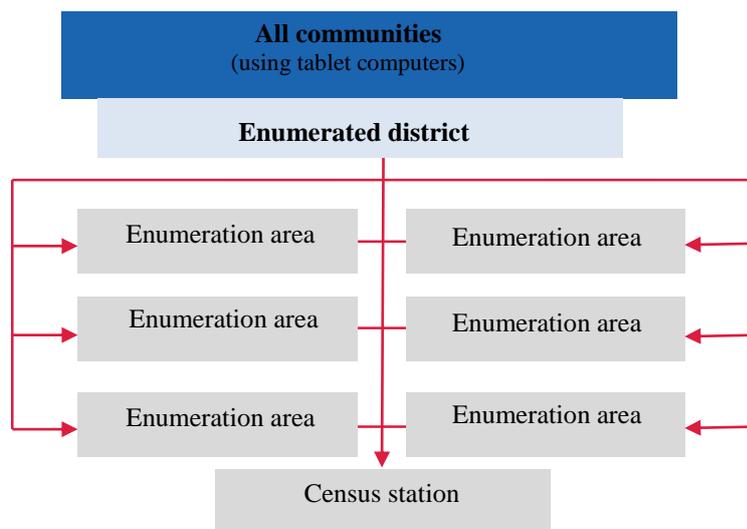
11. It was decided to make the following arrangements during the 2020 national population census:

- From 1 to 25 October 2020 – Internet census, separate taking of the census in electronic form by the population via the Internet.
- From 4 to 27 October 2020 – collection of information about the population that did not provide information about themselves on the Internet. The enumerators will fill in the electronic census forms for 100% of visits to dwellings and other places where the persons liable to the population census live (or stay) and at census stations.
- From 28 to 31 October 2020 – completion of the census for persons who have failed to provide information about themselves at their place of residence or stay or who were absent in the period during which the 2020 national population census was conducted, on the basis of administrative data. During the same period, the population census is to be checked to ensure that it is complete and accurate, with 10% of households subject to follow-up visits.

12. Extending the period for the collection of data on the population by the enumerators will make it possible to increase their average workload while reducing the number of staff involved. The enumerators are to be engaged from 1 to 31 October 2020, combining the Internet census with the census data collected by the enumerators on their visits to dwellings and at census stations. The enumerators' visits to dwellings in the enumeration areas during the Internet census will make it possible for the enumerators to provide the population with additional information about the opportunities for taking the census online and giving clear explanations of this option.

13. In view of the longer period for collecting data on the population by the enumerators compared with the pilot population census and taking into account the possibility of covering more of the population with the Internet census by extending the period of the census, it is proposed to establish the average assignment of the enumerator in an enumeration area to 550 respondents. Arrangements are to be made for a census station for every six enumeration areas (with differences within the constituent entities of the Russian Federation depending on the number of communities and population density) and for an enumerated district, by omitting instructor stations.

Figure I
Optimized structure of census areas



14. Involving business entities and large banks with branches in all the country's regions and an extensive client network and mobile operators in providing the population with access to public electronic services will expand the coverage of the population taking the census via the Internet.

15. Making such arrangements for the collection of data on the population during the 2020 national census is possible only if mobile devices with electronic census forms are used in enumeration areas and at census stations. The transmittal of the codes to the enumerators confirming that respondents have taken the census via the Internet should be done on a daily basis by means of remote access to the tablet computers of the enumerators at the federal level.

16. The traditional technology for collecting data on machine-readable paper census forms is to be maintained as a backup in exceptional circumstances in the event of equipment failures, the lack of necessary infrastructure or organizational limitations on the use of tablet computers.

IV. Population census infrastructure

17. Russia does not have a single federal cartographic material data resource that fully serves the purpose of a population census. The technology of the 2020 national population census includes the use of existing digital maps and improvements to them by enumerators on the ground in 2019. The work of the enumerators will lay the basis for the digital map to be used for the 2020 national population census.

18. The experience of the 2018 pilot population census has shown that the form of training of staff for the 2020 national population census is to depend on the category of the staff being trained: classroom instruction with the help of a lecturer; classroom instruction using a training video; distance learning via a video link; and self-paced learning using interactive materials. Training should include practical exercises and test questions. Self-study materials can improve the quality of staff training as a refresher course or first-time course for staff who for various reasons could not attend classroom instruction.

19. Modern training methods for work with respondents are to be used in training staff for the 2020 national population census, with a focus on overcoming any negative attitudes among the population to the census.

20. The awareness-raising efforts should be based on the notion that the 2020 national population census is among the most important statistical surveys of the decade, whose results will determine social and demographic government policy for many years to come;

they should also impress upon the people how important the results of the census are for every resident and thus remove any doubt among the respondents about their participation in it and encourage them to provide information about themselves on the government service portal.

21. Awareness-raising needs to involve all available traditional media channels – print media, radio and television, advertising and digital media – in a manner that is tailored to the target audiences, while identifying their media preferences and their attitudes to government initiatives and projects.

22. Based on the results of testing the means of automating the collection and processing of data from the 2018 pilot population census, the following were regarded as the best possible arrangements for automating the processes:

(a) Field level: process of preparing and conducting the census using tablet computers and monitoring data collection using tablet computers;

(b) District level: process of preparing and conducting the census, monitoring the preparations for conducting the census and collecting data using tablet computers and laptops;

(c) Regional level: all of the foregoing processes;

(d) Federal level – processes of planning, monitoring, automated processing at the federal level and summing up of the results, including at the Internet level, for data collection and public awareness-raising.

23. During the 2020 national population census it is proposed to apply the tried-and-tested solution for remote management of mobile devices in order to improve the security and confidentiality of collected information, protect the device from misuse, monitor the work of the enumerators and allow for software updates to be centrally installed on the mobile devices of the enumerators and codes attesting to the population's participation in the Internet census to be updated online. This solution should be applied during the period of preparation and conduct of the census at the field, district, regional and federal levels with a single centralized entry point. Furthermore, all devices must be monitored at each subordinate level and mobile devices must be centrally managed.

24. The total number of tablet computers needed to conduct the 2020 national population census is 360,000. It is proposed, after the 2020 national population census is carried out, to leave some 60,000 tablet computers to the State Statistical Service (Rosstat) for its current federal statistical surveys and 300,000 to interested executive authorities in the constituent entities of the Russian Federation, whose readiness to take the computers from Rosstat after the population census free of charge has been confirmed by the replies to queries of the regional agencies of Rosstat.

25. There are plans to provide for the georeferencing of data collected by means of tablet computers through the use of various cartographic material and marking the address part on the map before the beginning of the enumeration and by means of geolocation on mobile devices during the conduct of the survey.

V. Conclusion

26. The preliminary results of the 2020 national population census on the size of the population (broken down by urban and rural populations) in the Russian Federation, federal districts and constituent entities of the Russian Federation will be presented in December 2020.

27. Over the 2021–2022 period, the full population census results will be published on spreadsheets with detailed characteristics of the population on all matters involving the census programme in the country as a whole by federal districts and constituent entities of the Russian Federation and by municipalities. The results of the population census are also to be published in an open data format.

28. The use of data georeferencing will also make it possible to obtain the results with increased accuracy for certain geographical areas without linking them to administrative or municipal divisions. This information will make it possible to integrate the results of the 2020 national population census with the existing data sets and will be of interest to both public and private entities.

29. There will be free access to a much sought-after anonymized base of microdata providing a scheme for user requests for data on the 2020 national population census and comparisons of the data with the results of previous national population censuses.
