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**Economic Commission for Europe****Conference of European Statisticians****Seventy-second plenary session**

Geneva, 20 and 21 June 2024

Item 7 (a) of the provisional agenda

**Coordination of international statistical work in the  
United Nations Economic Commission for Europe region:  
Outcomes of the recent in-depth reviews carried out by  
the Bureau of the Conference of European Statisticians****Outcome of the consultation on the in-depth review of use  
cases for supplementary population bases****Prepared by the Secretariat***Summary*

This document presents the outcome of a consultation carried out in April and May 2024 on the in depth review of use cases for supplementary population bases (ECE/CES/2024/4).

The in-depth review was carried out in October 2023 by the Bureau of the Conference of European Statisticians (CES), based on a paper (ECE/CES/2024/4) prepared by Poland, the United Kingdom of Great Britain and Northern Ireland and the United Nations Economic Commission for Europe (UNECE).

The Conference will be invited to endorse the outcome of the in-depth review on use cases for supplementary population bases.



## I. Introduction

1. Each year the Bureau of the Conference of European Statisticians (CES) reviews selected statistical areas in depth. The purpose of the reviews is to improve coordination of statistical activities in the region of the United Nations Economic Commission for Europe (UNECE), identify gaps or duplication of work, and address emerging issues. These reviews focus on strategic issues and highlight concerns of statistical offices of both conceptual and coordinating nature.
2. The Bureau carried out an in-depth review of use cases for supplementary population bases in October 2023 based on a paper by Poland, the United Kingdom of Great Britain and Northern Ireland and UNECE (document ECE/CES/2024/4).
3. The UNECE Secretariat conducted a consultation on this paper during April and May 2024 to inform all CES members about the in-depth review and to provide an opportunity to comment on its findings, as well as to provide additional examples which could be used to inform possible future work on this topic. In addition to seeking overall comments on the topic and the paper, the consultation was used as a means of gathering further material using the same set of questions that was used in the preparation of the initial in-depth review paper, asking about countries' practices, plans, user engagement etc. with respect to supplementary population bases. The consultation response form noted that countries which had already provided answers in the context of preparing the in-depth review in 2023 (Albania, Canada, Ireland, Mexico, New Zealand, Poland, the Russian Federation, the United Kingdom and Eurostat) need not complete the questionnaire, unless they had new material they wished to add; however, they were very welcome to provide overall comments.
4. The following 30 countries responded to the consultation (including those responding to say that they had no comments): Armenia, Austria, Belarus, Belgium, Bulgaria, Canada, Chile, Costa Rica, Croatia, Ecuador, Finland, France, Hungary, Ireland, Japan, Kazakhstan, Latvia, Lithuania, Mexico, the Netherlands, New Zealand, Poland, Portugal, Slovenia, Sweden, Switzerland, Türkiye, the United Kingdom of Great Britain and Northern Ireland, Ukraine, the United States of America.

## II. Outcome of the Conference of European Statisticians Bureau discussion in October 2023

5. The Bureau conducted an in-depth review of use cases for alternative population bases in October 2023 based on the paper referred above. The following comments were made during the Bureau's discussions:
  - (a) The paper was found excellent, including its exploration of the rationale for using usual residence as the main basis for population counts.
  - (b) The continued centrality of usual residence as the 'anchor' was emphasized, both conceptually and for the continuity of time series.
  - (c) The new set of CES census recommendations should reflect the suggested clarifications relating the meaning and use of supplementary or alternative population bases, and the distinction between alternative bases and alternative sources, provided in the paper.
  - (d) There is a clear need for counts with alternative bases such as workday populations, including for analyses related to climate change and disaster response as well as for transport planning. For many purposes it may be more useful to know about movement and dynamics than to try to assign people to one place.
  - (e) The word 'alternative' may be erroneously interpreted as offering a competing count, suggesting that the usual residence count is not correct. It was recommended to consider using the word 'supplementary' instead, to emphasize that these are additional counts to be considered *as well* as the standard ones.
  - (f) The emphasis on user engagement was welcomed. The practical challenge will be to identify the most pertinent alternative/supplementary bases demanded by users across

a large number of countries, to make it worthwhile to undertake international work on their further development.

(g) The strong links to migration statistics were noted. People who move regularly, especially those who move across borders, may always fall below whatever arbitrary length-of-stay threshold is applied, and therefore not be counted anywhere even in a classical usual residence count.

(h) Any further work on this topic must engage closely with other international organizations as well as with CES work streams on related topics, such as hazardous events and disasters.

6. The following conclusions were reached by the Bureau:

(a) As an interim step, the Bureau requested the Secretariat to ensure that the current CES Census Task Forces on population concepts and definitions, and on migration and mobility, consider the in-depth review paper in their deliberations and add, expand or revise any corresponding definitions and explanations accordingly. In particular, the *CES Recommendations for the 2030 round of population and housing censuses* should clarify terms including ‘alternative (or supplementary) population base’ and should emphasize that this is different from questions related to alternative data sources.

(b) Issues about supplementary population bases will be explored further in the CES work related to population and migration statistics.

### III. Further information and examples provided in the electronic consultation

7. The consultation consisted of a section for general comments on the in-depth review, and five specific questions designed to gather further information and examples. This section examines the specific questions.

#### A. Has your office already produced population counts on other bases than usual residence?

8. Nineteen countries answered no, they do not produce other counts, or did not answer this question.

9. Nine countries (**Armenia, Austria, France, Hungary, Ireland, Mexico, Slovenia, Switzerland and the United Kingdom**) provided information on counts other than usual residence that have been produced by their offices. Two countries (**Ecuador and Ukraine**) described uses of alternative sources for population counts.

10. Among those stating that they have produced alternative counts, a common answer was that they produce de facto counts, ‘total population’ or permanent resident population, in addition to usual residence (**Armenia, France, Ireland, Slovenia**). **Switzerland** produces annual counts of the non-permanent resident population, using data from the population register.

11. **Austria** produces daytime population counts based on a grid covering the whole national territory, using data from the register-based census as well as the annual results of Register-based Labour Market Statistics for the intercensal period 2012–2020.

12. **Hungary** and **Mexico** both reported that they produce working and studying population counts based on existing census data.

13. **Ecuador** provided information on an experimental pilot conducted in 2015 in the Galápagos Province, designed to evaluate new methods of producing population statistics using register data (from civil register, vital statistics, a register of residents, municipal cadastre, among others).

14. **Ukraine** provided information on alternative data sources used to make tentative population estimates of the population in the absence of the full administrative data usually

used for population counts, in light of the country's current situation. These data sources include information from mobile telephone operators, a sample survey of mobile telephone usage.

**B. Does your office have plans to develop population counts using supplementary (alternative) bases?**

15. Twenty-four countries answered no, they have no plans to develop population counts using other bases than usual residence, or did not answer this question.

16. Two countries (**France** and **Mexico**) provided information on their plans in this regard.

17. Four countries (**Armenia, Ireland, Ukraine** and **the United Kingdom**) shared additional information, including on planned use of alternative data sources and projects to develop new methods for producing population statistics.

18. **France** is working on using data from mobile network operators and payment card transaction data to study daytime populations and mobility. These investigations have been prompted by needs expressed by local authorities which need to plan appropriate service provision such as care, waste treatment and rescue services.

19. **Mexico** is developing ways to combine administrative sources to develop statistics on the formal workforce, as a new population base. Furthermore, existing data from the census permit the production of several different population counts: workplace, schooling, migrant population, population with Mexican nationality.

**C. Has your office consulted, or does it plan to consult on user/stakeholder demand for supplementary (alternative) population counts?**

20. Twenty-three countries answered no, they have not conducted and/or do not plan to conduct stakeholder consultation to determine demand for supplementary population counts, or did not answer this question.

21. Two countries (**Croatia** and **Latvia**) reported an absence of any particular demand in this regard, reporting that they had not received any specific requests in the context of their usual stakeholder consultation mechanisms.

22. **Ireland** noted that they are currently participating in the CES Task Force on [new forms of international migration](#). This task force may cover some aspects related to identifying policy demand and user needs.

23. Three countries (**Ecuador, France** and **the United Kingdom**) reported that yes, they have conducted or plan to conduct such consultations.

24. **Ecuador** includes consultations within its broader programme of consultation on user needs.

25. National Council for Statistical Information of **France** organizes open presentations to gather user feedback, and has found that the topic of daytime population has been highlighted as an important direction for official statistics. The next meeting of this council includes an agenda item on the topic.

26. The **United Kingdom** reiterated the information already included in the in-depth review paper, namely that they continue to proactively gather information on user needs regarding population and migration statistics in general.

**D. Is any other statistics producer (whether official, academic, or private sector) producing population counts based on supplementary (alternative) bases in your country?**

27. Twenty-five countries answered either that there are no other statistics producers producing population counts based on other bases, or that they are not aware of any, or did not answer this question.

28. **Croatia** observed that the academic community makes estimates and projections using census data and demographic analysis, but did not report any knowledge of production of supplementary counts.

29. Four countries (**Finland, France, Switzerland and the United Kingdom**) reported on other counts being produced by other statistics producers.

30. In **Finland**, a cooperation project with Nordic countries and the Nordic Council of Ministers has produced information on cross-border workers. These are separate statistics and not combined into a part of the official statistics.

31. In **France**, the national statistical office works in partnership with universities to produce supplementary counts. Further information was provided in the form of reports shared with the Secretariat.

32. In **Switzerland**, the State Secretariat for Migration (SEM) produces the Foreign Population and Asylum Statistics. The definitions used by this body differ from those used by the Federal Statistics Office (FSO), due to different legal bases for the counts. This results in the use of different population bases (the reference population considered by FSO is larger and contains more categories of foreign nationals than that used by SEM).

33. The **United Kingdom** has an Administrative Data Research Partnership which enables academic researchers to access linked government data.

**E. Are you aware of any research or policy decisions that have been informed by supplementary population counts?**

34. Twenty-seven countries reported that they do not know of any research or policy decisions having been informed by supplementary population counts, or did not answer this question.

35. Two countries (**France and Mexico**) reported examples. The example given by France pertained to the use of alternative data sources, while the example given by Mexico related to the use of population counts based on an alternative base.

36. **Finland** noted the availability of the Nordic Cross-border Statistics, although no specific policy decisions were mentioned which had been made based on these.

37. **France** shared research conducted during the Covid-19 crisis in which alternative data sources (mobile network operators) were used to estimate the effects of the crisis on population movements and the economic outlook.

38. **Mexico** reported that there are known to be research and policy decisions based on data about the Mexican population living abroad. Several university studies have been conducted using on data provided by the official registration service for Mexicans living abroad.

**IV. General comments received in the electronic consultation**

39. A wide range of positive comments was received praising the work done for the review. In particular, several comments welcomed the focus on matching statistical innovation with identified user needs (**Austria, Hungary, Mexico, Portugal, Sweden**). Others (**Poland, the United Kingdom**) stated that they would welcome further international collaboration in this area and would be willing to contribute to such activity.

40. **France** offered summary information on two distinct examples of the use of supplementary population counts: the population owning second homes, based on fiscal data from the tax authority; and population movements during the various phases of national lockdown associated with the Covid-19 pandemic, using anonymized data from mobile network operators.
41. **Belarus** and **Bulgaria** provided details of the definitions of usual residence applied in those countries.
42. **Ireland** provided some clarifications relating to the bases used for population counts in Ireland described in the review paper.
43. **Ecuador** voiced support for the importance of promoting clarity in the differences between alternative sources of population data, and alternative (or supplementary) population bases, noting that the tendency to confuse these two things also exists in the Spanish language.
44. **Armenia, Austria, Chile, Ecuador, Mexico** and **Sweden** stated that international guidelines for supplementary population counts may be useful, although **Chile** observed that such guidelines would need to take into account the wide range in degrees of maturity of statistical systems and the variation in user demand across countries. Relatedly, **Croatia** noted that there are considerable conceptual, methodological and communication challenges in addition to a need for international consistency and comparability.
45. **Portugal** and **Sweden** noted the continued emphasis on harmonized usual residence counts among European Union countries, which may diminish any appetite for focusing on alternative or supplementary counts at present in these countries. Sweden added that in countries whose population statistics come from a population register, some groups are hard to reach.
46. Similarly, **Switzerland** observed that as countries increasingly adopt registers as the source of their population statistics, it will become more and more difficult to obtain supplementary counts using those register data. Data on things such as where people spend their daytime will have to come from other sources, especially 'live' sources such as mobile telephone data. The use of such sources will entail a closer collaboration between public and private sectors. **Switzerland** also noted that many alternative counts can be modelled using existing (usual residence-based) data, such as census or register data, without the need to introduce new population bases. This may be the case for daytime population, for example.
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