

# **UNECE Task Force on measuring the quality of administrative sources for use in censuses:**

## **Update**

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# Overview

- Objectives of the taskforce
- Timetable for the work
- A review of the relevant material
  - Existing use of administrative data in censuses
  - Frameworks and toolkits
- Key areas of consideration for the report
- Discussion and questions

# Objectives of the Task Force

- Develop guidance on the measurement of the quality of administrative sources for use in censuses
  - Drawing on existing material
    - ESS Vision 2020 ADMIN project (WP3 Quality, WP5 Frames)
    - Methodologies for an Integrated Use of Administrative Data in the Statistical Process (MIAD)
    - Contributions from the TF members: Austria, Canada, France, Ireland, Netherlands, Poland, Portugal, Spain, UK, US
  - Building on the UNECE guidelines on the use of registers and administrative data for population and housing statistics – *Data sources and their quality*
  - Consider wider relevance to UNECE countries
-  **A report covering good practice / guidelines**

# TF members

Austria

Canada

Estonia

France

Germany

Ireland

Israel

Italy

Montenegro

Netherlands

Poland

Portugal

Spain

Turkey

United Kingdom (Chair)

United States of America

Eurostat

UNFPA

UNECE (Secretariat)

# Timetable

Task	When
Review of existing material	April to August 2019
Agree outline of report and key contributors by section / chapter	September to October 2019
Drafting of the report	October 2019 to June 2020
Presentation of draft to the UNECE-Eurostat Expert Meeting on Censuses	September 2020
Revise draft and submit to the CES Bureau for review	October to December 2020
Review of the report by the CES Bureau	February 2021
Consultation among the CES members	February to March 2021
Final Draft submitted to CES plenary session	April 2021

# Review of existing material

- Use of administrative data by different countries
- The frameworks for assessing and measuring the quality of administrative sources



- Key areas of consideration for the report

# The use of administrative data in censuses

Usage varies across countries from:

- supplementing / enhancing a **Traditional Census**
  - a **Combined Census Approach** (registers and collection)
  - to a **Register-based Census**.
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- The report will aim to reflect the **different types of sources** used for these purposes and the key quality considerations.
  - It will draw on experiences from across different countries.

# Some specific examples

- Fieldwork practices – response targeting and follow-up
- To partially supplement, enhance and / or quality assure the traditional census outputs
- The construction of statistical registers for the census
  - Population register
  - Address/dwelling register
  - Business register
  - Activity register (e.g. employment, study, ...)
- Providing census variables directly

# Quality frameworks

There are multiple frameworks for assessing and measuring quality, along with “toolkits”. The frameworks cover the quality dimensions, including:

- Relevance
  - Accuracy and Reliability
  - Timeliness and Punctuality
  - Coherence and Comparability
  - Accessibility
  - Interpretability
  - Institutional Environment
- The report will draw on these frameworks and the toolkits, with a focus on the relevance to the different usages of admin data for censuses

# Specific areas covered by the frameworks:

## *The source data*

- Relevance of the source against intended census use (population units, variables, definitions, coverage).
- The administration authority's collection, processing and quality assurance of the data.
- Confidence that the administration authority will deliver.
- Deviations from Census reference dates and timeliness.
- Coherence / comparability across time and space.
- Metadata (definitions, variables, descriptions of collection / processing, ...).
- Risks of future changes to the data or supply (affecting timeliness, coverage, accuracy, etc) and the management of this.

# Specific areas covered by the frameworks:

*Interrogation and analysis of the source data to assess and measure quality:*

- Readability and metadata compliance
- Missing values (including for primary keys and geographic identifiers)
- Validity (e.g. errors, inconsistencies, range checks)
- Coverage (under and over – including duplicates)
- Outliers
- **Checks against other sources** – including through linkage
- Analysis by specific domains and groups of interest (e.g. migrants, ethnicity)
- Checks for consistency across time
- Linkability

# Key areas of consideration for the report

- Quality measurement around data linkage.
  - including where a common primary key does not exist, or where identifiers have been hashed / encrypted by the administration authority.
- Comparisons and assessment of integrated sources.
  - Including decisions on the best source or combination of sources.
  - Assessing the quality trade-offs when using multiple sources.
- Initial assessment versus ongoing monitoring of quality.
  - Including how quality is assessed in the absence of a traditional census, as countries move to a register-based census.
- Actions to address areas of quality concern (and whether this is in scope).
  - Imputation.
  - Dealing with conceptual difference between administrative data variables and census (e.g. economic status, units (addresses/dwellings versus households).
  - Dealing with coverage issues and time-reference differences.

# Discussion and questions

*Measuring the quality of administrative source for censuses – guidelines and best practice.*

The report must be relevant across the different countries.

- Are there key areas or items you would like to see covered that haven't been mentioned?
- Are there areas mentioned you think not relevant / out of scope?
- Is there anything you wish to share that might be relevant to the task force?

# Contacts

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# References

**ESS Vision 2020 ADMIN project (WP3 Quality, WP5 Frames):**

[https://ec.europa.eu/eurostat/cros/content/ess-vision-2020-admin-administrative-data-sources\\_en](https://ec.europa.eu/eurostat/cros/content/ess-vision-2020-admin-administrative-data-sources_en)

**Methodologies for an Integrated Use of Administrative Data in the Statistical Process (MIAD):**

[https://ec.europa.eu/eurostat/cros/content/miad-methodologies-integrated-use-administrative-data-statistical-process\\_en](https://ec.europa.eu/eurostat/cros/content/miad-methodologies-integrated-use-administrative-data-statistical-process_en)

**UNECE guidelines on the use of registers and administrative data for population and housing statistics**

<https://www.unece.org/fileadmin/DAM/stats/publications/2018/ECECESSTAT20184.pdf>