Scotland's Census 2022

External Methodology Assurance Panels

Summary Note: Panel 10

Tuesday 27 April 2021

Contents

PSR010: Summary Report of the findings of EMAP Session 10 – Tuesday 27 April 2021

1. This paper summarises the main points of discussion during the external methodology assurance panel, including overall conclusion and advisory recommendations.

2. Where appropriate, the panel's reasons for any advice that proposed methodology is not fit for purpose will be stated.

3. This paper will be published on the Scotland's Census website, following approval by the panel.

4. The methodology papers reviewed by this panel were: -

PMP024: Assurance of Processes

PMP025: Validation of Population Estimates

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PMP024: Assurance of Processes

Main points of discussion

The purpose of the paper is to provide an overview of statistical quality assurance which aims to assess and measure the level of quality being delivered from the design and processing of Scotland's Census 2022 to the production and dissemination of the outputs. Assurance of Processes is part of statistical quality assurance which focuses on designing and building secondary quality assurance checks at every step of the data processing journey. The main focus of Assurance of Processes is to ensure that each step within the data processing journey during Census live operations is run as it is meant to run according to the pre-determined methodologies.

1.1.   The panel was impressed with the structure of the paper and the condensed overview of the extensive methodologies used for Assurance of Processes. It was stated that the paper contains a lot of details and the individual sections harmonise well with each other. The panel felt that the paper is well written and its content is very clear.

1.2.   The panel provided feedback on the use of acronyms and suggested defining acronyms prior to citing them.

1.3.   It was suggested that the links to the published papers be introduced earlier in the paper.

1.4.   The panel suggested adding more detail on statistical aspects of the methodology.

1.5.   The panel found the diagrams in the paper very helpful.

1.6.   The panel was impressed that Assurance of Processes provides such a high level of independence, ensuring that each step of the data processing is run as it is meant to run. However, the panel wondered whether this level of independence is necessary and whether it may be more efficient to allow teams to complete their internal checks without involving the teams which are not responsible for running the underlying process. The panel stated that by doing so it should not compromise the independence element of Assurance of Processes and is likely to make the statistical quality assurance process more efficient. NRS reassured the panel that this level of independent quality assurance checks is only applied where relevant, and in some cases, a review of the internal checks is sufficient.

1.7.   The panel suggested revisiting Strengths and Limitations sections and tailoring the sections to the underlying processes.

1.8.   The panel suggested adding more detail on online and paper capture.

1.9. The panel suggested that some sections should be aligned in terms of writing style consistency.

1.10. The panel suggested adding more detail on Relationship Algorithm One in the Edit and Imputation section.

1.11. The panel agreed that it is both appropriate and efficient to allow statistical analysts who are already familiar with the underlying process to do quality assurance checks.

1.12. The panel suggested revisiting the paper and adding more definitions and if possible clarifying some terminology used.

1.13. The panel suggested adding more detail of the methods used by the Office for National Statistics (ONS) and Northern Ireland Statistics and Research Agency (NISRA).

1.14. The panel felt that the quality assurance checks were robust and appropriate.

1.15. The panel found the diagrams very useful. However, the panel suggested adding more detail to Ex-service Data Linking, Estimation, Adjustment and Derived Variables.

1.16. The panel suggested adding more detail to the Statistical Disclosure Control and Outputs section.

Conclusion

The panel agreed that Assurance of Processes methodology is sound. Inclusion of further detail was suggested around statistical aspects of the process, and around methods used by ONS and NISRA. The panel suggested further proof reading of the paper and avoiding the use of acronyms without introducing them first.

Panel Advice

	Tick ('✔') where appropriate
The Panel's advice is that the proposed methodology is fit for purpose.	✔
The Panel's advice is that the proposed methodology is not fit for purpose (reasons must be stated below).	
Reasons for advice (if to <u>not</u> proceed with proposed methodology):	

Chair: Katherine Keenan

Date: 27th April 2021

PMP025: Validation of Population Estimates

Main points of discussion

The purpose of the paper is to provide an overview of Validation of Population Estimates, which aims to provide a final validation to Scotland's Census 2022. The process aims to check that Scotland's Census 2022 is in line but not necessary identical to the existing data sources. The existing data sources might include administrative data, survey data and other published research data that might be available. NRS explained that this paper was still a work in progress.

2.1.   The panel felt that the paper was well structured and easy to read.

2.2.   The panel appreciated that the final methodology is still in the developmental stage. However, the panel felt that the paper would benefit from a clearer statement on the purpose of the validation and more details on the methodological procedure before the final publication of the paper.

2.3.   The panel suggested adding more details on the selection of the population groups for validation of estimates.

2.4.   The panel suggested adding more details on International Passenger Survey.

2.5.   It was suggested adding more details on the expected differences between Scotland's Census 2022 and the comparator data sources.

2.6.   The panel suggested reducing existing abstract and adding a Plain English abstract to ensure consistency across the papers.

2.7.   The panel suggested reviewing terminology used.

2.8.   It was suggested to add more detail to the Communal Establishment section.

2.9.   The panel asked for more information on the comparator data sources to be added and any limitations that they have. NRS explained that Quality Assurance of Administrative Data (QAADs) documents would be published for each source used which would include strengths and limitations of the comparator data.

Conclusion

The panel felt that the structure of the paper was sound and the paper is easy to read. Further details were suggested to be added on the data sources which might be used for the Validation of Population Estimates and more technical details were requested to be added to the paper. The panel felt that the paper needed further detailed explanation of the proposed methodology before publication.

Panel Advice

Tick ('✔')where appropriate

The Panel's advice is that the proposed methodology is fit for purpose.	✔
The Panel's advice is that the proposed methodology is not fit for purpose (reasons must be stated below).	

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Chair: Katherine Keenan

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