UNECE High-level Group for the
Modernisation of Official Statistics

Business Case for International Framework on Responsible AI for Official Statistics

This business case was prepared by the Applying Data Science and Modern Methods Group, and is submitted to the HLG-MOS for their approval.

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Purpose

With the wide-scale utilisation and adoption of artificial intelligence (AI) and machine learning (ML), core principles such as ethics, privacy, fairness, and legality are more important today than ever before. National statistical offices (NSOs) have already begun to develop and implement AI and ML algorithms to improve public service and reduce costs. They are “committed to doing so in a manner that is compatible with core administrative law principles such as transparency, accountability, legality, and procedural fairness”¹ and ensure that they develop “AI systems and algorithms that respect human rights and privacy; are fair, transparent, explainable, robust, secure and safe; and the actors involved in their development and use remain accountable”².

While producing results faster and more efficiently, one needs to make sure they are ethical, safe and in accordance with the existing confidentiality and security rules and are continuously subject to quality, ethics, sound methods and algorithmic accountability. Hence the need for NSOs to develop governance frameworks based on core guiding principles of responsible AI, such as accountability, transparency and explainability, fairness and non-discrimination, privacy, and safety.

An international framework on responsible AI for official statistics helps set up a common standard for responsible design, development, and deployment of AI-based solutions in NSOs, ensuring these new methods are acceptable from an ethical and human perspective.

Description of the activity and deliverable(s)

A literature review will be conducted to summarise the experience of different NSOs.

An international framework for responsible AI will be developed. The framework will consist of a guidance document listing core guiding principles on responsible AI, with clear definitions and guidelines; an assessment tool/checklist, along with use cases; a detailed description of a review process to be put in place to implement the framework that includes ethical and methodological peer reviews and audit of ML projects.

Finally, lessons learned and recommendations will be provided to facilitate the implementation of the framework.

¹ Directive on Automated Decision-Making- Canada.ca
### Alternatives considered
There will be a lack of common standard on responsible AI with NSOs working in silos.

### How does it relate to the HLG-MOS vision and other activities under the Group or HLG-MOS?
This business case supports the HLG-MOS vision and values, in particular to gaining trust and social acceptance. It also ensures the development of innovative solutions in other activities align with the core principles such as ethics, accountability, transparency, etc.

### Proposed start and end dates

**Start:** January 2023  
**End:** December 2023