

ANNEX 2

Joint sub-Task Team on Interactive and Digitally-enabled Statistical Standards for Economic Statistics and Classifications Terms of Reference

Introduction

2.1. The serviceability of statistical standards for economic statistics and classifications such as the System of National Accounts (SNA), Balance of Payments Manual (BPM), Government Finance Statistics Manual (GFSM), Monetary Finance Statistics Manual (MFSM), recommendations and guidelines for labour market statistics, International Standard Industrial Classification (ISIC) and Central Product Classification (CPC) can be enhanced by converting these publications into digitally-enabled and interactive tools with cross references that facilitate the navigation from one part of the system of economic statistics to the other. With the use of digital techniques for the system of economic statistics, it is expected that the joint update of the standards of the system will be facilitated and the system of economic statistics will enhance its capability to provide responsive guidance to rapidly occurring real-world changes. At the same time, a digital vocabulary of the main standards of economic statistics will allow for the digital integration with well-established library and other vocabularies, taxonomies and ontologies and thus improving cross-disciplinary search capabilities of digitized documents. This cross-reference capability will allow the digital confirmation of the role of the standards of economic statistics in informing the 2030 Agenda for Sustainable Development.

2.2. As part of its work on improving the way the international macroeconomic standards are communicated and made accessible to both data users and national account compilers, the Intersecretariat Working Group on National Accounts (ISWGNA) identified the digitalization of the SNA, and related manuals, handbooks, and guides as a workstream. At the same time, the Friends of the Chair Group on Economic Statistics recognized the need for advancing the use of innovative technologies and approaches for cross referencing and navigation between the various statistical standards for economic statistics and classifications. To facilitate the development of interactive and digitally-enabled statistical standards for economic statistics and classifications, the official statistics community needs to embrace new technologies and approaches to improve the quality, integration, accessibility and use, not only of data and metadata, but also how the structure and semantical cross-references methodological standards and statistical classifications frameworks are established. For this purpose, a Joint sub-Task Team on interactive and digitally-enabled statistical standards for economic statistics and classifications has been established and consists of relevant IT and subject matter experts.

Objectives

2.3. The Joint sub-Task Team will focus on advancing the use of innovative technologies and approaches for cross referencing and navigation between the manuals on statistical standards for economic statistics and classifications in support of the research on the update of these manuals as part of the update of the system of economic statistics. These technologies include enabling hypertextual access, semantic search, cross-domain linking and referencing, linked-open-data formats and metadata modelling. The Joint sub-Task Team will also focus on advancing the development of standards to structure, publish, and make reference to statistical frameworks, classifications, and other information resources. The work of the Joint sub-Task Team can contribute to the development of an overarching strategy for modernizing the way methodology, classifications and data are produced and disseminated.

2.4. The digital versions of the manuals with cross-references embedded will be an important step to facilitate the service from, access to, and navigation through the system in the presence of frequent overlapping areas across manuals. For the sake of clarity in the interrelations across the system, and to facilitate the implementation of navigation solutions, a concentric, overlap free design for the distribution of methodological content is envisioned, where the fundamental building blocks are all contained in a central body, and other manuals only cover very specific extensions avoiding any kind of duplication.

2.5. Both the development of the interlinked digital versions of the manuals and the establishment of a concentric network model for the manuals would contribute to the agile updating of the manuals and the diffusion of methodological knowledge. Moreover, the establishment of a collaborative digital platform is warranted to support the discussion, exchange of ideas and confrontation of approaches on methodological issues. Such environments should be used to contribute to the development of the research agenda(s) and to assist in the drafting of handbooks or guidance material, in a more inclusive way than possible currently.

2.6. The Joint sub-Task Team will coordinate its work with the ongoing efforts by Eurostat (to digitize the European System of Accounts), the European Central Bank (ECB), International Monetary Fund (IMF) and United Nations Statistics Division (UNSD) (in establishing a system of unique resource identifiers for sustainable development goals, targets and indicators for the semantic web³). It will also leverage the advice which ECB provided during the global consultation undertaken by the Friends of the Chair Group on Economic Statistics on setting global priorities on new working methods. In addition,

³ See <http://metadata.un.org/sdg/about?lang=en> .

Statistics New Zealand, Australian Bureau of Statistics and Statistics Canada have been collaborating in advancing interactive digital standards for international classifications.

2.7. The specific objectives of the Joint sub-Task Team include developing for existing and updated macroeconomic accounting standards (e.g SNA, BPM, GFS), related macroeconomic manuals and international classifications:

- a. Digital and interactive cross-referencing standards that allow for easy navigation across the manuals.
- b. Network or concentric topology using tools such as poolparty and graph-powered software for the system of manuals to avoid overlaps and conflicts between the various methodological prescriptions to facilitate the drafting of manuals.
- c. Metadata modelling and conceptual classification management.
- d. Applications using the topology to facilitate cross-references across statistical manuals.
- e. A platform as a collaborative environment to support the statistical update of the system of economic statistics, exchange of information, innovative ideas and general knowledge across a target population of experts, professionals or the public at large.

Governance and participation

2.8. The Joint sub-Task Team is chaired by <country>. The Secretariat will be provided by UNSD.

2.9. The work of the Joint sub-Task Team will be initiated through the creation of a network of international agencies like Eurostat, ECB, ILO, IMF, OECD, UNSD and World Bank and supporting country-agencies like the Australian Bureau of Statistics, Statistics Canada and Statistics New Zealand, in collaboration with the various Committees and experts like ISWGNA/AEG, BOPCOM, GFSAG, UN Committee of Experts (CoE) on Business and Trade Statistics (UNCEBTS), International Classifications Expert Group, monetary and financial statistics expert group and labour market statistics experts groups to jointly undertake the use of innovative semantic technology for the update of the system of economic statistics. Given the use of the advanced software tools and techniques, the Joint sub-Task Team will be guided by IT experts with knowledge in using tools such as Poolparty and graph-powered software to develop the ontologies. The activities of the Joint sub-Task Team will focus on designated outputs and outcomes with specified time frames.

2.10. The working arrangements are expected to consist mainly of electronic communication through the circulation of documentation, web-based data and code hosting services like GitHub, and the collection of comments on specific topics. Face-to-face meetings of the Joint sub-Task Team could be organized if necessary.

Reporting

2.11. The Joint sub-Task Team reports to the Joint Task Team on Communications.

Deliverables and timeline

2.12. The work will take place from April 2020 to March 2025. The Joint sub-Task Team will outline the issues to be addressed, consider existing research/ agency practices and various technological options to develop a Proof of Concept for digitized statistical standards and manuals by **November 2020**. The timeline for developing a fully functional Interactive and digitally-enabled statistical standards for economic statistics and classifications will be determined following the Proof of Concept and is to be endorsed by the various participating governing Committees. The Proof of Concept implementation phase will also determine the various intermediate and final products, the collaboration arrangements, and the timeline for the deliverables.

2.13. The key deliverables and timelines are as follows:

- a. A Proof of Concept progress report, including an assessment of the network approach of the working arrangements, to be submitted at the meetings of the Committee of Experts on national accounts, represented by the ISWGNA and AEG , BOPCOM and other Committees and the Friends of the Chair Group on economic statistics in 2020 and the Statistical Commission in March 2021.
- b. Progress reports to be submitted to the various governing bodies of the Committees participating in the project during 2021 to March 2025.
- c. Progress reports for intermediate products to be determined during the Proof of Concept implementation phase
- d. A fully functional interactive and digitally-enabled statistical standards in a cloud-based environment available for the dissemination of existing and updated standards of the SNA, BPM, related macroeconomic manuals and international classifications in March 2025.