Towards an integrated view of modernisation models

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# Introduction

In past years several reference models have been developed in order to support the modernisation of official statistics. They are currently maintained with the endorsement of the High Level Group for the Modernisation of Official Statistics (HLG-MOS). More specifically, the Supporting Standards Group is in charge of developing, enhancing, and facilitating the implementation of the UNECE models, namely the Generic Activity Model for Statistical Organisations (GAMSO), the Generic Statistical Business Process Model (GSBPM), and the Generic Statistical Information Model (GSIM). The Group has also operational responsibility for the documentation of the Common Statistical Production Architecture (CSPA). The Supporting Standards Group is composed by members from different National Statistical Institutes (NSIs) all over the world and by representatives from International organisations and associations.

The GSBPM describes and defines the set of business processes needed to produce official statistics [1]; the GSIM provides a set of standardized, consistently described information objects, which are the inputs and outputs in the design and production of statistics [2]; the GAMSO extends and complements the GSBPM by adding additional activities needed to support statistical production [3]. Finally, CSPA is a reference architecture for the statistical industry, which has been developed and peer reviewed by the international statistical community [4]. In 2018, the GSBPM and GSIM underwent the periodical 5 year revision. The periodic revision has the purpose to introduce the necessary changes into the models based on the feedback received from the organisations using them and to ensure that the models remain relevant in the changing landscape in which official statistics operates.

Despite the different topics the models address, they share the same feature of representing a common framework and a reference terminology within and among statistical organisations.

The degree of implementation of the models differs from country to country, some have implemented none or just one model, while others are implementing two or more models. However, only few countries have a clear picture of the relationships between the models and have plans for a coordinated implementation.

The paper focuses on the need for an integrated view of the modernisation models developed so far in order to respond to the needs expressed by the countries using (or willing to implement) the models. It describes the new activities that the Supporting Standards Group will undertake in 2019, in order to facilitate the understanding of the interrelationships between different models and what benefits could be expected by implementing two or more models in a coordinated way.

# The need for an integrated view

The models address different topics and were developed at different times. While the GSBPM - first released in 2008 - is by far the most known and used model, more recent models such as GSIM and GAMSO are less known and les implemented by statistical organisations.

In 2018, the UNECE carried out a survey on the implementation of the different models in statistical organisations. The results were presented at the ModernStats World Workshop in Geneva, in April 2018 [5]. One of the key aspects investigated was how the models were implemented individually and collectively in practice. The benefits and the difficulties in implementing each model were investigated and further discussed at the Workshop. The results and the discussion were useful in addressing future activities of the Supporting Standards Group. They provided useful inputs to the task teams that were completing the revision of GSBPM and GSIM.

For what concerns the usage of more than one model, the survey results showed that the majority of countries are using two or more models (27 over 42). Nevertheless, the countries are facing difficulties in using the models in a coordinated way within their organisations and were asking for greater support and guidance in implementation from the UNECE.

These results confirmed the thoughts of the Supporting Standards Group about the need for an holistic approach to the modernisation models in contrast to the stand-alone view in which each model is developed, maintained and implemented separately from the other ones.

To this purpose new activities were proposed by the Supporting Standards Group for 2019 to provide countries with better insights to the core models, their complementarities and potential synergies. These activities are being presented to the High Level Group for the Modernisation of Official Statistics in November 2018 for approval.

# Conclusions

The paper will describe in more detail the activities that the Supporting Standards Group will undertake in 2019 in order to foster an integrated view of the modernisation models.

These activities respond to the needs expressed by countries, as mentioned before. At the same time they will tackle some issues which emerged during the GSBPM and GSIM revisions and that required additional work (to the revisions themselves) by expert teams.

More specifically, the activities for 2019 are addressed to enhance the links between GSIM and GSBPM on a one side and the links between GAMSO and GSBPM on the other one. In this way, they represent first steps towards building “de facto” an integrated view of modernisation standards. They are centred around the GSBPM as it is the most widely used of the models.

These activities will help countries in better understanding how the modernisation models relate to each other and thus facilitating an holistic approach to the models themselves as well as the implementation of a standard-based modernisation of official statistics.

# References

1. Unece (2013), The Generic Statistical Business Process Model - GSBPM, [https://statswiki.unece.org/display/GSBPM/GSBPM+v5.0](https://statswiki.unece.org/display/GSBPM/GSBPM%2Bv5.0)
2. Unece (2013), The Generic Statistical Information Model – GSIM, [https://statswiki.unece.org/display/gsim/Generic+Statistical+Information+Model](https://statswiki.unece.org/display/gsim/Generic%2BStatistical%2BInformation%2BModel)
3. Unece (2017), The Generic Activity Model for Statistical Organisations – GAMSO, [https://statswiki.unece.org/display/GAMSO/GAMSO+v1.1](https://statswiki.unece.org/display/GAMSO/GAMSO%2Bv1.1)
4. Unece (2015), The Common Statistical Production Architecture – CSPA, <https://statswiki.unece.org/pages/viewpage.action?pageId=112132835>
5. InKyung Choi (2018), Survey results on the use of ModernStats Models, <https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/ge.58/2018/mtg1/UNECE_CHOI_Presentation.pdf>