

III. Relationships with Other Models and Standards

23. The GSBPM was originally developed based on the Generic Business Process Model from Statistics New Zealand, supplemented by input from other statistical organisations with experience of statistical process modelling. However, a number of other related models and standards exist, both as a result of modernisation initiatives, and similar activities outside the scope of official statistics.

CSPA

24. Turning first to the links between the GSBPM and the other frameworks and standards needed for statistical modernisation, it can be helpful to consider them in the context of enterprise architecture. Enterprise architecture relates business functions and processes to the information, applications and technology needed to run them. It is a way of describing what an organisation does, and how it does it, to try to identify how the organisation could improve quality and efficiency.

25. In the context of statistical modernisation, the aim is to align the enterprise architectures of different organisations, creating an "industry architecture" for the whole "official statistics industry". This approach is intended to facilitate collaboration, sharing and joint development of the components and services that are needed for the different parts of the statistical business process (defined in relation to the GSBPM). The result is the Common Statistical Production Architecture (CSPA), first released at the end of 2013¹.

GSIM

26. The Generic Statistical Information Model (GSIM) is a reference framework for statistical information, designed to play an important part in modernising and streamlining official statistics at both national and international levels. It enables generic descriptions of the definition, management and use of data and metadata throughout the statistical production process. It provides a set of standardised, consistently described information objects, which are the inputs and outputs in the design and production of statistics. The GSIM helps to explain significant relationships among the entities involved in statistical production, and can be used to guide the development and use of consistent implementation standards or specifications.

27. Like the GSBPM, the GSIM is one of the cornerstones for modernising official statistics and moving away from subject matter silos. The GSIM is designed to allow for innovative approaches to statistical production to the greatest extent possible; for example, in the area of dissemination, where demands for agility and innovation are increasing. It also supports current approaches of producing statistics.

28. The GSIM identifies around 110 information objects, examples include data sets, variables, statistical classifications, units, populations as well as the rules and parameters needed for production processes to run (for example, data editing rules).

29. The GSIM and the GSBPM are complementary models for the production and management of statistical information. As shown in the diagram below, the GSIM helps describe GSBPM sub-processes by defining the information objects that flow between them, that are created in them, and that are used by them to produce official statistics. Inputs and outputs can be defined in terms of information objects, and are formalised in GSIM.



30. Greater value will be obtained from the GSIM if it is applied in conjunction with the GSBPM. Likewise, greater value will be obtained from the GSBPM if it is applied in conjunction with the GSIM. Nevertheless, it is possible (although not ideal) to apply one without the other. Similarly, both models support the implementation of CSPA, but can be applied regardless of whether that architectural framework is used or not.

31. In the same way that individual statistical business processes do not use all of the sub-processes described within the GSBPM, it is very unlikely that all information objects in the GSIM will be needed in any specific statistical business process.

32. Applying the GSIM and GSBPM together can facilitate the building of efficient metadata driven systems, and help to harmonise statistical computing infrastructures.

GLBPM

33. Looking outside the domain of official statistics, the social survey research community has developed the Generic Longitudinal Business Process Model (GLBPM)² "to provide a generic model that can serve as the basis for informing discussions across organisations conducting longitudinal data collections, and other data collections repeated across time".

34. Like the GSBPM, the GLBPM is a reference model against which actual business processes can be mapped. It is a reference model of the process of longitudinal and repeat cross-sectional data collection for research organisations. It describes the activities undertaken and maps these to their typical inputs and outputs.

35. The GLBPM has many similarities to the GSBPM, although it differs in some specific activities reflecting the different needs and practices of the statistical and social science research communities. The GLBPM, takes the approach of having a non-linear path through a matrix of alternatives directly from the GSBPM.

1. See: <https://statswiki.unece.org/display/CSPA/Common+Statistical+Production+Architecture>
2. See: <http://dx.doi.org/10.3886/DDILongitudinal05>