

The Generic Statistical Information Model (GSIM)

A Brief Introduction

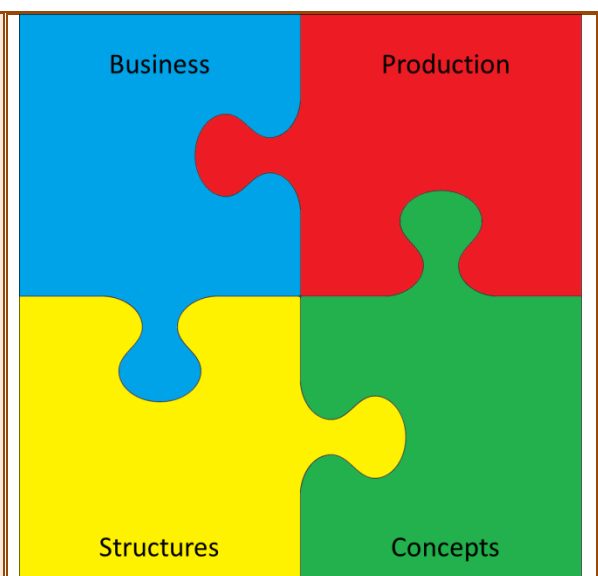
To produce official statistics we need to follow a set of processes, such as those described in the Generic Statistical Business Process Model (GSBPM). However, as well as processes we also have the information that flows between them (data, metadata, rules, parameters etc.). The Generic Statistical Information Model (GSIM) aims to define and describe these information objects in a harmonized way.

The High-Level Group for Strategic Developments in Business Architecture in Statistics (HLG-BAS) has identified the GSBPM and GSIM as key standards for the modernization of official statistics. They aim to provide common terminology, improving communication about the production of statistics, within and between organizations. This, in turn, facilitates collaboration and exchange of good practices, leading to greater efficiency.

What is GSIM?

1. GSIM is a reference framework of internationally agreed definitions, attributes and relationships that describe the pieces of information that are used in the production of official statistics (information objects). This framework enables generic descriptions of the definition, management and use of data and metadata throughout the statistical production process.
2. GSIM provides a common language to describe information that supports the whole statistical production process from the identification of user needs through to the dissemination of statistical products.
3. GSIM is aligned with relevant data management and exchange standards, such as DDI and SDMX, but it is not directly tied to them, or to any specific technology.

GSIM is not a piece of software, nor an information technology (IT) standard. It is a strategic approach and a new way of thinking, designed to bring together statisticians, methodologists and IT specialists to modernize and streamline the production of official statistics.

<p>What is an information object?</p> <p>GSIM is a model of objects that specify information about the real world (“information objects”). Examples include data and metadata (such as classifications), as well as the rules and parameters needed for production processes to run (e.g. data editing rules). GSIM identifies around 150 information objects, which are grouped into four broad categories, and explained in more detail in the technical documentation.</p>	 <p>The diagram consists of four interlocking puzzle pieces arranged in a 2x2 grid. The top-left piece is blue and labeled 'Business'. The top-right piece is red and labeled 'Production'. The bottom-left piece is yellow and labeled 'Structures'. The bottom-right piece is green and labeled 'Concepts'.</p>
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What are the benefits of using GSIM?

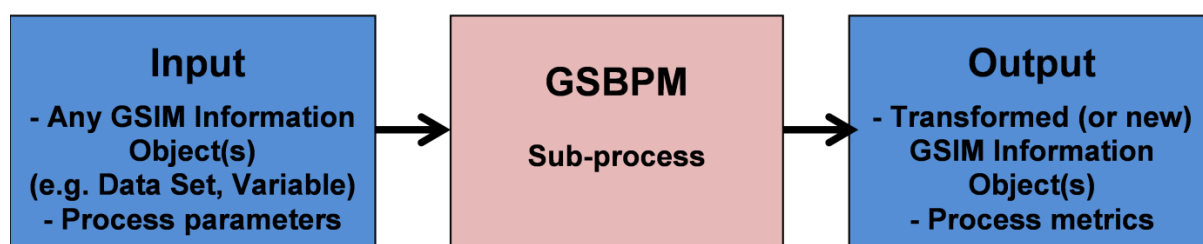
GSIM provides a set of standardized, consistently described information objects, which are the inputs and outputs in the design and production of statistics. By defining objects common to all statistical production, regardless of subject matter, GSIM enables statistical organizations to rethink how their business could be more efficiently organized.

GSIM can be used to:

1. Improve communication between different disciplines involved in statistical production, within and between statistical organizations; and between users and producers of official statistics.
2. Generate economies of scale by enabling greater collaboration within and between organizations, especially through reuse of information, methods or technology.
3. Enable greater automation of the statistical production process, thus increasing efficiency and reducing costs.
4. Provide a basis for flexibility and innovation, including support for the easy deployment of new statistical products and the adoption of new types of statistical data sources
5. Build staff capability by using GSIM as a teaching aid that provides a simple, easy to understand view of complex information, with clear definitions
6. Validate existing information systems and compare with best practice in other organizations.

What is the relationship between GSIM and GSBPM?

GSIM and GSBPM are complementary models for the production and management of statistical information. GSBPM models the statistical production process and identifies the activities undertaken by producers of official statistics that result in information outputs. These activities are broken down into sub-processes, such as “Impute” and “Calculate aggregates”. GSIM models information that flows between these sub- processes.



Greater value will be obtained from both models if they are applied together. Nevertheless, just as GSBPM has been applied to date without GSIM, it is possible (although not ideal) to apply GSIM without GSBPM, or an organization-specific model derived from GSBPM.

Where can I find more information?

To communicate effectively with all users, the GSIM documentation is structured in layers. This document is the highest layer, designed to give a brief overview to senior managers and subject-matter statisticians, a more detailed paper provides further information, still for a general statistical audience, and a detailed "specification" layer provides the information needed by specialists to implement GSIM. Electronic versions of all layers of documentation can be found at:

[http://www1.unece.org/stat/platform/display/metis/Generic+Statistical+Information+Model+\(GSIM\)](http://www1.unece.org/stat/platform/display/metis/Generic+Statistical+Information+Model+(GSIM))