Standards-based modernisation

modernistats

BY HLG - MOS

Thérèse Lalor
Statistical Management and Modernisation Unit
UNECE

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A common goal

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Statistics are fundamental to a democratic society. Statistics **Sweden** meets the needs of today and tomorrow for reliable statistics as a basis for analysis, debates and decisions.

We assist and encourage informed decision-making, research and discussion within governments and the community, by providing a high quality, objective and responsive national statistical service. **ABS, Australia**

We are an autonomous public body responsible for regulating and coordinating the National System of Statistical and Geographic Information, as well as capturing and disseminating information about **Mexico** in terms of territory, resources, population and economy, which allows us to know the characteristics of our country and help decision making.

To be widely respected for informing debate and improving decision making through high quality, easy to use statistics and analyses on the **UK**'s economy and society.

Long history of cooperation

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- The Conference of European Statisticians is one of the oldest statistical bodies working on international statistics:
  - With roots in the first Conferences of Statistics held under the League of Nations as of 1928
  - Founded in its current form in 1953 as the governing body of UNECE in statistics

Introducing UNECE Statistics

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Social	Economic	Environmental
Population and migration	Measuring economic progress and globalization	Sustainable development, climate change and environment
Gender		
Poverty and inequalities		

The challenges

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Modernisation and standards

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Official statistics has to rethink their processes and products to remain relevant

Modernisation and standards

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National Statistical Institutes (NSIs) have to be increasingly flexible to be able to deliver the range of statistics required. This flexibility is coming through the modernisation of official statistics

There are four standards/frameworks at the conceptual level:

- Generic Activity Model for Statistical Organisations
- Generic Statistical Business Process Model
- Generic Statistical Information Model
- Common Statistical Production Architecture

Supporting Standards

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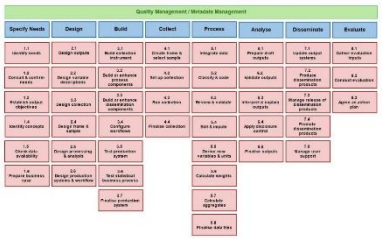
- Support implementation and use of GSBPM, GAMSO, GSIM, CSPA, …, including:
  - Answering questions and supporting implementers
  - Developing and publishing complementary materials, such as case studies, good practices, etc.
  - Workshops and training to promote and ensure consistent use of the HLG-MOS standards and models
  - Managing periodic reviews of standards and models. Next reviews of GSBPM / GSIM are scheduled for 2018



Modernisation Maturity Model

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The MMM and its Roadmap focus on how to build organisational capabilities through implementation of the models and standards identified as key to statistical modernisation i.e. GSBPM, GAMSO, GSIM and CSPA.

Target

	Silo	Integrated	Componentised	Services	Composite	Virtualised	Dynamically Re-configurable
Business Activity View ie. Collections	Isolated Collection Driven	Collection Business Process Defined	Componentised Business Activities	Business provides & consumes activities	Assemble to Order (design-time)	Provider-independent Assemble to Order	Plug n Play (run-time) BPM & BAM
Business Capability View	Isolated Business Line Driven	Collection Business Functions Defined	Componentised Business Functions	Business provides & consumes services	Formal, Standardised Business Services	Provider-independent Business Services	Business Capabilities via Run-time Configurable Services
Statistical Methodology	Isolated Business Line Driven	Collection Methods Defined	Common Methods	Service Oriented methods	Standardised, Configurable Methods	Standardised, Configurable Methods	Run-time Configurable Methods
Information	Application Specific Data Solution	Collection Specific - Data Subject Areas Established	Canonical Models	Information as a Service	Enterprise Business Data Dictionary & Repository	Virtualised Data Services	Semantic Information Representation
Application	Monolithic Solutions	Layered Solutions	Component Solutions	Emerging SOA	SOA	Cross Organisational SOA	Dynamically Re-Configurable (Plug n Play) Solutions
Infrastructure & Management	Solution Specific	Enterprise Standards	Common Reusable Infrastructure	Project Based SOA Environment	Common SOA Environment	Virtual SOA Environment: Sense & Respond	Real-time Event-based: Sense & Respond
Governance & Organisation	Adhoc Strategy & Governance	Defined governance processes	Common Governance Framework	Emerging business service governance	Business Service and IT Governance Aligned	Business Service and IT Governance Aligned	Governance via Embedded Policy
Design Practices	Isolated or Non-existent Design	Centralised, non-standard Design	Common Design Objects	Service Oriented Modelling	Business Process and Capability Modelling	Business Process & Capability Modelling for Infrastructure	Run-time Business Process & Capability Modelling

Surrounding influences

Other standards

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The Statistical Community also uses standards at physical level that are not solely driven by official statistics:

- Statistical Data and Metadata eXchange
- Data Documentation Initiative

Geospatial and official statistics

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- Statistics increasingly need to be understood within the context of location.
- Integrating geographical and statistical information offers significant opportunities to maximise the utility of data collected for statistical purposes.
- Statistics have always been published on the basis of geography but it is now important to understand what area that geography represents and what additional context the geography can add to the statistical data.

Geospatial and Statistical Standards

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"An increased use of technical and non-technical standards is helping to deliver a closer integration of statistics and geospatial information. However, statistical standards and geospatial standards still sit within their own domains."

In-depth review of developing geospatial information services based on official statistics, CES, 2016

Open questions

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- What is needed to ensure smooth data flow between statistical and geospatial organisations?
- Can we integrate standards from two communities?
- Do we need to?
- Are there other steps we need to take first?
- What about other non-technical actions?
- How do we gain high level support for this work?

The objective of this workshop is to hear experiences and answer these questions!

Thank you!

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