

GAMSO in context

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Introduction

- ➤ GAMSO: Shared vocabulary for describing **all business activities of statistical organisations**, beyond more direct statistical production activities covered for long by the GSBPM.
- So far Eurostat has been using GAMSO in different contexts:
 - GAMSO as an entry point the CROS portal which acts as a knowledge repository for the ESS modernisation initiatives like ESSnets and ESS working groups.
 - Reference to GAMSO in the ESS Enterprise Architecture
 Reference Framework (ESS EARF) as a model for the describing
 business activities in relation with ESS Vision 2020
 implementation and linking it with EA artefacts.



Use of GAMSO in CROS (1/2)

- CROS stands for "Collaboration in Research and Methodology for Official Statistics".
- ➤ The CROS Portal is a content management system and is originally dedicated to the collaboration between researchers and Official Statisticians in Europe and beyond.
- > It provides a working space and tools for dissemination and information exchange for statistical projects and methodological topics.



Use of GAMSO in CROS (2/2)

https://ec.europa.eu/eurostat/cros/





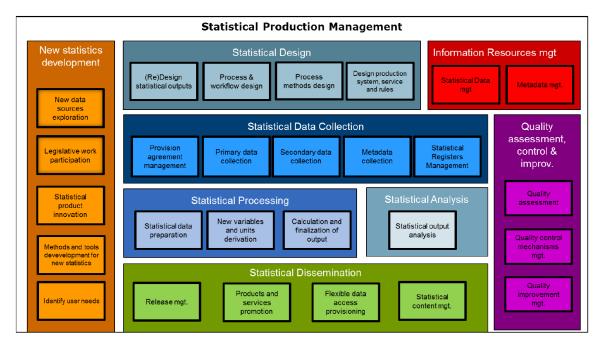
Use of GAMSO in ESS EA (1/2)

- ➤ The origin of ESS EA is the ESS Vision 2020 released in May 2014:
 - "We will adopt enterprise architecture as a common reference framework (...) Enterprise architecture is a systematic language to describe the way our business wants to operate and how the various components fit together. It serves to translate our vision into implementation strategies and priorities in a systematic way".
- ➤ The ESS EARF is the result of the collective and iterative work of the DIME/ITDG Task Force on ESS EA which ran from April 2014 till August 2015
 - Main parts: Business Capabilities Model, Building blocks Principles, Statistical Production Reference Architecture



Use of GAMSO in ESS EA (2/2)

ESS Business Capabilities Model (BCM) used to show which business capabilities are in scope for the ESS collaboration as described in the ESS Vision 2020 and which business capabilities are left to the individual members.



Example: ESS BCM for statistical production management at level 2





Main difficulties encountered

- Linking actual development & modernisation work with GAMSO
- Consistency between business modelling frameworks
 - Consistency between HLG specifications
 - Consistency with EA and BPM standards
- Coverage of support activities that are specific to the sector of official statistics



Cross-industry & OS frameworks (1/3)

Cross-industry standards

BPMN: Business Process Model and Notation. The primary goal of BPMN is to provide a notation that is readily understandable by all business users, from the business analysts that create the initial drafts of the processes, to the technical developers responsible for implementing the technology that will perform those processes, and finally, to the business people who will manage and monitor those processes.

TOGAF: The Open Group Architecture Framework (TOGAF) is a framework for enterprise architecture that provides an approach for designing, planning, implementing, and governing an enterprise information technology architecture TOGAF is a high level approach to design. It is typically modelled at four levels: Business, Application, Data, and Technology. It relies heavily on modularization, standardization, and already existing, proven technologies and products.

Official Statistics industry frameworks

GAMSO describes and defines the activities that take place within a typical statistical organization. It extends and complements the GSBPM by adding additional activities needed to support statistical production.

GSBPM describes and defines the set of business processes needed to produce official statistics. It provides a standard framework and harmonised terminology to help statistical organisations to modernise their statistical production processes, as well as to share methods and components.

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. It is a reference framework of internationally agreed definitions, attributes and relationships that describe the pieces of information (called "information objects" in GSIM) that are used in the production of official statistics.



Cross-industry & OS frameworks (2/3)

> Terminologies

	GSBPM	GAMSO	GSIM	TOGAF	BPMN
Activity		X			X
Activity area		X			
Business function			Χ	Х	
Business process	Χ		Χ		Χ
Business service			Χ	X	
Capability		X		X	
Phase	Χ				
Process step			Χ		
Sub-activity		X			
Sub-process	Χ				Χ
Task					Χ



Cross-industry & OS frameworks (3/3)

> EA & BPM views on business modelling

	ВРМ	EA	
View	≈ Procedural	≈ Functional	
Question	How is the work done?	What work needs to be done?	
Object	Sequence of activity and flow of information	Resources involved, inputs, outputs	
Key concepts	Process, sub-process, activity	Capability, function, service	

> Articulating GSBPM & GAMSO

- The combined use of GAMSO and GSBPM may be less straightforward than it seems
 - **Overall structure**: Activity, activity area, phase, sub-process... link with GSIM business concepts?
 - Overlaps and ambiguities between GSBPM **overarching processes** and GAMSO
 - Overlaps and ambiguities between some GSBPM **phases** and GAMSO



Modelling some specific areas (1/2)

- > 2 major international strategic documents
 - Strategic Vision of the HLG
 - European Statistical System Vision 2020
- → The most salient points these vision documents have in common are enhancing customer focus, increasing efficiency and flexibility through standard-based modernisation and energising innovation.
- ➢ GAMSO currently proposes a relatively broad range of general support activities that are common to most organisations while relatively little focus seems to be given to some critical activities more specifically related to the sector of official statistics.



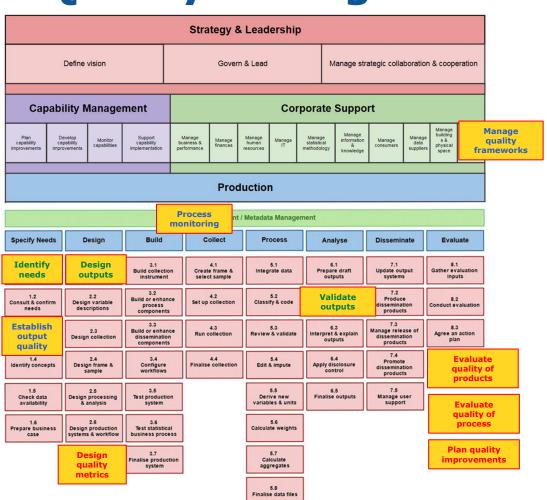
Modelling some specific areas (2/2)

- GAMSO is intended to support international collaboration between statistical organisations in particular in the area of modernisation
- Modernisation-related activities are expected to be sufficiently visible and isolated in the model to benefit from collaboration and sharing, for instance:
 - Sharing and reuse of semantic or IT assets
 - Sharing knowledge and expertise
 - Capability architectures
 - Development of targeted standards
 - Benchmarking

- ...



Quality management

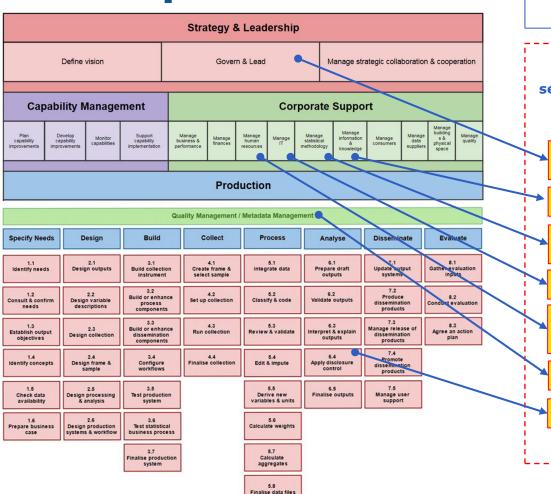


Can quality management be better isolated?

- Some **overlaps** between GAMSO and GSBPM exist for instance between GAMSO and GSBPM overarching processes
- GSBPM quality management overarching process is not strongly structured
- Being able to **isolate key items** as unambiguously attached to quality management can be useful to support modernisation and collaboration



Data protection



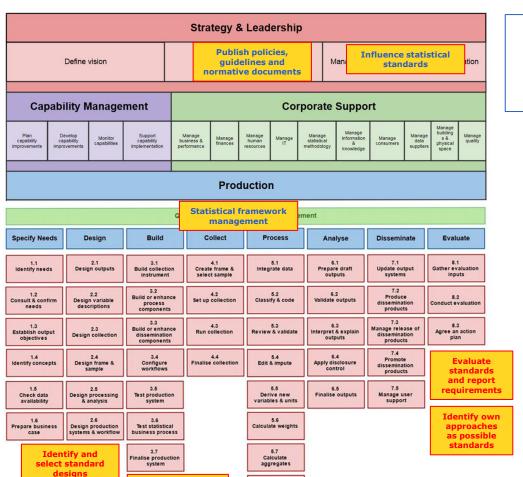
A complete view on data protection?

- Develop and implement security, privacy and data protection
 - Data protection policies and procedures
 - Manage access rights
 - Manage confidentiality and SDC
 - Manage physical security of data
 - Confidentiality agreements, trainings, communication, ...
 - General data security
 - Apply disclosure control

- Data protection is scattered in many places in the model
- Activities related to data protection are **mixed** with other ones which doesn't allow to **isolate** them an build a specific view



Standardisation



Finalise data files

Identify and

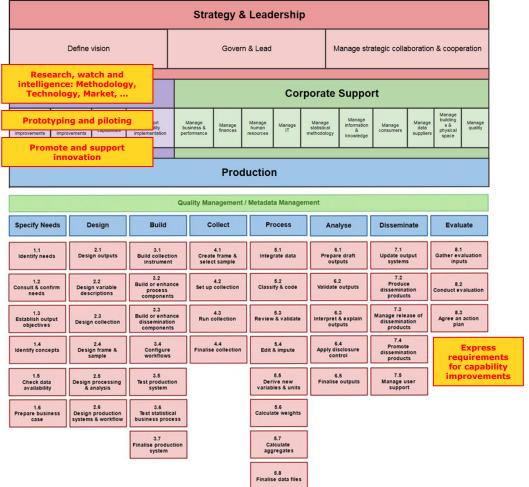
select standard implementations

How far is standardisation embedded in the statistical organisation?

- ☐ Vision: **Standards-based modernisation**, interoperability,
 sharing and re-use of semantic
 assets, methodologies, software, ...
- More visibility to standards-related activities in businesses modelled according to GAMSO would provide all the benefits associated to modernisation also to standardisation itself (e.g. benchmarking and sharing of solutions).



Innovation



Do you innovate?

- ☐ Innovation also a focus area in modernisation strategies
- □ In GAMSO innovation is not really considered as a **distinct** field of activity and its relation to the overall statistical production process is not explicit
- Innovation finds a natural place in the "Capability management" activity area but this in not strongly expressed
- Capability improvements in the context of a **single statistical business process** are included in the production activity area... but where?



Conclusions (1/2)

- ✓ GAMSO aims to describe and define all the activities that take place within a
 typical statistical organization
 - The model intends to provide a common vocabulary and framework to **support international collaboration** activities, particularly in the field of **modernisation**.
 - The relevance of a model that covers completely statistical organisations beyond pure production activities is recognised and the development of models going in this direction seems to be clearly a need when aiming at international collaboration for modernisation but also when performing process and quality improvements in a single statistical organisation.
- ✓ GAMSO is a relatively recent initiative and was conceived as an add-on to the GSBPM
 - While it is appreciable that its development did not impact GSBPM which is a much more widely used specification at the moment, this development approach by essence does not allow removing all inconsistencies and overlaps between GAMSO and GSBPM.
 - Furthermore, questioning the structure of GAMSO also brings questions on the structure of GSBPM, considering the landscape of business modelling frameworks inside and outside of the sector of official statistics.
 - It needs to demonstrate its value respect to GSBPM for statistical organisations and its ability to
 articulate with mainstream approaches emerging in statistical organisations like EA and BPM
 approaches.



Conclusions (2/2)

- Overlaps between GAMSO and GSBPM should be avoided, in particular considering GSBPM overarching processes
 - In a longer term merge GAMSO and GSBPM?
 - The development of a consistent model for the whole statistical organisation would most likely bring changes current versions of both GAMSO and GSBPM
- ✓ Better alignment in terminologies used in GAMSO/GSBPM with GSIM and even more with cross-industry frameworks for EA and BPM
 - The conceptual base used in GAMSO/GSBPM should be more explicit and for instance could make better
 use of GSIM as a meta-model
 - Requalify the models as a business function models rather than activity or process models?
 - The use of terms capability, function, service, process, and activity should be as far as possible consistent with EA and BPM cross-industry standards.
- ✓ Generic corporate support functions seems over-represented compared to functions more specific to official statistics
 - A suggestion is to group generic corporate functions into a category such as "General corporate support"
 and more specific horizontal functions as we encountered them in strategic vision documents
 and modernisation programmes in another category that could be labelled as an example "Cross-domain
 statistical support"

→ Input for the first revision of GAMSO?



Thank you!