Sector Review of the Implementation of the Generic Activity Model for Statistical Organisations (GAMSO) in Armenia

Final Report

November 2022

Introduction

There is a strong trend in official statistics to standardise processes and centralise similar statistical functions (e.g. dissemination) to realise efficiency gains, reduce risk and increase quality, especially where resources are scarce. The Generic Activity Model for Statistical Organisations (GAMSO) can help organisations to think about what to centralise and what are the expected benefits.

In October 2022, an international team of experts convened by the United Nations Economic Commission for Europe (UNECE) conducted a Sector Review of the implementation of the GAMSO in Armenia. This review was undertaken at the request of, and in partnership with, the Statistical Committee of the Republic of Armenia (Armstat). This report contains the observations and recommendations of the international experts and has been agreed with the management of Armstat.

The review team consisted of Ms Andrea Petres and Mr Zoltan Vereczkei (Central Statistical Office of Hungary), Mr Carlo Vaccari (Istat, Italy), Ms InKyung Choi and Mr Steven Vale (UNECE). Mr Iurie Mocanu (National Bureau of Statistics, Moldova) joined the review team as an observer. The review was conducted in cooperation with the managers and staff of Armstat. Its findings are based on discussions and presentations during a mission of the review team to Armstat, which took place on 18-20 October 2022, in Yerevan. The collaboration between the review team and the staff of Armstat was very positive and constructive throughout all phases of the work. The review team would like to thank the management and staff of Armstat for their full and active collaboration in the conduct of this Sector Review.

The review team would also like to thank the UN Resident Coordinator's Office in Yerevan, and particularly Ms Mane Tadevosyan for their support in arranging interpretation for the mission, as well as other members of the UN Country Team in Armenia who joined the opening sessions of the mission and shared their views.

The review team was very impressed with the work done so far to implement the GAMSO in Armenia, as part of the wider work to modernise official statistics in the country, in line with the standards and best practices promoted by the UNECE High-Level Group for the Modernisation of Official Statistics. The review team was asked to help Armstat to identify possible next steps for the implementation of GAMSO and make recommendations to support this work based on international best practices. These next steps and recommendations are set out in detail in this report.

Chapter 1: Awareness raising and communication

The GAMSO "describes and defines the activities that take place within a typical organisation that produces official statistics". As such, it "extends and complements the Generic Statistical Business Process Model (GSBPM) by adding the activities needed to support statistical production"[1].

Armstat has made good progress in implementing the GSBPM to describe statistical production processes, being one of the pioneer countries in the UNECE region in this respect. It is therefore logical that Armstat has now started to implement the GAMSO. Many Armstat staff are aware of the GSBPM due to its use as a framework to document statistical production processes. However, awareness of the GAMSO is currently more limited, so some awareness raising activities will be needed among staff, especially mid-managers level. These activities should highlight that modernisation is also about making Armstat more efficient and removing duplication of efforts. This has already happened to some extent with the GSBPM, however, the GAMSO is a tool to do this for all activity areas in Armstat. The Modernisation maturity Model for the GAMSO[2] may be helpful in this respect.

Prior to the expert mission, Armstat prepared a document setting out in detail how each activity identified in the GAMSO has been mapped to their current activities, with links to relevant documents and other resources. The review team found this to be a very useful starting point and agreed to provide feedback on the document to Armstat by the end of November.

The review team proposes the following recommendations in respect to awareness raising and communication:

Recommendations

1.1   The document should be published on the Armstat web site. This will support the goal of Armstat to be transparent in its activities, processes and methods.

1.2   Armstat should create a new version of the document for internal purposes, which should be published on the intranet. In addition to the current content, the following should be added for each activity:
- The names of people / units responsible for the activity. If more than one unit is concerned, then add all of them to the given activity (this can help to clarify roles and borders). If the responsibility is uncertain, add a question mark. If the activity doesn't exist in Armstat, just leave blank.
- The inputs and outputs (documents, data sets, etc.) of each activity.
- Any quality criteria or indicators relevant to the given activity.
- The IT applications that support each activity.

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[1] See: https://statswiki.unece.org/display/GAMSO/GAMSO+v1.2
[2] See: https://statswiki.unece.org/pages/viewpage.action?pageId=129172266

- Should any other area be of special interest for Armstat, further criteria can be added to the document. The review team will provide a template that may be used by Armstat to prepare the overview. The template will be flexible and Armstat may modify it to fit internal needs.

1.3   Armstat should create and share with staff a diagram that better shows the links between the GSBPM and the GAMSO, by adding the GSBPM phases (and ideally the sub-processes) to the existing GAMSO diagram. A "clickable" version of this diagram[3] could be used to link documentation on statistical production processes with other activities.

1.4   Armstat should develop standard training material in Armenian on the GSBPM and GAMSO for staff (including other producers of official statistics)

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[3] See, for example, https://statswiki.unece.org/display/GSBPM/Clickable+GSBPM+v5.1

Chapter 2: Strategic considerations

The GAMSO can be a powerful tool for strategic planning and development in a statistical organisation. It can inform discussions on organisational structure and restructuring. The model can also help to identify the activities that use most resources or have the highest risks to the functioning of the organisation. Some form of staff time recording by GAMSO activity / GSBPM sub-process can often help to identify how resources are currently used.

The GAMSO can also help to identify activities that could be modernised, centralised or streamlined by providing a common vocabulary to make it possible to compare different statistical activities and processes inside Armstat and with other countries.

Centralisation of activities generally means moving away from a "silo" based structure, for example, where statistical production units focus on a single statistical output (or a small group of similar outputs) and undertake all processes from data collection to dissemination separately. In addition to processes within statistical production, the GAMSO activity area "Corporate Support" also contains activities that often benefit from centralisation within statistical organisations. When centralising activities, it is important to clarify the targets. These can include increased efficiency, quality improvements, reduced risk, streamlined IT, etc.

Centralisation is not just a structural change, it also requires a clear definition of the functions assigned to the centralised areas. It changes in the ways the organisation operates. For example, centralisation of methodology would mean that the subject-matter units do not develop methodological solutions in an isolated manner on their own but rather the methodology units lead the development of methods, in cooperation with subject-matter units, that are consistent and reusable across the organisation. This means that the subject-matter units could focus more on data quality issues and reducing risks in the statistical production process. Centralisation does not just mean that a central unit is created. The work should also be streamlined to be fully functioning as a "centralised unit". The process of centralisation involves setting priorities and implementing improvement actions whilst managing risks and evaluating results on a regular basis.

Dissemination and IT services have already been centralised in Armstat, and there is an interest to identify further activities that could be centralised to improve efficiency. The activities of data collection and methodology were discussed as possible candidates. There has been good progress implementing the recommendations of the 2019 Sector Review on Statistical IT[4]. This is one of the corporate support areas that is likely to need further strengthening to support modernisation, standardisation and the centralisation of certain functions.

One example that would benefit from the strengthening of IT is the further development of the intranet as a corporate tool to support centralisation of other activity areas. The Armstat intranet provides an essential infrastructure to support the management of corporate knowledge. Its functioning could be further improved to allow staff to store their documents

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[4] https://unece.org/DAM/stats/documents/technical_coop/Sector_Review_IT_Armenia_Report.pdf

and search for resources by tagging documents using the GAMSO / GSBPM activities and sub-processes as an index so that resources are more easily reusable by others.

Even when activities have already been centralised, further streamlining may be possible. The following list includes possible actions that could support this, using the example of the dissemination service:

- In order to improve the management of the product portfolio to better serve user needs, first compile a *list of all products disseminated by Armstat* (this is the Armstat product portfolio),
- Define *types of products* (e.g. by format - tables, graphs, infographics, etc. -, by subject-matter domain, etc.),
- Identify dissemination *channels* (how the product gets to the user), evaluate their efficiency,
- Identify *user groups* and connect them to the products/types of products,
- Measure user satisfaction, identify user needs,
- Set *quality indicators* for the products and measure them regularly, evaluate products using the quality indicators, set goals, define improvement actions, implement them,
- Set up *procedures that occur regularly, following the principles of the PDCA (Plan – Do – Check – Act) cycle for managing the product portfolio.*

Points to consider for an activity that has not yet been centralised, for example data collection, could include:

- Evaluate *changes in the environment* (e.g. new technologies, more administrative data sources, etc.)
- *Assess risks* and set *directions for managing them*
- Identify the *capabilities needed* – the diagram below from the UNECE Statistical Capacity Development Strategy[5] may help with this
- Set quality guidelines and criteria – the GSBPM quality indicators[6] may help with this
- Identify the *next steps for capability improvement*
- *Implement and monitor the results*.

[5] See:
https://statswiki.unece.org/download/attachments/149913724/Statistical%20capacity%20development%20strategy%20final.docx
[6] See: https://statswiki.unece.org/display/GSBPM/Quality+Indicators

The seven dimensions of statistical capabilities

The review team suggests a pilot activity/subprocess to centralise the activities, defining borders (i.e. the clear separation of tasks between units) and rules on how to cross those borders, including a ticketing system for documenting and handling requests to centralised services, as well as generic rules about responsibilities and deadlines (like a Service Level Agreement), and a reporting system to allow managers to identify bottlenecks, risks and potential improvements.

In parallel with the activities described above, it will probably be necessary to have a parallel exercise on workforce and skills planning. This can also be supported by the GAMSO, and normally starts by identifying the current (or "as is") structure and resource allocation, then the desired future (or "to be") structure and resource allocation, then determining the staff and skills needed to make the transition. A skills audit can identify current staff skills, the skills needed to support the "to be" structure of the organisation, and any gaps. A strategy should then be prepared to acquire missing skills through recruitment of new staff and / or training of existing staff.

Recommendations

2.1   Armstat should use the document proposed in Recommendation 1.2 to analyse the activities that could be centralised (or further streamlined), as part of a wider discussion on the future structure, roles and responsibilities within Armstat, and in line with the strategic priorities of the organisation.

2.2   In parallel, Armstat should use the GAMSO as the basis for a skills audit, identifying current staff skills, the skills required to meet the strategic priorities, and the gaps that need to be addressed through training or recruitment.

Chapter 3: Moving forwards – A roadmap

The review team identified a series of actions, some of which are inter-dependent, which can be grouped as follows:

Short-term (3 - 6 months)
- Finalise the current documentation of Armstat activities according to GAMSO and publish it on the Armstat web site (Recommendation 1.1)
- Create a diagram that combines the GAMSO and the GSBPM (to support Recommendation 1.3)
- Develop a standard presentation of GSBPM / GAMSO in Armenian (Recommendation 1.4)

Medium term (6 - 18 months)
- Create an internal version of the documentation of Armstat processes by GAMSO activities, including additional fields (as specified in Recommendation 1.2)
- Review the Armstat intranet and consider a system for managing internal documents tagged according the GAMSO activities / GSBPM sub-processes (to support Recommendation 1.3)

Longer term (18 months - 3 years)
- Analyse which areas to centralise or to further streamline, in line with Armstat strategic priorities (Recommendation 2.1)
- Define the borders between different areas, and crossing points and rules, including a ticketing system to document and manage requests for services (to support Recommendation 2.1)
- Conduct a skills audit (Recommendation 2.2)

The review team wishes Armstat success in implementing the above roadmap and in their further steps to modernise official statistics in Armenia. Armstat has made an impressive start, and the Armenian experiences will definitely be of interest to other countries that are not so far along the modernisation journey. The review team would therefore encourage Armstat to present progress and experiences at relevant international events, including the UNECE ModernStats World Workshops.

The review team would also like to encourage Armstat to provide feedback on how the GAMSO and the GSBPM could be improved to better meet Armstat's needs. This will be a very useful input to the upcoming GSBPM/GAMSO revision.

The members of the review team also remain available for follow-up discussions by e-mail and on-line meetings, and are willing to provide technical support with activities such as intranet re-design, analysis of areas to streamline and a skills audit.