# Evaluation of the UNECE project E331 "Modernising Statistical Production Phase 3"

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#### **Acronyms**

CES Conference of European Statisticians

COVID-19 Coronavirus Disease 2019

EB Executive Board [of the HLG-MOS]

GAMSO Generic Activity Model for Statistical Organisations

GSBPM Generic Statistical Business Process Model

GSIM Generic Statistical Information Model

HLG-MOS High-Level Group for the Modernisation of Official Statistics

HRMT Human Resources Management and Training

NSOs National Statistical Offices

OECD Organisation for Economic Cooperation and Development

SDG Sustainable Development Goals

UNECE United Nations Economic Commission for Europe

WGs [Modernisation] Working Groups

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#### 1. Executive summary

The document presents the evaluation of the **UNECE project E331 "Modernising Statistical Production Phase 3**", set up to support the activities of the work program decided by the **High-Level Group on Modernisation of Official Statistics** (HLG-MOS) during July 2019 - December 2023.

The project aimed at advancing official statistics through innovation, modernisation, and international cooperation. It focuses on developing new models, frameworks, guidance, and enhancing capabilities of national statistical offices (NSOs). It encourages the **use of new data sources, technologies, and methodologies, and fosters collaboration among countries and organisations to harmonise statistical standards and practices**. It differentiates itself from other initiatives by not aiming for the participation of all UNECE member countries, but instead working with willing participants from NSOs to share experiences and develop solutions. The governance structure includes various groups supporting cross-cutting pillars of statistical modernisation, supported by the UNECE Statistics Division.

The evaluation methodology focuses on the collection and analysis of information through documents, questionnaires, and interviews with experts involved in HLG-MOS activities<sup>1</sup>. It evaluates the relevance, effectiveness, efficiency, and sustainability of the project, alongside its impacts on human rights, gender equality, disability inclusion, climate change, and disaster risk reduction.

The conclusions of the evaluation are positive in terms of relevance, effectiveness and efficiency. However, the sustainability may be compromised as the activities largely depend on volunteering by NSOs.

- Relevance: The project has been highly relevant, addressing both technical and institutional needs of NSOs. It effectively focused on areas critical to the modernization of statistical production, such as adopting new technologies (e.g., AI/ML, cloud computing), standards (e.g., GSBPM, GSIM), and methods for data integration and privacy. The HLG-MOS Phase 3 responded to institutional needs, such as ethics, communication, dissemination, and human resources development. However, it tended to bias toward the needs of more advanced NSOs, leaving a gap in direct benefits for less advanced offices without specific interventions for knowledge transfer.
- Effectiveness: The HLG-MOS Phase III was highly effective in achieving its objectives, with a very significant output of activities, meetings, workshops, and the development of standards and models. It fostered international collaboration, allowing for the sharing of best practices and innovations across the statistical community. The project led to the increased capabilities of NSOs in modernizing their statistical production, with notable improvements in adopting new technologies and methodologies. However, the effectiveness varied across

.

<sup>&</sup>lt;sup>1</sup> Al tools were used to summarise documents, namely, annual activity reports and technical reports of some meetings. The evaluator acknowledges the contribution of participants to HLG-MOS activities who provided answers to the evaluation questionnaire, as well as those who took part in the interviews. The support of Ms Inkyung Choi (UNECE Statistics Division) in facilitating the contacts and revising partial versions of this report is greatly appreciated.

*NSOs*, with some institutions reporting organization-wide benefits while others observed limited dissemination within their organizations.

- **Efficiency:** The project demonstrated high efficiency in organizing activities and utilizing resources. The transition to online meetings, prompted by the COVID-19 pandemic, allowed for continued collaboration with broader participation and reduced environmental impact. However, the project's reliance on voluntary participation and contributions highlighted the need for a more sustainable model to ensure broader and more inclusive engagement across NSOs.
- Sustainability: Sustainability remains a concern, as the project outcomes'
  continuation heavily depends on the NSOs' capacity to adopt and integrate the
  innovations and standards developed. The decentralized dissemination of results
  and the unequal appropriation of project outcomes suggest a need for improved
  mechanisms to ensure the long-term impact of the project's achievements.

Overall, it is recommended that the UNECE, under the auspices of the CES, continues the HLG-MOS activities. The recommendations for actions by the HLG-MOS Secretariat and the Working Groups include:

- Enhance Coordination: Improve the coordination of HLG-MOS activities with other global and regional initiatives to maximize synergies and avoid duplication of efforts.
- Strengthen Transfer of Know-How: Develop targeted strategies for knowledge transfer and capacity building to ensure that less advanced NSOs can benefit from the project's outcomes.
- Increase Financial Support: Explore mechanisms for providing financial support to enable broader participation and adoption of project outcomes across NSOs.
- **Improve Dissemination**: Streamline the dissemination of project results to ensure wider access and usability of outputs for the statistical community.

#### 2. Purpose of the evaluation and structure of the document

This evaluation aims to determine how well the UNECE project E331 "Modernising Statistical Production Phase 3", undertaken under the auspices of the High-Level Group for the Modernisation of Official Statistics (HLG-MOS) established by the Conference of European Statisticians (CES) met its goals. The project is presented in Section 3.

Phase 3 was set up to support the activities of the work program decided by the HLG-MOS for the project period (**July 2019 to December 2023**). The focus is on supporting the development of new models, frameworks, guidance and capabilities of National Statistical Offices (NSOs) and other producers of official statistics.

This report examines the project's relevance, effectiveness, efficiency, sustainability, and its impact on human rights, gender equality, disability inclusion, climate change, and disaster risk reduction. Additionally, it reviews how the project adapted to the COVID-19 crisis.

The evaluation employed various methods such as desk reviews, surveys, interviews, and observations of online events, described in Section 4. The findings, presented in Section 5, may be used to enhance future initiatives of the UNECE to modernise official statistics.

Annex 1 recalls the Terms of Reference of this evaluation.

## 3. What is the HLG-MOS "Modernising Statistical Production Phase 3"

The Bureau of the Conference of European Statisticians (CES) decided in 2010 to set up the **High-Level Group for the Modernisation of Official Statistics (HLG-MOS)**. CES endorsed HLG-MOS as a key initiative aimed at **advancing the field of official statistics** by developing **standards**, **services**, **capabilities and frameworks** to increase efficiency in a sustainable way.

The UNECE project E331 "Modernising Statistical Production Phase 3" was set up to support the activities of the work program decided by HLG-MOS for the project period (**July 2019 to December 2023**).

#### 3.1. Objectives and expected outcomes

The focus of the project is on supporting the development of new models, frameworks, guidance and capabilities.

Its objectives are:

 Modernisation of Official Statistics: The primary objective of HLG-MOS is to drive the modernisation of official statistics, ensuring that statistical systems remain relevant and effective in a rapidly evolving data landscape.

- Innovation: HLG-MOS encourages innovation in data collection, analysis, and dissemination. It promotes the adoption of new data sources, technologies, and methodologies to improve statistical production.
- Capabilities: It aims to enhancing the capabilities of national statistical offices by providing guidance, training, and knowledge-sharing opportunities.
- International Cooperation: HLG-MOS fosters international collaboration among countries, international organisations, and statistical experts to develop and harmonise statistical standards, methods, and best practices.

On the short term, the direct result of the project should be *increased capabilities at NSOs and the increased availability of jointly produced models, standards, services and frameworks that have been produced by and for the NSOs.* 

And thus, the Project Document states the expected direct results of the project's implementation:

- Development of new technical and managerial capabilities
- Increased use of common models and standards
- More shared statistical services available
- Implementation of common frameworks.

#### 3.2. What is not the HLG-MOS Phase 3

It is important to keep in mind some specific aspects of the project, which makes it different from other regional or global statistical initiatives to support official statistics:

The activities HLG-MOS do not intend to onboard all countries.

HLG-MOS is a group of committed **Chief Statisticians** actively steering the modernisation of statistical organisations. The participants in its activities are often **technical staff** from **advanced National Statistical Offices** (NSOs) and other agencies involved in producing official statistics. Participation is open to all NSOs, and they participate to produce models, services, and practices, and they implement them to their own benefit. To formalise the participation in HLG-MOS, some countries and organisations had signed a Statement of Intent to contribute to HLG-MOS when the project started in 2019.

It has to be noted that by design, HLG-MOS does not intend to require the participation of all Member States of the UNECE but conducts its work program through willingness of the participating offices.

The HLG-MOS Phase 3 is not a traditional capacity building program for NSOs.

The project also **did not consist of technical assistance or capacity building** but focuses on supporting the HLG-MOS work program that brings together able and willing experts to share experiences and develop solutions that are shared in a broad official statistical community.

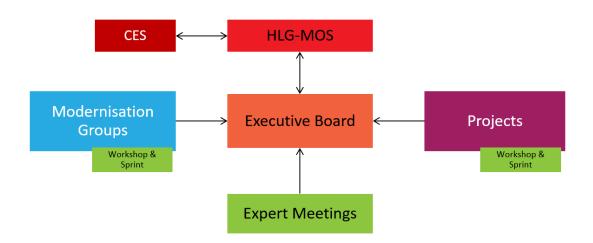
• The design of the HLG-MOS Phase 3 did not pre-specify a list of deliverables to be produced.

The project is about addressing the emerging needs of statistical organisations and develop solutions, therefore by its nature, it did not plan detailed specific expected output and activities in advance.

#### 3.3. Governance structure

The HLG-MOS initiative is structured around several key bodies:

Figure 1. Structure of the HLG-MOS.



- The HLG-MOS provides a strategic vision for the modernisation work and regularly updates its implementation strategy to stay abreast of the latest developments.
- The **Bureau of the Conference of European Statistics** reviews and approves the work program of HLG-MOS prior to its approval by the plenary Conference.
- The Executive Board (EB) is responsible for coordinating the work of the various groups, reducing duplication, and creating synergies. EB discusses and provides feedback and selects proposals that will be considered as HLG-MOS projects or flags for other types of follow-ups. It typically consists of deputy Chief Statisticians or senior level managers.
- **HLG-MOS projects:** 2-3 projects are selected annually on emerging technologies and ideas, normally with a fixed time frame of 1-2 year (e.g., machine learning, strategic communication).
- The HLG-MOS modernisation groups provide continuous support to cross-cutting pillars that are important for modernising statistical organisations, such as standards and human resources. The groups (Blue-Skies Thinking Network; Supporting Standards Group; Capabilities and Communication Group; Applying Data Science and Modern Methods) are responsible for developing tools, methodologies, and best practices in various areas of official statistics, such as data sharing, data quality, and data visualisation. These groups operate on a longer term, with activities under each group changing every year to address the most urgent needs in their respective working areas (carried out by task teams). The groups select an overall chair, and additional chairs are selected for the various task teams and subgroups. The chairs of the groups provide bimonthly updates to the Executive Board. These teams are composed of experts and professionals from member states and international organisations. Groups

have monthly virtual plenary meetings, and task teams typically meet virtually at least once a month. Task teams work on producing reports, guidelines, and recommendations. The groups and task teams may organise sprint workshops to expedite the work.

 Secretariat support is always provided by UNECE Statistics Division. The UNECE Secretariat provides administrative and technical support for HLG-MOS activities. This includes organising meetings, coordinating projects, and facilitating knowledge sharing.

Annex 2 includes a description of the activity of the Modernisation Groups.

#### 3.4. Collaboration infrastructure and modalities

The collaboration modalities for the activities of HLG-MOS include:

Physical and online expert meetings

**Expert meetings** are organised to discuss various substantive areas such as collection, editing, confidentiality, and dissemination/communication. One-off workshops can also be organised ad-hoc to address emerging topics and issues related to HLG-MOS projects and activities of the year. The focus of expert meetings and workshops is on innovative developments and modernisation, and the meetings are used to receive input on HLG-MOS activities, share works, and identify areas for future work and collaboration among organisations. As of 2023, expert meetings are held with a 24-month cycle for inperson meetings, with online meetings organised in alternate years to address more specific or emerging issues related to HLG-MOS projects and activities.

**Sprint workshops** are organised to tackle issues and develop ideas on a very short and agile time. The sprint meetings are important collaboration methods used by HLG-MOS projects, modernisation groups or task teams to expediate the work through intensive discussions.

• Technical collaborative tools

The collaboration infrastructure available for the work of the different groups of the HLG-MOS include a large number of wiki sites, web pages, GitHub spaces, and other platforms for collaboration and sharing of information. The UNECE secretariat manages and maintains about fifty different public and restricted wiki sites available for collaborative purposes or for sharing output from HLG-MOS activities.

Coordination with other international initiatives

The HLG-MOS secretariat, provided by UNECE, coordinates within the UNECE Statistical Division and with other international organisations working on the modernisation of official statistics, such as Eurostat, the OECD, UNDESA, and others when relevant. It also aims at ensuring coordination and linkages with international activities in similar areas, such as the Global Working Group for Big Data<sup>2</sup>, the ESSnet projects<sup>3</sup>, and UN-GGIM.

3rd Mtg EG ISGI Paris/documents/UN%20GWG%20Big%20Data%20presentation.pdf

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<sup>&</sup>lt;sup>2</sup> https://ggim.un.org/meetings/2016-

<sup>&</sup>lt;sup>3</sup> https://cros.ec.europa.eu/

Representatives from HLG-MOS, including chairs, project managers, and group members, coordinate the work done under HLG-MOS with other national and international activities.

Providing technical assistance to other countries on implementing modernisation models or other guidelines, frameworks, and recommendations produced under HLG-MOS is normally done by UNECE regional advisors and secretariat in collaboration with experts in HLG-MOS modernisation groups.

#### Pooling resources

The HLG-MOS Statement of Intent is an agreement for agencies to contribute to implementing the program of work, with in-kind or financial support considered reasonable of the total organisation budget. It was signed with a few countries (see Section 5.3). Agencies that have signed the Statement of Intent and can be considered as implementation partners include a list of countries and organisations, with UNECE as the implementing agency of the project.

#### Enhanced involvement of EB

Some EB members play the role of Champions, who cover all aspects of a group/project/workshop, including being a contact point for issues, membership management, content focus, alignment with HLG-MOS strategy and vision, coordination of workshops with the strategic agenda, interlinking various groups, and coordinating activities between them, as well as coordination with other international activities.

#### 3.5.Resources

The "Modernising Statistical Production Phase 3" (hereafter "Phase 3") has a budget of 600,000 USD to implement activities from 01.07.2019 until 31.12.2022 (3.5 years) (see table below).

The members of the HLG-MOS provided the funds for this project.

The work of the HLG-MOS projects is normally led by project managers that are either assigned by a member of HLG-MOS (**in-kind contribution**) or contracted by UNECE using the project fund ("Phase 3"). As a guide, the agreement considers in-kind or financial support in the region of 0.05% to 0.1% of total organisation budget as reasonable.

Table 1. Project budget.

#### Project Budget

Project Budget										
Code	Object class	Activity/ Purpose	Units	Cost per unit (USD)	Total amount per object class (USD)					
010	Staff and personnel (consultants)	A1.1. International expert to lead the work on the annual HLG-MOS project	2 Consultants per calendar year for the duration of the project x \$4,250 per month (2x3.5x12 months = 84 units)	4,250	357,000					
010	Staff and personnel (consultant travel)	A1.2. Preparing and organising project sprints and workshops in support of the project deliverables	2 to 3 missions per year x \$3,600 (4x2.5= 10 units) <sup>8</sup>	3,600	64,800					
		A1.3 Represent and present the project at relevant coordination meetings	2 missions per year x \$3,600 (4x2=8 units) <sup>9</sup>	3,600						
120	Contract service	A1.1 UN levied fee	Compulsory 1% levy on consultant contracts		3,570					
160	Travel of Staff	A1.2. Preparing and organising project sprints and workshops in support of the project deliverables	3 missions per year x 3,600 (3x4=12 unites)	3,600	72,000					
		A1.3 Represent and present the project at relevant coordination meetings	4 missions per year x1800 (4x4=16 units)	1,800						
160	Travel of meeting participants	A1.2. Support in participation of experts in project sprints and workshops in support of the project deliverables	4 missions of 2 participants per year x\$900 (4x3x2=24 units)	900	21,600					
125	Operating and other direct costs	All activities	3,5 years \$ 500		1,018					
135	Equipment vehicles and furniture	All activities	3,5 years \$ 500		1,750					
Budge	t Sub-Total				521,738					

2% for evaluation (for projects above 250,000\$	10,435
13% UN Programme Support Cost	67,826
Total budget *	600,000

Upon receipt of the new contribution from donor(s), when issuing the released budget for the new project, apart from the deduction of the required standard 13% UN Programme Support Costs, 15% operating reserve of the estimated annual expenditures during the year will be deducted from the cash available balance, which will be released during the last year of the project implementation.

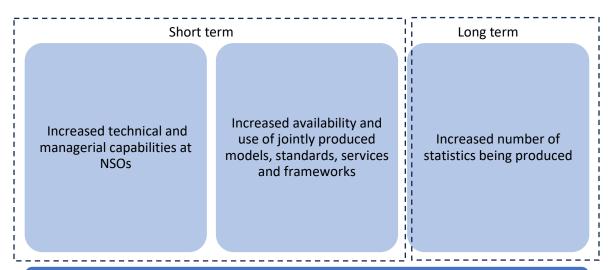
#### 4. Methodology for the evaluation

This section presents the methodology for collection and analysis of the information from documents, questionnaires and in-depth interviews with participating experts in the HLG-MOS activities.

#### 4.1.Logical framework

The evaluation is guided by the objectives, indicators of achievement and means of verification established in the **logical framework** of the project document:

Figure 2. Logical Framework of the HLG-MOS Phase 3 project.



National Statistical Offices (NSOs) are better able to modernise their statistical production, including by improved international collaboration

SDG 17.18: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts

SDG 17.19: By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries



All other SDGs will benefit of increased evidence for measurement and monitoring

#### Objective

Strengthening capacities of National Statistical Offices (NSOs) to modernize their statistical production by pooling together resources and jointly develop models, tools, services, capabilities and frameworks that are needed to address the challenges NSOs face in producing the statistics needed to encounter the challenges of the ever-changing data ecosystem and demand for statistics.

This project supports the work program of the High-Level Group for the Modernisation of Official Statistics that brings together experts from NSOs that are able and willing to jointly make resources available to develop products for everybody to use that are needed to modernize the statistical production.

#### **Expected Accomplishments**

EA1. Increased capacity of national statistical offices to modernize the production of statistics and address the emerging issues identified by the High-Level Group for the Modernisation of Official Statistics.

#### Indicators of achievement

IA1.1 Between 6 and 8 models, standards, services and frameworks have been developed and endorsed by the CES. or implemented by countries.

IA1.2. At least 15 statistical organisations have collaborated, shared experiences and obtained new capabilities in producing and implementing models, standards, services and frameworks.

- A1.1. Expert and project management support to the two annual HLG-MOS projects (6-8 in total).
- A1.2. Preparing and organising project one sprint<sup>6</sup> and similar type of workshops in support of each project each year to advance the project deliverables (8-12 in total).
- A1.3. Represent and present the project at relevant expert and coordination meetings such as Eurostat/ESSnet and OECD meetings related to the modernisation of statistics (12 in total).

#### 4.2. Evaluation criteria

Evaluation<sup>4</sup> is defined as a systematic and discrete process, as objective as possible, to determine the relevance, efficiency, effectiveness, impact, and/or sustainability of any element of a program's performance in relation to their objectives. The usual criteria for an evaluation (such as those provided by the OECD) include the following dimensions: relevance, effectiveness, efficiency, coherence, sustainability, impact, stakeholder engagement, transparency and accountability.

This evaluation focuses on assessing the **relevance**, **effectiveness**, **efficiency and sustainability** of Phase 3. It also considers:

- The impacts the project may have had on progressing human rights, gender equality, disability inclusion, climate change and disaster risk reduction in the context of this engagement.
- The impact of COVID-19, in relation to the obstacles it created and how they were addressed.

The definition of the evaluation criteria covered by this exercise follow:

- ✓ Relevance: Evaluations should assess the extent to which the program's objectives and activities are aligned with current and emerging needs, priorities, and the overall policy context. This involves considering whether the program addresses important policy issues and whether its objectives remain relevant.
- ✓ Effectiveness: Evaluations should focus on the achievement of the program's intended outcomes and objectives. This criterion assesses the degree to which

<sup>&</sup>lt;sup>4</sup> https://unece.org/evaluation-reports

- the program has produced the expected results and contributed to the desired outcomes.
- ✓ **Efficiency**: Evaluations should examine the cost-effectiveness and efficiency of the program's operations. This includes assessing whether the program is delivering its outcomes in a cost-effective manner and whether resources are being used efficiently.
- ✓ **Sustainability**: Evaluations should consider the long-term sustainability of the program's outcomes and impacts. This includes assessing the extent to which the program's results are likely to be sustained beyond the evaluation period.

# 4.3. Evaluation of the alignment with human rights, gender, disability, SDGs, and climate change.

#### **Human rights**

The project design document mentions contributions to human rights in the context of aligning with international frameworks that include human rights instruments. Specifically, the project justification explicitly takes into consideration international frameworks with a clear gender component, such as the Sustainable Development Goals (SDGs) and human rights instruments, which are designed to meet the different needs and priorities of women and men. Additionally, the project's relevance to monitoring SDGs, which are inherently linked to human rights, is emphasised as it enables the production of statistics necessary to measure and monitor progress towards these goals, including those related to human rights.

#### **Sustainable Development Goals**

The project design document mentions the alignment with the SDGs in a twofold aspect:

- Improving the statistical capacity (SDG 17, target 17.18) and contributing to the measurement of development besides GDP (Target 17.19)
- The statistical monitoring of all SDG indicators (including for Voluntary National Reviews) is supported by the improvement of capacity of NSOs.

It is important to mention that Target 17.18 addresses the needs of the statistical systems of developing countries, while the HLG-MOS, is mostly based on the participation and contribution of the staff of the most advanced NSOs, and in this sense, it is not fully aligned with the mentioned target as it does not include specific technical assistance or capacity building measures.

#### Gender issues

The HLG-MOS project documents states that it is expected to contribute to gender issues by enabling the production of sex-disaggregated or gender-relevant data and qualitative indicators. However, gender equality has a moderate or minor role in the objectives of the project and there is no specific mention of gender in the project objectives.

So, only indirectly, the project may contribute to increase gender equality by improving the capacity of NSOs to measure it.

#### **Disability issues**

While the project design document does not explicitly mention disability issues in the context of the project's contributions, it does refer to the need for statistics to be compiled for various vulnerable groups, including persons with disabilities. The commitment to

"leaving no one behind" is emphasised, which implies the inclusion of disability issues in the broader scope of producing statistics for all segments of the population.

#### Climate change issues

The project design document does not explicitly mention climate change issues. However, considering the project's focus on modernizing statistical production to cover all SDGs adequately, it can be inferred that climate change issues, which are part of the SDGs (specifically SDG 13 on climate action), would be indirectly supported by the project's efforts to enhance the monitoring and reporting capabilities of national statistical systems.

The evaluation of how Phase 3 has tackled these issues is therefore carried out in the basis of:

- Answers to the structured online questionnaire
- Checking of outcomes and presentations in HLG-MOS conferences

#### 4.4. Evaluation questions and potential sources of information

Evaluation questions are proposed in the ToR of this assignment. Preliminarily, the evaluator identified the potential sources of information, including:

- Project design documents
- Annual activity and financial reports
- Outputs (presentations, manuals, guidelines, etc.)
- Online interviews to selected participants
- A structured questionnaire to participants
- Documentary research on UNECE, HLG-MOS and other institutions' sites.

The table below identifies the types of sources of information to answer each evaluation question, which are described in further detail in the next sections.

Table 2. Potential sources of information for the evaluation.

Potential sources of information Relevance Project design documents 1. To what extent did the project respond to the priorities Interviews to NSOs + documentary research and needs of national statistical offices in beneficiary (NSO documents) countries in modernising their statistical production? Remote observation of meetings<sup>5</sup> 2. To what extent were the project activities consistent Documentary research (UNECE work program, with global and regional priorities and aligned with the SDGs? Documentary research (UNECE Subprogram 3 3. How relevant were the project activities vis-à-vis the program of work of the UNECE? What value has "Statistics" of the UNECE program budget for UNECE added in this area? 2018-2019)

<sup>&</sup>lt;sup>5</sup> The HLG-MOS Workshop on the Modernisation of Official Statistics - 21 Nov 2023. did not provide for remote participation. No other meeting is foreseen within the deadline of the evaluation and therefore this source of information was not used for the evaluation.

4. To what extent were gender, human rights, disability perspectives and climate change considerations integrated into the design and implementation of the project? How can these perspectives be better included in future projects design and implementation?	Check of outcomes Remote observation of meetings (see footnote)									
Effectiveness										
5. To what extent were the <b>project design and set-up</b> effective for meeting the needs of statistical offices in beneficiary countries?	Project design documents Interviews to NSOs									
6. To what extent did the project achieve its objectives and expected results, namely, to improve the competencies of statistical offices in the beneficiary countries to modernise their statistical production and to address the emerging issues identified by HLG-MOS in the field of official statistics?	Project design documents Reports of WGs, reports to CES Interview to NSOs (competencies acquired)									
7. To what extent are the project activities <b>coherent and harmonised with those of other partners</b> operating within the same context, particularly those of other UN system entities?	Documentary research (UN Global Platform, European Statistical System: CROS, ESSnet and ESS.VIP, UNCGIM, UN Statistical Commission, etc.)									
8. Which <b>obstacles and difficulties</b> did statistical offices face, if any, that prevented them from actively participating in the project?	Interviews to NSOs Remote observation of meetings (see footnote)									
9. What were the challenges/obstacles (including COVID-19) to achieving the expected results? How successfully did the project overcome these?	Reports of WGs, reports to CES									
Efficiency										
10. Were the <b>resources</b> adequate for achieving the results?	Project design documents Financial reports (HLG-MOS Trust) Interviews to NSOs (financial and in-kind contribution)									
11. Were the results achieved on time and were all activities organised efficiently?	Reports of WGs, reports to CES Financial reports (HLG-MOS Trust) Interviews to NSOs (financial and in-kind contribution)									
12. To what extent were the <b>resources used economically</b> and how could the use of resources be improved?	Financial reports (HLG-MOS Trust) Interviews to NSOs (financial and in-kind contribution)									
Sustainability										
13. What measures were adopted to ensure that project outcomes would continue after the project ended and to what extent have these measures addressed the existing risks for sustainability?	Interviews to NSOs / UNECE									
14. To what extent do the <b>partners and beneficiaries</b> 'own' the outcomes of the work? How is the stakeholders' engagement likely to continue, be scaled up, or replicated?										
15. To what extent project activities streamlined with countries projects and activities?	Interviews to NSOs									

#### 4.5. Sources of information

#### 4.5.1. Documentary review

The HLG-MOS initiative has produced an impressive amount of documentation, including websites (wikis). Thus, the documentary review has been supported by the use

of AI tools<sup>6</sup> to extract information in a structured way and then revised by the evaluator. The review has two main purposes: (1) familiarise the evaluator with the objectives, achievements and issues of the different HLG-MOS work streams and (2) collect information to answer the evaluation questions. In this sense, the information provided by the documents is considered at face value, as it has been in general validated for presentation to high-level bodies (such as CES) and to scientific audiences (in the technical workshops).

The following materials have been provided by the UNECE HLG-MOS Secretariat:

- Project Document: Project Document Modernisation Phase 3 final.pdf
- Evaluation ToR: ToR Evaluation E331 final.pdf
- Annual Reports: HLG-MOS Work Programs (reports to CES)
  - o 2019 HLG-MOS Report
  - o 2020 HLG-MOS Report
  - o 2021 HLG-MOS Report
  - o 2022 HLG-MOS Report
  - o 2023 HLG-MOS Work Program
  - o 2023 HLG-MOS Report
- Meeting minutes related to project monitoring and implementation: <u>HLG-MOS</u>
   <u>Executive Board Meetings</u> (EB consists of senior-level managers from statistical organisations and provides a continuous monitoring and advisory for the HLG-MOS works). While this EB meetings are non-public, all important updates from on-going work are made available publicly (see <u>regular updates on the work of HLG-MOS</u>)
- Knowledge Products (selected products from selected activities)
  - On the topic of ML/AI: <u>ML Project Report, ML wiki, Publication on Machine Learning for Official Statistics</u> (from HLG-MOS project 2019-2020; ONS-UNECE Machine Learning Group 2021-2022)
  - On the topic of confidentiality: <u>Synthetic Data for Official Statistics</u> (from HLG-MOS project 2021); Input Privacy Preservation (from HLG-MOS project 2020-2022)
  - On the topic of communication: Strategic Communication (from HLG-MOS Project 2018-2019); The Role of Brand Management, Marketing and Crisis Communication for Statistical Organisations (from a Modernisation Group on Capability, 2022);
  - On the topic of standards: Geospatial view of Generic Statistical Business Process Model (from a Modernisation Group on Standards, 2021), <u>Linking GSBPM and Generic Statistical Information Model (GSIM) -</u> <u>Information Flow within GSBPM using GSIM</u> (from a Modernisation Group on Standards, 2022)
- Results of the survey on the use of ModernStats models of 2021.
- Bi-monthly updates at the ModernStats wiki (https://StatsWiki.unece.org/display/hlgbas/Modernisation+updates)
- List of <u>HLG-MOS Projects</u> and <u>Project Proposals</u>
- List of HLG-MOS Modernisation Group and their Activity Proposals
- List of Expert Meetings

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<sup>&</sup>lt;sup>6</sup> For example, HUMATA (<u>https://app.humata.ai/</u>).

#### 4.5.2. Surveys by UNECE

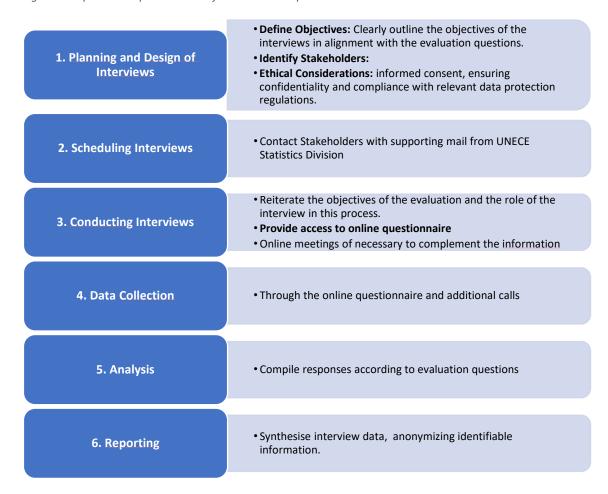
UNECE HLG-MOS Secretariat carried out two surveys in 2018 and 2021 to the international relationship departments CES members and international organisations' statistics department on the use of HLG-MOS ModernStats models.

2018 survey result was presented at the ModernStats World Workshop 2018 (this is the main meeting HLG-MOS has on the models such as GSBPM and GSIM) but 2021 results were published only via stats wiki blog (as the ModernStats World Workshop didn't take place in 2021) and discussed at the meetings of the modernisation group on standards ("Supporting Standards Group") to guide its future direction.

#### 4.5.3. Interviews to stakeholders and online questionnaire

To complement the documentary reviews, interviews by the evaluator to stakeholders followed a traditional methodological approach including a limited number of in-depth interviews (around 45 minutes) and a structured online questionnaire. The steps are summarised in the diagram below:

Figure 3. Steps in the implementation of interviews and questionnaire



Five in-depth interviews were conducted during December 2023 to staff from NSOs participating in the HLG-MOS activities with different levels of involvement (from leaders

of groups to experts participating occasionally). An anonymised summary is included in Annex 6.

Additionally, an online questionnaire has been designed to collect information from staff of NSOs using the *QuestionPro* software<sup>7</sup>. The questionnaire (see Annex 3) consists of several sections designed to evaluate the HLG-MOS initiative from various perspectives. The sections include:

- Familiarity with HLG-MOS: Questions assess respondents' familiarity with the design and activities of HLG-MOS.
- Relevance: Queries focus on whether HLG-MOS addresses the priorities and needs of national statistical offices, including top priorities of the work program.
- Effectiveness: This section evaluates the effectiveness of HLG-MOS activities in meeting modernisation needs through scales measuring various outcomes.
- Obstacles and Difficulties: Questions identify challenges preventing active participation in HLG-MOS activities.
- Efficiency: Assesses if resources were adequate for carrying out HLG-MOS activities.
- Sustainability: Queries about measures adopted to ensure the project's longevity and the extent of the NSO's use of the outcomes.

The questionnaire uses various types of questions, including Likert scales, multiplechoice, yes/no options, and open-ended questions for detailed responses. This approach aims to gather both quantitative and qualitative data.

Data were cleaned (incomplete responses were examined) and the aggregate results of 22 valid responses have been produced<sup>8</sup>.

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<sup>&</sup>lt;sup>7</sup> https://www.questionpro.com/

<sup>&</sup>lt;sup>8</sup> Anonymised individual records are available if necessary to replicate the statistical process.

#### 5. Conclusions of the evaluation

This section presents conclusions of the evaluation, based on the triangulation of findings from the desk research, in-depth interviews and responses to the questionnaire.

#### 5.1.Relevance

Relevance is evaluated considering the extent to which the program's objectives and activities are aligned with current and emerging needs, priorities, and the overall policy context. In this case, the evaluation questions on relevance are:

- ✓ To what extent did the project respond to the **priorities and needs of national statistical offices** in beneficiary countries in modernising their statistical production?
- ✓ To what extent were the project activities consistent with global and regional priorities and aligned with the SDGs?
- ✓ How relevant were the project activities vis-à-vis the program of work of the UNECE? What value has UNECE added in this area?
- ✓ To what extent were **gender**, **human rights**, **disability perspectives and climate change considerations** integrated into the design and implementation of the project? How can these perspectives be better included in future projects design and implementation?

#### 5.1.1. Addressing the priorities of NSOs and regional needs

<u>Technical topics</u>, while widely discussed in the Official Statistics community, may be biased towards the needs of more advanced NSOs, while the results of activities on institutional topics should benefit a larger community of NSOs.

An extraction<sup>9</sup> of the topics recorded for the different activities of the HLG-MOS can be graphically represented by the mind map in Figure 4.

Questionnaires to participants in HLG-MOS activities confirm that the project addressed the priorities and needs of national statistical offices (NSOs) for modernizing their statistical production, especially of those directly involved with HLG-MOS. While this may seem a **bias towards the needs of more advanced statistical offices**, the review of recent international initiatives in the field of official statistics, and the domain of data science, shows that the *technical issues* dealt with by the project are widely discussed in different fora a such as the UN Statistical Commission, European Statistical System (ESS) working groups and innovation projects, the NTTS conferences<sup>10</sup>, the forums on technical assistance projects to less developed statistical systems (e.g. in the area of adoption of standards such as GSPBM) and even the private sector (e.g. interoperability of systems, moving to cloud computing). Therefore, less advanced NSOs may still benefit of the results of technical outputs, but this would require an explicit investment in transfer of know-how (see the **Recommendations**).

On the other side, *institutional issues* related to ethics, communication and dissemination of official statistics and human resources (HR) development, address the needs of public institutions such as NSOs, independently of their level of technical development. The

<sup>&</sup>lt;sup>9</sup> Carried out using the AI tool Humata and the Text2Map software.

<sup>&</sup>lt;sup>10</sup> See for instance <a href="https://ec.europa.eu/eurostat/web/european-statistical-system/-/new-techniques-and-technologies-for-statistics-ntts-">https://ec.europa.eu/eurostat/web/european-statistical-system/-/new-techniques-and-technologies-for-statistics-ntts-</a>.

appropriation of the project results in these institutional areas is easier than for technical results and should be the object of wider dissemination (see **Recommendations.**)

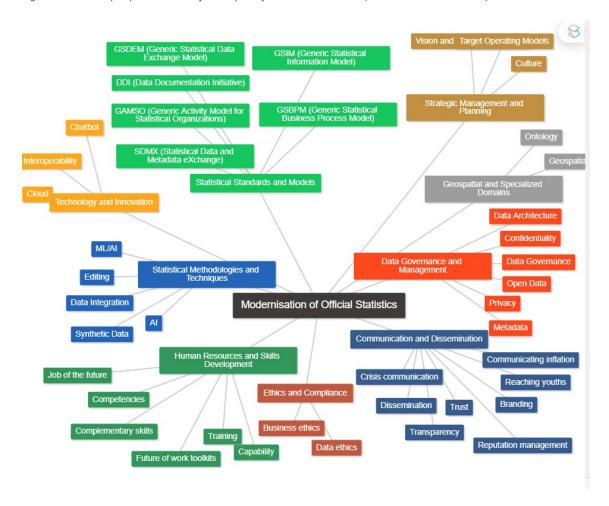


Figure 4. Mind map representation of the topics of HLG-MOS activities (source: own elaboration)

It is important to mention that the national level, the priorities for statistical work in the EU Member States are largely determined by the legal obligations (EU Regulations on statistics). This means that resources in EU NSOs are first allocated to the implementation of "routine" national and EU work programs of data collection. While the EU Regulations do not – in general – prescribe any data collection or processing technology, innovation in EU NSOs may suffer from lower priority, as it is not grounded on a legal basis.

### <u>The HLG-MOS activities are consistent with regional priorities, but coordination may be</u> enhanced

The topics for development are largely defined by the HLG-MOS modernisation groups themselves<sup>11</sup>, guided by the HLG-MOS Executive Board, and subsequently approved by **HLG-MOS Executive Board and by the larger statistical community in the UNECE region at a high level (CES).** At the same time, it is clearly linked to the Expected Accomplishments of the Subprogram 3 "Statistics" of the UNECE program budget for

<sup>&</sup>lt;sup>11</sup> Projects are often initiated from the BTSN.

2018-2019: (b) Updated and newly developed standards and recommendations to enhance the quality and international comparability of statistics and monitoring of the Sustainable Development Goals. However, the Expected Accomplishments (c) Improved national capacity to implement international standards and recommendations in official statistics, including on the Sustainable Development Goals and gender-sensitive indicators would require a capacity-building accompanying measure (see Recommendations).

At the global level, other initiatives intersect with areas of modernisation e.g. in the area of new data sources. For instance, the UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD). It has been led by countries that participate as well in the HLG-MOS, ensuring some level of coordination.

Given that the UNECE region largely intersects with the EU, it is relevant to consider the coordination of HLG-MOS activities with those of the European Statistical System (ESS).

Eurostat is one of the institutions having signed a Letter of Intent for collaboration with the HLG-MOS. This is a strong framework for coordination. Indeed, the interviewees highlighted varying levels of coordination - including informally - with other initiatives, such as those dealt with the DGINS conferences (of Directors-General of the NSOs) and the group of Methodology and IT directors of EU NSOs (ESS DIME and ITDG). These high-level groups of EU Member States' representatives elaborate on recommendations in areas such as confidentiality, standards, data interoperability, etc. also covered by the HLG-MOS, and even on the management of innovation in NSOs<sup>12</sup>.

At the same time, there are innovations projects in the frame of the ESS which coincide or overlap. This is the case of several ESS.VIP ("Vision Implementation Programme") and ESSnet projects and networks. Some interviewees view this as an advantage given as the HLG-MOS provides an additional forum, while other mentioned that the EU financing of the participation of NSOs staff makes them more attractive.

Given that the constituency of the DGINS, ESS DIME/ITG and the CES is largely the same for EU countries, some *de facto* coordination is ensured, and the additional presence of other countries of the UNECE region is highly evaluated by the interviewees.

As the evaluation does not cover the criterion of coherence, a detailed assessment of the coverage of HLG-MOS activities with those of the ESS, or other frameworks has not been carried out.

**Recommendation:** It is highly recommended that the CES examines in detail the coordination of HLG-MOS program with that of other global and regional initiatives, especially those of the UN and ESS, and requires specific annual reporting of synergies.

## 5.1.2. Considerations on human rights, gender equality, disability inclusion, climate change and disaster risk reduction

Only one-quarter to one-third of respondents consider that any of these topics has been taken into account in the design of the project.

Examples of considering climate change included not only the better measurement through innovative data sources, but also the mitigation of emissions by replacing

<sup>&</sup>lt;sup>12</sup> See for instance the agenda of the DGINS 2022 program (https://egencia.qondor.com/Program/Display/Index/4420?projectId=105130#/program).

physical by online meetings. One participant mentioned the fair representation of genders at all levels of activities.

There are no explicit mentions to Human Rights in the documents reviewed. Official statistics may contribute to the improvement of Human Rights by providing empirical data that governments and international organisations can use to formulate policies aiming at protecting and promoting Human Rights, for example, by identifying vulnerable groups, providing evidence on inequality. In this sense, a project that aims at improving the processes in Official Statistics may have an indirect positive impact on Human Rights.

On the other side, statistical techniques such as data linking – promoted as a form of modernizing the statistical processes – can have an impact on data privacy. In this sense, data privacy and the protection of confidentiality are central themes in the **Input Privacy-Preservation Techniques** project. The project aims<sup>13</sup> to investigate modern and innovative privacy-preserving techniques and methods that offer protection on the input side. The project also involves documenting statistical use-cases relevant for the application of privacy-preserving techniques. One presentation by Statistics Canada was made on the Necessity and Proportionality Framework, which describes all steps undertaken and decisions made with respect to privacy and ethics.

#### 5.1.3. Considerations on gender equality and disability inclusion

The HLG-MOS project design mentions gender equality and disability inclusion but there is no strong evidence of results relevant to these objectives

Gender equality is not the principal objective of the project <sup>14</sup> but has a moderate or minor role. The project design clearly indicates that it does not correspond to any of the strategic objectives specified in the UNECE Policy for Gender Equality and the Empowerment of Women for the Sub-program. The results framework of the project includes gender-responsive indicators or targets, which are designed to meet the different needs and priorities of women and men. However, it does not include a baseline to monitor gender equality results.

There is however no specific project objective with respect to disability inclusion.

HLG-MOS results ensure the modernisation of the production of official statistics, independently of the domain. In this sense, gender and disability statistics may benefit of the results but there is no strong evidence of direct impact.

It is expected to contribute to gender equality by **making data available to support the empowerment of women**. It takes into consideration international frameworks with a clear gender component, such as the Sustainable Development Goals (SDGs) and human rights instruments, as well as country-specific gender policies or commitments, such as National Gender Action Plans. The project is also supposed to enable countries to produce sex-disaggregated data necessary to monitor and study gender-related policies and issues.

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<sup>&</sup>lt;sup>13</sup> See Work Program for HLG-MOS in 2020

<sup>&</sup>lt;sup>14</sup> See the Project document (project Document Modernisation Phase 3 final.pdf).

The HLG-MOS results, in particular the Employee, Manager and Employer Toolkits, attaches importance to gender and disability issues, but do not provide concrete recommendations to NSOs.

Within the workstream related to the management of NSOs ("Capabilities and Communication Group"), the project includes activities on creating an agile and skilled workforce and stimulating cultural evolution within offices to increase the attractiveness of NSOs by allowing a *good life and work balance for both men and women*. Task teams under this stream devised Employee, Manager and Employer Toolkits which consider this aspect<sup>15</sup>. The same happens for disability inclusion: the Toolkit mentions that NSOs may achieve greater diversity of workforce through making the workplace more accessible to a range of diverse groups, e.g. helps remove physical barriers to accessing the workplace. However, it does not provide concrete recommendations for that aim.

It is recommended that the relevant Task teams under the ("Capabilities and Communication Group" elaborate concrete recommendations, by taking stock of good practices. For example, a recent initiative of a side event of the 55<sup>th</sup> session of the UN Statistical Commission considers the leadership of female directors of NSOs.

Gender parity was not an issue in the participation to HLG-MOS activities. There is no documentary evidence on the disability status of participants to HLG-MOS events and groups.

Statistics about the participation in HLG-MOS events is not centralised and therefore difficult to evaluate. It is proposed that the UNECE Secretariat of the HLG-MOS puts in place (or re-uses existing ones in the UN) a centralised registration system.

#### 5.1.4. Considerations on climate change and disaster risk reduction

The HLG-MOS does not explicitly consider targets related to climate change mitigation. However, the organisation of online meetings enlarged participation and mitigate environmental impact.

There is no specific mention to objectives related to mitigate / adapt to climate change. However, climate change is mentioned in the context of reducing its impact and facilitating a broader audience by organizing online events.

The Executive Board and the UNECE secretariat<sup>16</sup> decided to change the cycle of inperson expert meetings and workshops to 24 months in response to calls for action to reduce climate change. Online expert meetings and workshops, widely used in the HLG-MOS project, also contribute to reducing the environmental impact of these gatherings.

<u>There is no evidence of activities explicitly targeting the modernisation of environmental statistics.</u>

Since environmental statistics are crucial to monitor and design policies for mitigation / adaptation to climate change, the modernisation of this domain would have in principle a positive impact. However, no specific mention to environmental statistics is made except within the broad umbrella of the SDG indicators.

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<sup>&</sup>lt;sup>15</sup> Future of work Home - Future of work - UNECE Statswiki

<sup>&</sup>lt;sup>16</sup> See Report on the work of the HLG-MOS for 2022 (ECE/CES/2023/9)

Work on disaster risk reduction has taken place both in terms of recommendations for risk management and as reaction to the COVID-19 pandemic.

While disaster risk reduction is not explicitly mentioned in the project design, during the previous phase, "Guidelines on implementing risk management in statistical organisations" were drafted. <sup>17</sup> During Phase III, the response to the COVID-19 pandemic by NSOs (adapting the production methods) can be considered as activities to *mitigate* the impact of this epidemiological disaster.

Some activities planned for 2020 were delayed, realigned, cancelled or put on hold due to the COVID-19 pandemic, re-prioritizing the activities. The work of the Expert Group on Capabilities and Communication group nearly came to a full stop, since Human Resources (HR) and communication departments were strongly involved in the Covid-19 response in most offices. Most affected were also the physical gatherings, which were however attended by larger number of participants when moved to online formats. In this sense, the modification of the work program was beneficial.

Indirectly, other activities can be considered as disaster risk mitigation:

- The discussions on the use of the Cloud and Digital twins for the statistical business (reducing the risks of local database and system disruptions)
- The share of experiences on COVID impact surveys (from the activity report for 2022)
- The meetings about "Data Collection and the impact, challenges and opportunities of the COVID-19 pandemic" <sup>18</sup>

One major activity was the Workshop on the COVID-19 response in Human Resources management and training (September 2020) where countries shared their experiences.

Given that the data assets of the NSOs are one of their most valuable ones, it is important that the HLG-MOS investigates innovative solutions to preserve them in case of disaster. The use of cloud and other technologies should be continued in future work programs.

#### 5.2. Effectiveness

The evaluation questions regarding effectiveness are the following:

- ✓ To what extent were the **project design and set-up effective** for meeting the needs of statistical offices in beneficiary countries?
- ✓ To what extent did the project achieve its objectives and expected results, namely to improve the competencies of statistical offices in the beneficiary countries to modernise their statistical production and to address the emerging issues identified by HLG-MOS in the field of official statistics?
- ✓ To what extent are the project activities coherent and harmonised with those
  of other partners operating within the same context, particularly those of other
  UN system entities?
- ✓ Which **obstacles** and difficulties did statistical offices face, if any, that prevented them from actively participating in the project?

<sup>&</sup>lt;sup>17</sup> Guidelines on Risk Management - Guidelines on Risk Management - UNECE Statswiki

<sup>&</sup>lt;sup>18</sup> https://unece.org/statistics/events/DC2020.

✓ What were the challenges/obstacles (including COVID-19) to achieving the expected results? How successfully did the project overcome these?

#### 5.2.1. Project design and set-up

The project was designed by the HLG-MOS Secretariat, with the validation by the Executive Committee of UNECE. It includes a logical framework that specifies the expected accomplishments (project outcomes or impacts) but does not specify a list of activities (and a corresponding list of output indicators). This has advantages but also drawbacks:

- As clear advantage, it allows for flexibility of the activity plan to better suit the
  needs and resources of the participating countries. In this sense, interviewees
  have mentioned that there is a high degree of adaptation of the activities to their
  needs, but it is not clear that all activities benefit in the same way non-participating
  NSOs. It also does not preclude a calendar of activities, except for the meetings.
- On the other side, not having a predetermined list of outputs to be achieved, it is not possible to evaluate the effectiveness of the program in the usual sense.

The project design does not consider the participation of all NSOs of the UNECE region, but only those with volunteer and have practices to share. This limits the effectiveness of the HLG-MOS activities for non-participating NSOs. In any case, the number of organisations that have participated in events and groups is largely above the 15 mentioned in the logical framework indicator IA1.2, which can be considered as achieved. As one interviewee mentioned,

"The HLG-MOS is a unique and fruitful collaborative place. Its collaborative operation around activities proposed by the NSOs generates commitment from all parties."

As a negative evaluation by some participants, it was also mentioned that the activities did not widely reach the NSOs' staff (only the participants in activities), and one participant mentioned that the overall Official Statistical system is in crisis and that improving it needs a big change. Indeed, at the individual NSO level, the impact of participation in HLG-MOS activities varied, with some NSOs seeing organisation-wide benefits and skill development, while others had limited dissemination and awareness of innovation activities within their organisations. Training and accelerated acquisition of knowledge and skills was clearly achieved for the participation staff, but for non-participating colleagues in NSOs the impact was lower and depended on the internal dissemination of results (e.g. by the departments in charge of International Relations, Methodology, Training).

Networking with colleagues in other countries was seen as beneficial. The project design is based indeed on international collaboration. This has been highly evaluated by the participants as the most effective project result. While other networks exist, mainly within the ESS, the "innovation community" which has been created is positive. One interviewee from an EU NSO mentioned the interest of meeting colleagues from third countries, which are not subject to the EU statistical legislation, as a source for inspiration on innovative processes.

#### 5.2.2. Achievement of objectives and expected results.

While there is no predetermined list of outputs to be obtained, it cannot be overstated the large number and diversity of activities implemented and results produced. Around

140 events (meetings, working groups, workshops) have taken place between 2018 and 2023, which is a very large number for projects in the field of statistical collaboration (as a comparison, some domain-related working groups within the ESS take place at most 3-4 times a year). As an example of high frequency of HLG-MOS meetings, the modernisation working groups meet (virtually) on a monthly basis.

A list of (most) events, methodological materials, pilot studies, etc. has been compiled in Annex 4. Given that most of the documentation is online, in separate spaces of the UNECE StatsWiki, it is difficult to make an exhaustive listing of the outputs. Also, some of them have a concrete boundary (an event, a manual) while others are living materials (e.g. standards). In any case, the number of outputs is impressive and reflect the dedication of the experts involved in the different activities. A synthesis of outputs (not listing all events) is provided in the HLG-MOS StatsWiki. <sup>19</sup>

89% of the respondents to the evaluation questionnaire consider that the HLG-MOS achieved their objectives, improving the competencies of NSOs to modernise their processes and products. This is a very positive statement, which can be complemented with a handful of comments from the in-depth interviews:

"It provided NSOs with tools to tackle modern technological change, e.g., cloud, Al/ML, Data Science, etc. It has provided reference models for architecture work, and thus enabled better benchmarking between NSOs. It has built training platforms for NSOs to utilise, and so on."

"The best example is the Machine Learning project that expanded to numerous organisations and created a community that continues to learn and share on experiences and practices."

"Frameworks, standards and best practices developed and identified by HLG MOS are being used globally".

"Any effort on standardisation of statistical processes in the world uses UNECE standards".

Without going into deeper detail on the evaluation of how each one of the outputs has benefited the NSOs, the grouping of results as in the table below shows that tools and standards such as the GSBPM, GAMSO, etc. as well as the outputs related to new data sources are the most used by NSOs (according to the questionnaire responses). It seems that less technical activities (i.e. those related to management and communication) are less used.

<sup>&</sup>lt;sup>19</sup> https://statswiki.unece.org/display/hlgbas/HLG-MOS+Outputs

Table 3. Use of HLG-MOS outputs (responses to the questionnaire).

Statement	1	2	3	4	5	Overall
Tools and standards (e.g., GSBPM, GAMSO, GSIM, etc.)	0	0	3	6	8	17
Outputs related to new data sources (e.g., big data)	0	2	7	3	3	15
Outputs related to new statistical methods (e.g., ML, data integration)	0	3	4	7	3	17
Outputs related privacy (e.g., IPP, synthetic data)	3	4	4	2	1	14
Outputs related to Human Resource and risk management	5	4	4	2	0	15
Outputs related to communication and management of user relations	4	2	4	5	1	16

Scale: 1 – Not used 2 – Slightly used 3 – Moderately used 4 – Considerably used 5 – Extensively used Overall

It has to be recalled that the outputs of Phase 3 build on those of previous phases. In this sense, it is difficult to disentangle the effectiveness of this phase and the previous ones. Thus, indicator IA.1.1 of the logical framework (which sets a number of standards to be adopted between 6 and 8) should be considered as achieved in the context of the continuity of the programme of the Supporting Standards working group, which has developed or updated models such as GSBPM, GAMSO, GSIM, CSPA, Common Statistical Data Architecture (CSDA) and Core Ontology for Official Statistics (COOS), and worked out the links with other existing standards such as SDMX or DDI.

It is worth mentioning that the evaluation of use of outputs related to Human Resources, risk management, communication and user relationships are considered less used. There are outputs of the Capabilities and Communication Group. In the area of Human Resources Management and Training (HRMT), several tools (e.g. satisfaction questionnaire) were developed during the previous phases. During 2019-2023, the work has focused on the future of work (in statistical organisations), strategic communication and brand and reputation management. Two publications<sup>20</sup> were prepared ready-to-print as well as online and include case studies (from participating NSOs and compiled recommendations).

**Recommendations:** Being only in English, the dissemination of publications in the area of HRMT could be enhanced by providing translations to international working languages of the UNECE region (French and Russian). While increasing the administrative costs of the project, translation into the other UN official languages would increase the outreach.

The perception of the extent to which the project results were effective in meeting the needs of statistical offices (on a scale 0-10 where 0 means "not at all" and 10 "completely") is shown in the table below.

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<sup>&</sup>lt;sup>20</sup> UNECE (2021). Strategic Communications Framework for Statistical Institutions. Geneva. <a href="https://unece.org/sites/default/files/2021-06/ECECESSTAT20211.pdf">https://unece.org/sites/default/files/2021-06/ECECESSTAT20211.pdf</a> and UNECE (2021). The role of brand management, marketing and crisis communication for Statistical Organisations. <a href="https://statswiki.unece.org/display/BRM/Brand+and+reputation+management?preview=/330371441/35">https://statswiki.unece.org/display/BRM/Brand+and+reputation+management?preview=/330371441/35</a> 1764516/UNECE%20Brand%20management%20and%20crisis%20communication final.pdf

Table 4. Perception of effectiveness of project results (responses to the questionnaire)

Statement	0	1	2	3	4	5	6	7	8	9	10	Nr responses	Average
International collaboration to share best practices, resources, and knowledge in statistical modernization has increased	0	0	0	0	0	1	1	1	1	4	9	17	8,94
nnovative methods and practices introduced in the production of official statistics.	0	0	0	0	0	0	1	5	1	3	6	16	8,50
New Technologies adopted to improve data collection, processing, and dissemination	0	0	0	0	1	2	1	3	3	3	3	16	7,63
Methods and technology in place for better data exchange and integration across different statistical domains and among various national and international entities	0	0	1	0	1	1	2	4	1	3	3	16	7,25
mproved data quality	0	0	0	1	1	0	2	6	1	3	2	16	7,25
Non-traditional data sources used for in the production process of official statistics	0	0	0	1	0	2	1	5	3	0	2	14	7,00
Accessibility and user-friendliness of official statistics has improved	0	0	1	2	0	3	1	2	3	1	2	15	6,40
Statistical Legislation and Governance of the National Statistical System has been strengthened	0	0	2	0	0	2	5	2	1	1	2	15	6,33
New statistical information needs have been identified	0	0	2	1	1	1	3	1	2	2	2	15	6,33
Cost of statistical production has decreased	0	1	2	1	0	2	2	1	3	2	2	16	6,19
A significant number of staff of the NSOs has obtained new skills	0	2	1	1	1	1	1	3	4	0	3	17	6,18
The National Statistical System has better tools to mitigate crises, such as pandemics or natural disasters	0	0	2	0	1	3	1	2	5	1	0	15	6,13
oublic trust and transparency of official statistics has increased	1	0	2	0	0	3	2	1	2	3	0	14	5,79
Data on all population groups specially on vulnerable segments are collected	0	0	2	2	2	2	0	2	2	2	1	15	5,73
itatistical production better aligned with the SDGs	0	0	1	3	2	2	0	3	2	1	1	15	5,67

As mentioned above, international cooperation for the exchange of knowledge and best practices has been highly appreciated. The introduction of innovative methods, new technologies for data processing and exchange have been also highly appreciated. At the opposite end, the effectiveness of the HLG-MOS activities in solving issues of public trust and transparency of Official Statistics, or the contribution to the alignment with the SDGs and the production of data for vulnerable groups is not considered highly achieved.

Recommendation: review the inclusion of less technical activities as part of the HLG-MOS project in future phases.

Recommendation: strengthen the effective link of HLG-MOS activities with SDGs, especially with the production of indicators to monitor the SDGs.

#### **5.2.3.** Coherence with other modernisation initiatives

The international statistical system is witnessing a multitude of innovation initiatives. This includes various projects and collaborations aimed at enhancing the collection, analysis, and dissemination of statistical data by leveraging modern technologies and methodologies. Notably, the ESS has initiated several projects, including the ESSnet and ESS.VIP projects, which focus on the integration of big data and the development of new statistical services, methodologies, and frameworks to support the statistical process. The ESSnet projects encompass a wide array of initiatives, such as the development of new services, which in many cases involve pilot exercises exploring the potential of selected big data sources and building concrete applications. Moreover, at the global level, initiatives like the UN Global Pulse and the UN Big Data initiative represent the United Nations' efforts to harness big data for sustainable development and humanitarian action. These initiatives aim to explore the potential of big data sources for improving the timeliness, relevance, and efficiency of statistical systems worldwide, thus supporting policymaking and monitoring progress towards the Sustainable Development Goals (SDGs).

The HLG-MOS has involved countries of the UNECE region, which intersects with the ESS. In this sense, the coherence of activities is ensured by the participation of EU NSOs in both frameworks. As mentioned in the 2023 activity report, coordination and linkages with international activities in similar areas are made through cross-membership between the various groups. The UNECE Secretariate and EB meet with representatives of other international modernisation initiatives to further coordinate and align the activities.

Indeed, more than 40% of the responses to the questionnaire indicate that HLG-MOS activities were very coherent with those of other partners and especially with those carried out within the European Statistical System (ESS). They highlight the global use of frameworks, standards, and best practices developed by HLG-MOS, with increasing participation in events.

Key achievements of the HLG-MOS which are then largely used in ESS innovation projects include updating crucial models like GSBPM and GSIM, enhancing interoperability, transparency, and international cooperation in statistical processes. The HLG-MOS is noted for its unique, effective collaboration, less bureaucratic than ESS projects (which require extensive reporting in exchange for financing resources).

However, there is clear overlap between the topics dealt with by different innovation activities (e.g. the use of big data sources, the use of ML techniques in official statistics).

Some participants consider this a positive aspect since it provides more opportunities to work on them. Non-participating NSOs may have difficulties to know where to find inspiration and sources of knowledge. For UNECE region countries not members of the ESS, the access to the results of EU-funded projects is limited.

**Recommendation**: Provide cross-linkages between results of the different innovative projects. Besides *cross-membership*, the CCSA, as coordination committee of the statistical activity of international organisations, could provide resources to take stock of all the innovation activities, as well as report to the UN Statistical Commission on the case of coordination of innovation programmes in official statistics<sup>21</sup>.

#### 5.2.4. Obstacles and challenges

Common challenges mentioned by NSOs with respect to the participation in HLG-MOS activities include language barriers, technical skill gaps, cultural issues (i.e. orientation to innovation), and in particular the lack of human resources in the NSO, prioritising the work which is required by a legal basis. Some external factors like time zone differences for online meetings posed additional challenges for the implementation of activities. The COVID-19 pandemic obliged to postpone some work and the physical meetings – decreasing the networking and interaction effect - but it has not been a major obstacle for the effectiveness of the HLG-MOS, as most work has been continued and achieved.

**Recommendation**: maintaining the culture of virtual meetings will increase the resilience of the HLG-MOS network in case of disrupting events (such as a pandemic), ensures larger participation without the financial and environmental costs of physical meetings, and does not significantly affect the effectiveness of the work programme.

Organisational structures, such as departmental silos are a barrier to the diffusion of innovations considered by the HLG-MOS within NSOs.

The high dispersion of the dissemination of results (e.g. different wikis, absence of a classified repository of presentations to the events) is a barrier to the access to results and knowledge.

**Recommendation**: More efforts have to be done to disseminate the results of modernisation activities within NSOs. This can include: training activities, wider dissemination (such as using social media and periodic newsletters and briefings to the high management of NSOs). A specific work stream of the HLG-MOS should consist in "socialisation" of the results to the wider official statistics community. Delivering the results of collaborative work in the form of publications is an effective way of disseminating the experiences and consolidating the knowledge generated.

<sup>&</sup>lt;sup>21</sup> See for instance the report to the 2022 session of the UN Statistical Commission (<a href="https://unstats.un.org/unsd/ccsa/">https://unstats.un.org/unsd/ccsa/</a>), which does not make any mention of the coordination in this area, while it has worked on the use of non-traditional sources and other topics which are dealt with by the innovation programmes.

#### 5.3. Efficiency

The evaluation questions regarding efficiency are the following:

- ✓ Were the results achieved on time and were all activities organised efficiently?
- ✓ To what extent were the resources used economically and how could the use of resources be improved?

#### 5.3.1. Efficiency in the organisation of activities

The large number of activities shows without doubts an efficient organisation. The long date experience on the UNECE Statistics Division in organising technical and high-level meetings of statisticians is no doubt an explanation for this efficiency. There is indeed a network of professionals in the NSOs well connected to UNECE Statistics Division and CES, via the International Relations departments of NSOs. The Methodology and IT departments of NSOs of the EU also have specific networks and working groups within the ESS. This facilitates the dissemination of events at the country level.

Indeed, 95% of participants to the online evaluation survey considered that outputs of HLG-MOS activities were on time and all activities were organised efficiently. The evaluation of the secretarial support by the UNECE was in all cases highly rated.

There are two aspects which should be considered with regard to the efficiency in the use of technology: the organisation of online meetings and the online dissemination of the results.

The efficiency of online meetings in the context of the HLG-MOS activities can be inferred from several points mentioned in the Annual Reports:

- Online meetings were adopted as a response to the COVID-19 pandemic, allowing for the continuation of workshops and expert group meetings despite restrictions on in-person gatherings. This shift to virtual events has enabled the organisation of larger events attended by over 1,200 participants in 2020<sup>22</sup>, despite staff shortages, indicating a level of efficiency in reaching a broad audience. In fact, without the online option, the number of participants would have been much more limited as the travels have to be borne by the participating institutions, many of them under budgetary constraints.
- The transition to online meetings has also been influenced by calls for action to reduce climate change (emissions from flights, especially from short-distance ones in Europe), suggesting an awareness of the environmental benefits and potentially greater efficiency of virtual meetings over traditional in-person gatherings. This led to a decision to change the cycle of in-person expert meetings and workshops to every 24 months, with an option of organising online expert meetings and workshops in the in-between years.
- However, there are challenges associated with online meetings, such as
  difficulties in scheduling due to time zone differences, which pose challenges for
  organizing these events (see section 5.2.4 on obstacles to the participation).
  Additionally, there are mentions of issues with hybrid meetings where participants
  reported inefficiencies and difficulties in hearing the meetings, indicating that the
  transition to online formats is not without its drawbacks.

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<sup>&</sup>lt;sup>22</sup> Report ECE/CES/2021/10.

Despite these challenges, the move towards online meetings and the adoption of virtual events in response to the pandemic and environmental concerns suggest an overall positive view of their efficiency. This is particularly evident in the ability to continue important discussions, share knowledge, and maintain international cooperation in the field of official statistics during challenging times.

The HLG-MOS activities were supported by the use of technological tools for sharing knowledge, communicating events and disseminating results:

One interviewee complained that information is not widely disseminated except to the participants in the activities. The use of resources could be improved by increasing the dissemination and promotion of results (both by UNECE staff and within the NSOs).

Indeed, the HLG-MOS utilises collaborative tools such as StatsWiki to share outputs with a wider audience. Over 200 virtual meetings and six sprints were organised to advance the work of projects, groups, and steering committees. These groups used already as of 2019 up to 40 active wiki spaces with over 4,000 pages and more than 20,000 attachments, demonstrating the extensive use of collaborative platforms for dissemination and collaboration<sup>23</sup>. While these numbers reflect the intensity of its use, the fact that presentations, articles, reports, etc. are spread across so many wiki spaces is a weak point in the integration of results and the dissemination to non-participants.

**Recommendations** for improving the dissemination of results include streamlining information across over 50 websites, possibly through a reading guide, and extending the dissemination to the official statistics community beyond NSOs. This suggests an awareness of the need to enhance the accessibility and reach of the results to a broader audience, including research centres, universities, and international organisations.

**Recommendations**: While the use of online platforms and collaborative tools like StatsWiki has enhanced the dissemination of results, there are recommendations for further improvement. These include addressing the challenge of language barriers by providing translations of publications into international working languages to enhance accessibility and understanding across a diverse audience.

#### 5.3.2. Use of resources

In the context of the HLG-MOS Phase 3 project, the implementation relies on a mix of human and financial resources from NSOs and UNECE, with contributions varying in form from direct financial support to in-kind contributions like staff time and meeting hosting. Intangible resources such as knowledge are embedded in the project design, as it is implemented using the experience, skills and technology available in the most advanced NSOs. Other resources such as the technology to convene online meetings or to disseminate the outputs should be considered.

Here is a summary of resources used:

 Human Resources: The contribution of staff from NSOs indicates the involvement and effort from participating countries. In-kind contributions, including part-time project managers and hosting meetings, play a substantial role in supporting the activities of HLG-MOS.

<sup>&</sup>lt;sup>23</sup> Report ECE/CES/2020/17-

- Financial Resources: The financial resources from NSOs and the financial support from UNECE include both direct financial contributions to the HLG-MOS Trust and in-kind contributions, which are crucial for the execution of projects and activities.
- Technological resources: The use of collaboration tools like StatsWiki is significant, which, while not a direct financial or human resource, and represents an important resource for facilitating the work of HLG-MOS. These tools likely contribute to the efficiency and effectiveness of communication and collaboration among members.

According to the project document (see Annex 5), the project initial budget for UNECE is US\$600,000 for the period 01.07.2019 to 31.12.2022 (42 months). The largest share corresponds to two consultants (fees and travels), amounting to 82% of the total cost for UNECE. US\$21,600 (3.6%) corresponds to costs associated with other participants to events.

A Trust Fund was established to finance the activities, allowing countries to contribute in cash to the financing of activities. For example, during 2022, financial contributions to the Trust Fund were received from Statistics Canada (US\$35,000), INEGI (US\$10,000), the Republic of Korea (US\$32,500) and from the United Kingdom (US\$105,000). The three most important contributors in cash were, since the start of the HLG-MOS, Australia, South Korea and Canada. UNECE overheads amount to 13% of the Fund.

The cost of project activities was partly covered by in-kind contributions from NSOs (part-time project managers from Statistics Canada, INEGI, Statistics Netherlands, and OECD, chairs of Modernisation Groups, Task Teams and Executive Board). Some NSOs hosted meetings, thus providing for part of the logistics. The three most important contributors in-kind were, since the start of the HLG-MOS, Italy, The Netherlands and Canada. For the 2018-2022 period (not exactly matching the time span of this evaluation), the in-kind contribution represented 46% of the total project cost<sup>24</sup>. Travel costs (and carbon footprint) were also much reduced during the COVID-19 pandemic, the events being mostly replaced by online conferences.

Responses from interviewees varied from having dedicated up to 20 staff from departments for innovation (mainly departments responsible for Methodology or IT) to facing human resource shortages and financial constraints. Some NSOs benefit from funding advantages (e.g. through the participation in ESSnet or ESS.VIP projects), while others struggle with participation due to limited resources.

Evaluating the efficiency on the basis of the financial and in-kind cost is not straightforward. The outcomes include meetings, manuals, guidelines and papers, pilot studies, etc. It is difficult to break down the financial figures by areas, and the contribution of the NSOs in terms of their human resources cannot be evaluated without a more detailed analysis that would require time-use records and salary levels in the participating NSOs.

<sup>&</sup>lt;sup>24</sup> Only South Korea contributed 100% financially, not in-kind.

**Recommendation**: the HLG-MOS Secretariat could launch, with the support of the CES, an annual survey to NSOs on innovation activities<sup>25</sup> to estimate the resources used. It is paradoxical that many of the participating NSOs have contributed to the development of the Oslo Manual for Measuring Innovation and designed questionnaires that are to be fulfilled by private and public institutions in their countries, but there is no accessible, comparable reporting on innovative activities of the NSOs. A similar survey on the cooperation of academic and official statisticians was carried out by this evaluator for the Bureau of the CES in 2000.

The cost of participating to events, borne by the sending institutions, is not included in these calculations. The reduction in travel costs and carbon footprint due to the COVID-19 pandemic is noted as an unexpected efficiency gain during this period.

**Recommendation**: The HLG-MOS Secretariat could assess the possibility of offering full or partial fellowships (i.e. providing financial support for the transportation and/or accommodation) of experts from NSOs of the countries with tighter financial constraints on the basis of merits, establishing criteria for the participants such as: presentation of national experiences, facilitating hands-on collaborations, providing technological demonstrations, and considering the gender and disability status whenever possible.

For the implementation of practical work on data (e.g. within the ML project), one interviewee suggested favoring the use of open sources instead of commercial software as a way to ensure better use of the financial resources.

**Recommendation**: when possible, promote the use of open-source software for data collection, processing and dissemination in the pilot projects.

### 5.4. Sustainability

The assessment of sustainability should address the following questions:

- ✓ What measures were adopted to ensure that project outcomes would continue
  after the project ended and to what extent have these measures addressed the
  existing risks for sustainability?
- √ To what extent do the partners and beneficiaries 'own' the outcomes of the work? How is the stakeholders' engagement likely to continue, be scaled up, or replicated?
- ✓ To what extent project activities streamlined with countries projects and activities?

### 5.4.1. Sustainability and ownership of project outcomes by NSOs

In order to evaluate the ownership of project outcomes, it is important to recall the main elements of the system of official statistics. In the current scenario, the modernisation activities are mainly a responsibility of the NSOs, which are the main producers of official statistics. They are supported by international organisations such as UNECE or Eurostat, but the current production model for official statistics is centered around the activities of

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<sup>&</sup>lt;sup>25</sup> A similar survey on the co-operation of academic and official statisticians was carried out by this evaluator and Prof. Pilar Martín-Guzmán for the Bureau of the CES in 2000 (see <a href="https://unece.org/fileadmin/DAM/stats/documents/ece/ces/bur.2000/30.e.pdf">https://unece.org/fileadmin/DAM/stats/documents/ece/ces/bur.2000/30.e.pdf</a> and <a href="https://2001.isiproceedings.org/pdf/933.PDF">https://2001.isiproceedings.org/pdf/933.PDF</a>).

national stakeholders which collect, process and disseminate data. International organisations produce standards, convene expert groups and deliver technical assistance, but usually do not collect primary data from households, individuals or businesses.

Thus, only NSOs can guarantee the sustainability of the HLG-MOS activities by getting ownership of the project outcomes. However, the appropriation by the potential beneficiaries of the project results is unequal. While some standards have been widely adopted (e.g. GSBPM), other results (guidelines, pilot projects) are harder to scale up due to the high diversity of capacity in the NSOs of the region and the lack of financing to support the adoption of project results.

The fact that there is no consolidated stock of results (spread across wikis, conference websites, etc.) makes it hard for non-participating NSOs to find the outputs and ensure wide dissemination within their institutions. The departments such as Methodology, IT and International Relations in the NSOs should consider a possible role in disseminating the results. In this sense, the practice of interviewed NSOs sheds light on how this is done.

The responses to the question about NSO measures taken for sustaining outcomes from HLG-MOS activities show varied approaches. Some NSOs have taken specific actions like integrating international standards like GSBPM and GSIM as internal production standards, and expanding competencies in areas like Machine Learning. However, in general NSOs do not have a systematised way of disseminating the results and adopting them in the production process. Others have focused on activities like presenting outcomes to senior management committees, network building, training, and translation of content. But only in a few cases, the results of the modernisation activities are disseminated widely within NSOs, and even more rarely this is translated into capacity building activities. It is interesting to mention the case of INE-Spain, where the selective training course for new recruits includes testing them on the use of GSBPM for documenting statistical processes.

However, a few respondents indicated either no measures in place or expressed concern about the lack of such measures to ensure sustainability. This highlights a range of engagement levels in integrating HLG-MOS outcomes into organisational practices for sustainability.

Some respondents mentioned the gap between innovation and adoption / implementation and the need to better disseminate the results to the statistical community. One respondent said "I can only note the importance of NSOs to encourage and support their employees to attend the occasional sprints. The sprints are very work-intensive, significantly advance progress during and after as a result of the team building and personal/professional connections that occur at the meeting."

**Recommendations**: the HLG-MOS Secretariat and the NSOs of the UNECE region should plan for the wide dissemination of project outcomes **within** the NSOs, those that have and have not participated in the activities. This can involve: identification of different modalities of internal diffusion of modernisation practices (again through a questionnaire to NSOs), selection of best practices and elaboration of recommendations. Taking stock of all project results in an accessible manner (e.g. structured inventory) would facilitate the dissemination of results and their sustainability,

### 5.4.1. Scaling up stakeholder involvement and contributions

The participation to modernisation groups is in general ensured by voluntary contributions (including in-kind and financial contributions as presented in Section 5.3.1), which makes it hardly sustainable in the case of staff turnover or shortage of staff, as well as in the case of budgetary constraints.

The stakeholder involvement and contributions require that the innovation and modernisation activities are aligned with the priorities of the NSOs. About ¾ of the respondents to the questionnaire (72%) respondents indicated that the alignment of HLG-MOS activities with the country projects is done informally, which hampers the institutional commitment of NSOs.

It is important to recall that the HLG-MOS does not require the participation of all Member States of the UNECE but relies on capable and willing experts from the most advanced offices (in general from highly developed countries, but also from others in transition or development), ensuring that contributions are driven by expertise and a commitment to modernizing statistical organisations. In this sense, it is highly probable that the most involved and advanced NSOs will continue supporting the HLG-MOS activities, as modernisation is already part of "their DNA".

For other NSOs, without financing of the activities (e.g. through grants for innovative projects or UNECE financing of travels), the sustainability of the involvement seems to be compromised. Several interviewees mentioned indeed the foreseen staff cuts and budget constraints. Regarding the modalities of participation, the responses to the questions on sustainability indicate that the participants consider that physical participation and hosting events are the less sustainable contributions, due to the financial costs. Remote participation is considered from moderately to completely sustainable.

**Recommendations**: Funding for the participation of NSOs' staff and invited speakers would ensure scaling up the work. The exploration by the HLG-MOS Secretariat of the possibility of strengthening the financial muscle through a trust fund for the modernisation of official statistics should be undertaken. Note that there are similar initiatives such as the Bern Network for Financing Development Data (<a href="https://bernnetwork.org/">https://bernnetwork.org/</a>) and the funds devoted by Eurostat to ESS.VIP and ESSnet projects.

### 6. Conclusions and recommendations

### 6.1. Conclusions

The conclusions of the evaluation are positive in terms of relevance, effectiveness and efficiency. However, the sustainability may be compromised as the activities largely depend on volunteering by NSOs.

- Relevance: The project has been highly relevant, addressing both technical and institutional needs of NSOs. It effectively focused on areas critical to the modernization of statistical production, such as adopting new technologies (e.g., AI/ML, cloud computing), standards (e.g., GSBPM, GSIM), and methods for data integration and privacy. The HLG-MOS Phase 3 responded to institutional needs, such as ethics, communication, dissemination, and human resources development. However, it tended to bias toward the needs of more advanced NSOs, leaving a gap in direct benefits for less advanced offices without specific interventions for knowledge transfer.
- Effectiveness: The HLG-MOS Phase III was highly effective in achieving its objectives, with a very significant output of activities, meetings, workshops, and the development of standards and models. It fostered international collaboration, allowing for the sharing of best practices and innovations across the statistical community. The project led to the increased capabilities of NSOs in modernizing their statistical production, with notable improvements in adopting new technologies and methodologies. However, the effectiveness varied across NSOs, with some institutions reporting organization-wide benefits while others observed limited dissemination within their organizations.
- **Efficiency:** The project demonstrated high efficiency in organizing activities and utilizing resources. The transition to online meetings, prompted by the COVID-19 pandemic, allowed for continued collaboration with broader participation and reduced environmental impact. However, the project's reliance on voluntary participation and contributions highlighted the need for a more sustainable model to ensure broader and more inclusive engagement across NSOs.
- Sustainability: Sustainability remains a concern, as the project outcomes'
  continuation heavily depends on the NSOs' capacity to adopt and integrate the
  innovations and standards developed. The decentralized dissemination of results
  and the unequal appropriation of project outcomes suggest a need for improved
  mechanisms to ensure the long-term impact of the project's achievements.

By design, the project did not include a transfer of know-how / capacity building component to the wider community of NSOs. This is something to be considered, especially since achieving larger statistical capacity is directly aligned to Sustainable Development Goal 17.

Overall, it is recommended that the UNECE, under the auspices of the CES, continues the HLG-MOS activities, strengthen the coordination with other global and regional initiatives to modernise statistics, and capitalizes on the many quality outputs to support the development of statistical capacity at the global level.

### 6.2. Recommendations

The following tables summarise the recommendations mentioned throughout the evaluation report to improve certain aspects of the HLG-MOS initiative, derived from the evaluation. They are classified by broad area (coordination, financial resources, transfer of know-how, technology innovation, working modalities), as well as by priority level and responsible actor (HLG-MOS Secretariat and other).

Table 5. Summary of recommendations.

Recommendations for priority actions by the HLG-MOS Secretariat.

Area	Recommendation	Explanation	Action by
Coordination	The CES should examine in detail the coordination of HLG-MOS program with that of other global and regional initiatives, especially those of the UN and ESS, based on specific annual reporting of synergies.	Development, ESS innovation networks, etc.) whose activities may present synergies with the HLG-MOS activities. Structured reporting on innovation in Official Statistics would increase the coordination.	HLG-MOS Secretariat, CES Bureau, Bureau of the UN Statistical Commission, Committee of Coordination of Statistical Activities (CCSA)
Transfer of know-how	Integrate the contents of all wikis and websites	Develop a "reading guide" to the information already present across over 50 websites.  The reading guide should be disseminated to a broader audience, including research centres, universities, and international organizations.	HLG-MOS Secretariat (with additional resources given the amount of work needed)
Coordination	Preparing a living inventory of innovation activities in Official Statistics	The HLG-MOS Secretariat could launch, with the support of the CES, an annual survey to NSOs on innovation activities (using the experiences of the Oslo Manual in measuring innovation) to estimate the resources used.	HLG-MOS Secretariat, CES Bureau (with additional resources)
Financial resources / transfer of know-how	Consider allocating a budget for transfer of know-how and capacity building to NSOs	While participating NSOs are more likely to benefit from the activities of HLG-MOS, those not participating for a variety of reasons (financial, technical capacity, shortage of HR) would require support to adopt the outputs to their routine work programmes. This support may take different forms such as training, mentoring, exchange of experts, etc.	HLG-MOS Secretariat with potential donors

<sup>&</sup>lt;sup>26</sup> See for instance the report to the 2022 session of the UN Statistical Commission (<a href="https://unstats.un.org/unsd/ccsa/">https://unstats.un.org/unsd/ccsa/</a>), which does not make any mention of the coordination in this area, while it has worked on the use of non-traditional sources and other topics which are dealt with by the innovation programmes.

Area	Recommendation	Explanation	Action by
Financial	Provide financial support for	The HLG-MOS Secretariat could assess the possibility of offering full	HLG-MOS Secretariat with
resources	attending physical meetings for selected participants	or partial fellowships (i.e. providing financial support for the transportation and/or accommodation) of experts from NSOs of the countries with tighter financial constraints on the basis of merits, establishing criteria for the participants such as: presentation of national experiences, facilitating hands-on collaborations, providing technological demonstrations, etc., and considering gender and disability status whenever possible.  Funding for the participation of NSOs' staff and invited speakers would ensure scaling up the work. The exploration by the HLG-MOS Secretariat of the possibility of strengthening the financial muscle through a trust fund for the modernisation of official statistics should be undertaken.  Note that there are similar initiatives such as the Bern Network for Financing Development Data ( <a href="https://bernnetwork.org/">https://bernnetwork.org/</a> ) and the funds devoted by Eurostat to ESS.VIP and ESSnet projects.	potential donors

Recommendations for lower priority action by the HLG-MOS Secretariat.

Area	Recommendation	Explanation	Action by
Transfer of Achieve wider dissemination of non-technical outputs (e.g. on communications, on HR		Non-technical outputs are easier to adopt by NSOs that have a shortage of HR or technical skills.	HLG-MOS Secretariat  Capabilities and
	management)	It is recommended that the relevant Task teams under the "Capabilities and Communication Group" elaborate concrete recommendations, by taking stock of already identified good practices, as a priority with respect to the development of new outputs.	Communication Group.
		The dissemination of publications in the area of HRMT could be enhanced by providing translations to international working languages (at least French and Russian as working languages of the UNECE region).	
Transfer of know-how	Strengthen the effective link of HLG-MOS activities with SDGs, especially with the production of indicators to monitor the SDGs.	While the modernisation activities have an impact on all statistical domains, it is important to continue the efforts towards the measurement of SDGs. The BTSN may consider reflecting on how to address the measurement of SDG indicators difficult to measure (Tier III indicators).  HLG-MOS secretariat would be responsible to connect and explore synergies with existing task teams/secretariats on SDG indicators and other statistical areas.	BTSN HLG-MOS Secretariat
Working modalities	Continue promoting virtual meetings of the Working Groups and Task Teams.	Maintaining the culture of virtual meetings will increase the resilience of the HLG-MOS network in case of disrupting events (such as a pandemic), ensures larger participation without the financial and environmental costs of physical meetings, and does not significantly affect the effectiveness of the work programme.	HLG-MOS Secretariat, chairs of the Working Groups

### Other recommendations.

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Area	Recommendation	Explanation	Action by
Transfer of	Wider dissemination of outputs		Working Groups
know-how	within the NSOs.	modernisation activities within NSOs. This can include: training	
		activities, wider dissemination (such as using social media and	National focal points for
		periodic newsletters and briefings to the high management of NSOs).	innovation (to be identified) in NSOs
		Delivering the results of collaborative work in the form of publications	
		is an effective way of disseminating the experiences and	
		consolidating the knowledge generated.	
Technology	Continue the study of data	Given that the data assets of the NSOs are one of their most valuable	Working Groups
innovation	preservation technologies	ones, it is important that the HLG-MOS investigates innovative	
		solutions to preserve them in case of disaster. The use of cloud and	
		other technologies should be continued in future work programs.	
Technology	Promote the use of open-source	When possible, promote the use of open-source software for data	Working Groups
innovation	software	collection, processing and dissemination in the pilot projects.	

### Annex 1. Terms of Reference for the evaluation



#### TERMS OF REFERENCE

### Evaluation of project E331 "Modernising Statistical Production Phase 3"

#### I. Purpose

The purpose of this internal evaluation is to assess the extent to which the objectives of the UNECE project E331 "Modernising Statistical Production Phase 3" were achieved. The evaluation will assess the relevance, effectiveness, efficiency and sustainability of the project.

The evaluation will also assess any impacts the project may have had on progressing human rights, gender equality, disability inclusion, climate change and disaster risk reduction in the context of this engagement. The evaluation will finally look at the activities repurposed to address the impact of the COVID-19 crisis, and assess, to the extent possible, UNECE's COVID-19 early response through this project.

#### II. Background

To monitor the 2030 development agenda and respond to the increasingly complex challenges in society, there is a pressing need for statistical organisations to provide more disaggregated and timely data in a more accessible manner. Statistical organisations also face competition from private companies that produce their own data and attracts the attention of users, all while operating within existing budget constraints. The key to overcome these challenges is to modernise the management and production of official statistics, harness the potential of new data sources and adapt innovative technologies and methodologies.

In 2010, the Bureau of the Conference of European Statisticians (CES)<sup>2</sup> decided to set up the High-Level Group for the Modernisation of Official Statistics (HLG-MOS) to actively steer the modernisation of statistical organisations. The mission of the HLG-MOS is to work collaboratively to identify trends, threats, and opportunities in modernising statistical organisations and provide a common platform for experts to develop solutions in a flexible and agile way.

The annual work programme of the HLG-MOS consists of four Modernisation Groups, each working in cross-cutting pillars that are important for modernising statistical organisations such as human resource, standards. The work programme also contains two annual HLG-MOS projects on specific topics that are selected in a previous year, mostly on new and innovative technologies and ideas such as big data, machine learning and strategic communication.

The HLG-MOS meets annually to review the work programme, sets priorities for the coming years, and revise their mission and vision strategy where needed. The HLG-MOS Executive Board is tasked by the HLG-MOS to oversees the execution of the work programme, and provides guidance to Modernisation Groups and HLG-MOS projects throughout the year via its monthly meetings. Toward the end of year, Modernisation Groups and other experts in statistical organisation propose activities for the next year and the Executive Board prioritises and selects the proposals based the mission and vision, which is ultimately approved by the HLG-MOS by January next year.

The Modernising Statistical Production Phase 3 was set up to support the activities of the work programme decided by the HLG-MOS for the project period (July 2019 to December 2023<sup>3</sup>). The focus is on supporting the development of new models, frameworks, guidance and capabilities.

The project is about addressing the emerging needs of statistical organisations and develop solutions, therefore by its nature, it does not have detailed specific expected output and activities in advance. The project also does not consist of technical assistance or capacity building but focuses on supporting the

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<sup>&</sup>lt;sup>1</sup> Throughout the document, "statistical organisations" mean national and international statistical organisations that produce official statistics.

<sup>&</sup>lt;sup>2</sup> The CES consists of the Chief Statisticians of more than 60 countries, it drives the work of the UNECE Statistics Division and advises it about statistical development needs of the countries.

<sup>&</sup>lt;sup>3</sup> Originally 2022 but extended due to Covid pandemic.

HLG-MOS work programme that brings together able and willing experts to share experiences and develop solutions that are shared in a broad official statistical community.

The following are some of the outcomes of Phase III:

- Machine Learning for Official Statistics (from HLG-MOS project 2019-2020)
- Input Privacy Preservation (from HLG-MOS project 2020-2022)
- Synthetic Data for Official Statistics (from HLG-MOS project 2021)
- The Role of Brand Management, Marketing and Crisis Communication for Statistical Organisations (from a Modernisation Group on Capability, 2022)
- Geospatial view of Generic Statistical Business Process Model (GSBPM; from a Modernisation Group on Standards, 2021)
- Linking GSBPM and Generic Statistical Information Model (GSIM) Information Flow within GSBPM using GSIM (GSBPM; from a Modernisation Group on Standards, 2022)

### III. Evaluation objectives, scope and questions

The evaluation will be guided by the objectives, indicators of achievement and means of verification established in the logical framework of the project document. The evaluation will be conducted in Q3-Q4 of 2023. It will cover the full implementation of the project, from July 2019 to December 2023 in the CES countries.

The final evaluation of the project has the following specific objectives:

- Determine as systematically and objectively as possible the relevance, effectiveness, efficiency and sustainability of the project results in light of its goals and objectives;
- Assess how the project activities contributed to gender equality and women's empowerment, as
  well as the realisation of human rights, with an emphasis on 'leaving no one behind' and, if needed,
  it will make recommendations on how these considerations can be better addressed in future
  activities of the subprogramme.
- Identify good practices and lessons learned from the project and formulate action-oriented, forward-looking recommendations addressed to the subprogramme for improving future interventions.

The evaluation criteria are relevance, effectiveness, efficiency and sustainability.

#### Relevance

- 1. To what extent did the project respond to the priorities and needs of national statistical offices in beneficiary countries in modernising their statistical production?
- 2. To what extent were the project activities consistent with global and regional priorities and aligned with the SDGs?
- How relevant were the project activities vis-à-vis the programme of work of the UNECE? What value has UNECE added in this area?
- 4. To what extent were gender, human rights, disability perspectives and climate change considerations integrated into the design and implementation of the project? How can these perspectives be better included in future projects design and implementation?

### Effectiveness

- 5. To what extent were the project design and set-up effective for meeting the needs of statistical offices in beneficiary countries?
- 6. To what extent did the project achieve its objectives and expected results, namely to improve the competencies of statistical offices in the beneficiary countries to modernise their statistical production and to address the emerging issues identified by HLG-MOS in the field of official statistics?
- 7. To what extent are the project activities coherent and harmonised with those of other partners operating within the same context, particularly those of other UN system entities?
- 8. Which obstacles and difficulties did statistical offices face, if any, that prevented them from actively participating in the project?
- What were the challenges/obstacles (including COVID-19) to achieving the expected results? How successfully did the project overcome these?

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#### Efficiency

- 10. Were the resources adequate for achieving the results?
- 11. Were the results achieved on time and were all activities organised efficiently?
- 12. To what extent were the resources used economically and how could the use of resources be improved?

### Sustainability

- 13. What measures were adopted to ensure that project outcomes would continue after the project ended and to what extent have these measures addressed the existing risks for sustainability?
- 14. To what extent do the partners and beneficiaries 'own' the outcomes of the work? How is the stakeholders' engagement likely to continue, be scaled up, or replicated?
- 15. To what extent project activities streamlined with countries projects and activities?

### IV. Evaluation approach and methodology

The evaluation will be conducted in accordance with: the ECE Evaluation Policy<sup>4</sup>; the Administrative instruction guiding Evaluation in the UN Secretariat<sup>5</sup>; and the United Nations Evaluation Group (UNEG) Norms and Standards for Evaluation<sup>6</sup>. Human rights and gender equality considerations will be integrated at all stages of the evaluation<sup>7</sup>: (i) in the evaluation scope and questions; (ii) in the methods, tools and data analysis techniques; (iii) in the findings, conclusions and recommendations of the final report. The evaluator will explicitly explain how human rights, gender, disability, SDGs, and climate change considerations will be taken into account during the evaluation.

The evaluator is required to use a mixed-method approach, including qualitative as well as quantitative data gathering and analysis as the basis for a triangulation exercise of all available data to draw conclusions and findings. The evaluator shall conduct online surveys and interview a wide range of diverse stakeholders from the public sector, academia, international organisations, and, where applicable, the diaspora and civil society. To ensure representativeness, the evaluator shall speak to a large sample of stakeholders including high-level government interlocutors whom UNECE has worked with.

The evaluation should be conducted based on the following mixed methods to triangulate information:

- A desk review of all relevant documents, including the project document and information on project
  activities (monitoring data); materials developed in support of the activities (agendas, plans, participant
  lists, background documents, donor reports and publications); Proposed programme budgets covering
  the evaluation period; project reports to the donor.
- Online survey of key stakeholders and beneficiaries: the survey will be developed by the consultant on her/his preferred platform.
- 3. Interviews (in-person and/or by telephone/video): the evaluator shall interview a wide range of diverse stakeholders and beneficiaries from the public sector, academia, international organisations, and, where applicable, the diaspora and civil society. To ensure representativeness, the evaluator shall speak to a large sample of stakeholders including high-level government interlocutors whom UNECE has worked with.
- 4. Remote observation of virtual workshops and meetings, including recordings of meetings if applicable.

The evaluator will further elaborate on the evaluation methodology in the Inception Report that will among others include the survey questions and interview guide. The evaluation report will be written in English, will consist of approximately 30 pages and will include an executive summary (max. 2 pages) describing the evaluation methodology, key findings, conclusions and recommendations. The evaluator will also produce an Evaluation Brief summarising key evaluation findings, lessons learned and recommendations, including through images and infographics.

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<sup>4</sup> UNECE Evaluation policy

<sup>6</sup> UNEG 2016 Norms and Standards for Evaluation

In line with UNEG Guidance contained in Integrating Human Rights and Gender Equality in Evaluations

### V. Evaluation schedule<sup>8</sup>

August 2023 Terms of Reference finalised

September 2023 Evaluator selected

October 2023 Contract signed. Evaluator starts the desk review

Late October 2023 Evaluator submits inception report including survey design

November 2023 Launch of data gathering, including survey and interviews

December 2023 Evaluator submits draft evaluation report and evaluation brief

January 2024 Evaluator submits final evaluation report and evaluation brief

#### VI. Resources and management of the evaluation

An independent consultant will be engaged to conduct the evaluation under the management of the Programme Management Unit (PMU). Payment will be made upon satisfactory delivery of work. PMU will manage the evaluation and will be involved in the following steps: Selection of the evaluator; Preparation and clearance of the Terms of Reference; Provision of guidance to the Project Manager and evaluator as needed on the evaluation design and methodology; Clearance of the final report after quality assurance of the draft report. The Project Manager, in consultation with the Division Director, will be involved in the following steps: Provide all documentation needed for desk review, contact details, support and guidance to the evaluation consultant as needed throughout the timeline of the evaluation; Advise the evaluator on the recipients for the questionnaire and for follow-up interviews; Process and manage the consultancy contract of the evaluator, along the key milestones agreed with PMU.

### VII. Intended use / Next steps

The results of the evaluation will be used in the planning and implementation of future activities of the UNECE Statistics Subprogramme. Findings of this evaluation will be used, when possible, to:

- improve direct project's follow up actions, implementation of products by project beneficiaries and dissemination of the knowledge created through the project;
- · assess the gaps and further needs of countries in the area of this project;
- formulate tailored capacity building projects to strengthen the national capacity in enhancing innovation.

The results of the evaluation will be reported to HLG-MOS.

Following the issuance of the final report, the Project Manager will develop a Management Response for addressing the recommendations made by the evaluator. The final evaluation report, management response and progress on implementation of recommendations will be publicly available on the UNECE website.

### VIII. Criteria for evaluators

The evaluator should have:

- An advanced university degree or equivalent background in relevant data and statistics.
- Knowledge of and experience in working on modernisation of official statistics desirable.
- Relevant professional experience in design and management of evaluation processes with multiple stakeholders, survey design and implementation, project planning, monitoring and management, gender mainstreaming and human-rights due diligence.
- Demonstrated methodological knowledge of evaluations, including quantitative and qualitative data collection and analysis for end-of-cycle project evaluations, including demonstrated experience in conducting questionnaires and interviews.
- Fluency in written and spoken English.

Evaluators should declare any conflict of interest to UNECE before embarking on an evaluation project, and at any point where such conflict occurs.

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<sup>8</sup> Final timetable to be agreed following engagement of the evaluator

### Annex 2. Description of Modernisation groups

### Blue Skies Thinking Network (BSTN)

The Blue Skies Thinking Network (BSTN) is a core group within the HLG-MOS structure that serves as the "ideas factory" of the ModernStats community. The network is comprised of around 10-15 members from various National Statistical Offices (NSOs) and international organisations. The group is led by an innovation manager (Mr. Barteld Braaksma from Statistics Netherlands) and aims to have in-depth and broad knowledge of innovation-related aspects to facilitate the development of work.

- In 2019, the BSTN was set up to generate and evaluate new ideas and assess their potential to modernise statistics. The group met at least once a month and organised pitch talk sessions, which were mini sprints where members and outsiders could briefly present a modernisation idea or project for discussion. Task Teams were set up with subject area experts to follow up on specific topics.
- In 2020, the BSTN continued to generate and evaluate new ideas. The group could also set up temporary activities to follow up on project proposals that were not selected. The network planned to elaborate further on these topics throughout the year.
- In 2021, the BSTN provided a research and innovation platform where members could share ideas and look for partners to explore how new innovations to the production process could benefit statistical organisations. The network generated and evaluated proposals for HLG-MOS activities and conducted short time-boxed follow-up studies. The network identified and discussed several topics throughout the year.
- In 2023, the BSTN continued to identify new potential topics by actively engaging
  with the statistical community for new ideas and evaluating them based on HLGMOS vision and priorities. The network planned to elaborate further on these
  topics throughout the year.

### **Supporting Standards Group**

The Supporting Standards Group is a key component of the HLG-MOS structure, responsible for the maintenance and development of the **ModernStats models such as GAMSO, GSBPM, GSIM, and CSPA**. The group's goal is to develop, enhance, integrate, promote, support, and facilitate the implementation of the range of standards needed for statistical modernisation.

- In 2019, the group provided support for the implementation of the "ModernStats" models through a range of activities which included development, promotion, and maintenance of the models. The group had plenary meetings every month via web conferences and may have additional meetings or organise a sprint workshop to expedite the work progress.
- In 2020, the group was chaired by Ms Marina Signore from Istat and supported by the UNECE secretariat. The group worked on linking GSBPM and GSIM, using two templates to map 20 sub-processes and producing new mapping diagrams

- showing information flows. The group also worked on geospatial information for GSBPM, identifying five use cases.
- In 2021 the group was chaired by Zoltán Vereczkei from Hungary and supported by the UNECE secretariat. The group consisted of twenty experts from twelve NSOs and four international organisations, with many more colleagues collaborating in the task teams. The group had monthly plenary meetings and the task teams met on a frequent basis.
- In 2022, the group continued to provide support for the implementation of the "ModernStats" models. The group was still chaired by Zoltán Vereczkei from Hungary and supported by the UNECE secretariat. The group consisted of twenty experts from twelve NSOs and four international organisations, with many more colleagues collaborating in the various task teams.
- In 2023, the group prioritised several activities, including the maintenance and development of the ModernStats models. The group was chaired by Statistics Hungary and provided support for the implementation of the "ModernStats" models. The group continued to develop, enhance, integrate, promote, support, and facilitate the implementation of the range of standards needed for statistical modernisation.

### Capabilities and Communication Group

The Capabilities and Communication Group is a key component of the HLG-MOS structure, focusing on the **organisational changes and communication challenges necessary to support modernisation in statistical organisations**.

- In 2019, the group was created by adding Communication to the Expert Group on Developing Organisational Resilience. The group's work nearly came to a full stop due to the Covid-19 pandemic, which heavily involved Human Resources (HR) and communication departments in most offices. The group kept meeting on a monthly basis to evaluate if any task team could commence their activities.
- In 2020, the group adjusted its work program to assist statistical offices to cope
  with the changing working arrangements and the need for more extensive
  internal and external communication due to the Covid-19 pandemic. The
  group was jointly chaired by CSO Ireland and Statistics Poland and worked in
  three streams setting up task teams for various activities.
- In 2021, the group continued to focus on the organisational changes and communication challenges necessary to support modernisation in statistical organisations. The group was jointly led by Anna Borowska from Statistics Poland and Maria Hurley from CSO Ireland and consisted of 46 colleagues from 18 organisations.
- In 2022, the group shifted its **emphasis to the legacy of the pandemic**. The group consisted of 52 colleagues from 22 organisations.
- In 2023, the group continued to focus on the organisational changes and communication challenges necessary to support modernisation in statistical organisations. The group's activities were grouped into three streams: **Ethics** management, The job of the future, and Strategic communication.

### Applying Data Science and Modern Methods group

The "Applying Data Science and Modern Methods" group is a key component of the HLG-MOS structure, focusing on identifying concrete opportunities to further **modernise** business processes in statistical organisations using data science and modern methods.

- In 2022, the group was launched. The group consisted of 21 colleagues from 10 organisations and conducted a market landscape analysis to take stock of existing works in the field of data science and modern methods. Eight potential topics were identified under data collection and integration, data editing, data confidentiality, data dissemination, etc. Based on the expertise and interest of the members, three topics were prioritised, and task teams were set up.
- In 2023, the group continued to identify concrete opportunities to further modernise business processes in statistical organisations using data science and modern methods.

### Annex 3. Proposed questionnaire

Q1 (introductory text) Dear colleague,

You are invited to participate in our survey about the activities of the HLG-MOS. Your participation in this study is completely voluntary. However, it is very important for us to learn your opinions. This survey is part of regular UNECE evaluation exercise required for activities supported by extrabudgetary fund, as is the case with the "ModernStats Trust Fund." Given the fund was set up for the HLG-MOS activities, the evaluation will focus on the relevance, effectiveness, efficiency and sustainability of the activities in meeting its goal of supporting modernisation of statistical organisations.

This questionnaire combines a range of scale questions, Yes/No options, and openended questions to capture both quantitative and qualitative data on the initiative's Relevance, Effectiveness, Efficiency, and Sustainability. Open questions provide space for respondents to share detailed insights and suggestions.

Your survey responses will be strictly confidential and data from this research will be reported only in the aggregate. If you have questions at any time about the survey or the procedures, you may contact José CERVERA (jcervera@devstat.com).

Thank you very much for your time and support. Please start with the survey now by clicking on the "Continue" button below.

Q2 How familiar you are with the design and activities of the HLG-MOS (e.g., projects, modernisation groups) and ways of works (e.g., HLG-MOS Executive Board monitoring the activities, Modernisation Workshop contributing to the work plan for upcoming year)? Chose the response that better fits your opinion:

- 1. Not at all familiar
- 2. Slightly familiar
- 3. Moderately familiar
- 4. Very familiar
- 5. Extremely familiar

### A. Relevance

Q3. On a scale of 1 to 5, how strongly do you agree that the HLG-MOS addressed the priorities and needs of national statistical offices for modernizing their statistical production?

	Strongly	Disagree	Neutral (3)	Agree	Strongly
	disagree	(2)		(4)	agree
	(1)				(5)
For your institution					
For NSOs participating in					
the activities					
For NSOs not participating					
in the activities					

Q4. What are the top 3 priorities you believe the HLG-MOS program is primarily focusing? (check 3 priorities)

Technology	
Interoperability and Data Sharing: Facilitating better data	Yes /No
exchange and integration across different statistical domains	
and among various national and international entities.	
Statistical production methods	
Data Quality and Integrity: Ensuring that the statistical data	Yes /No
produced is reliable, accurate, and timely, meeting	
international standards of quality.	
Innovation in Statistical Methods: Encouraging the	Yes /No
exploration and implementation of innovative methods and	
practices in the production of official statistics.	
Access to innovative data sources: Increase the use of non-	
traditional data sources (e.g. Big Data, Geospatial	
information)	
Alignment with the SDGs: Aligning statistical production with	Yes /No
the indicators and targets of the Sustainable Development	
Goals to monitor progress effectively.	
Decreasing costs in statistical production: identify methods,	Yes /No
technologies or processes that can decrease the cost of	
statistical operations in any of their phases	
Capacity of the NSO	
International Collaboration: Fostering international	Yes /No
cooperation and partnerships to share best practices,	
resources, and knowledge in statistical modernisation.	
Organisational Resilience and Capability: Developing	Yes /No
resilient statistical systems capable of maintaining operations	
during crises, such as pandemics or natural disasters.	
Responsiveness to users	
Enhancing Data Accessibility: Improving the accessibility and	Yes /No
user-friendliness of official statistical products to ensure they	
meet the needs of a diverse range of data users.	
Public Trust and Transparency: Enhancing the transparency	Yes /No
of statistical processes and methodologies to build public	
trust in official statistics.	

Q5. On a scale of 1 to 5, how strongly do you agree that the project activities were consistent with global and regional priorities and aligned with the Sustainable Development Goals (SDGs)?

	1 – Not at all	2 - Slightly	3 - Moderately	4 – Very	5 - Extremely
Aligned with the topics and information needs of the SDGs				·	,
Aligned with the inclusiveness principle of					

the SDGS ("leave no one			
behind")			
Aligned with other			
initiatives to increase the			
data for monitoring the			
SDGs.			

# Q6-Q7. In your opinion, which of the following aspects were integrated into the design and implementation of the HLG-MOS activities?

	Q6	Q7
Gender	Yes /No	If yes, please provide an example (open text)
Disability	Yes /No	If yes, please provide an example (open text)
Human Rights	Yes /No	If yes, please provide an example (open text)
Climate change	Yes /No	If yes, please provide an example (open text)

# Q8. On a scale of 1 to 5, how coherent and harmonised were the HLG-MOS activities with those of other partners?

	1 –	2 -	3 -	4 –	5 -
	Not at all	Slightly	Moderately	Very	Extremely
With UN initiatives on using					
new data sources (UN					
Global Pulse, UN Statistics					
Division "Data for Now",					
data-related strategies of					
UN agencies such as					
UNICEF, UNDP etc.)					
With European Statistical					
System's initiatives (CROS,					
ESSnet, ESS VIP projects,					
etc.)					
With other international					
initiatives to modernise					
official statistics					

### **B.** Effectiveness

Q9. On a scale 0 (not at all) to 10 (totally), to what extent do you believe the project results were **effective** (i.e. achieved goals) in meeting the needs of statistical offices in participating and non-participating countries?

	For participating countries (0 = not at all, 10 = totally)	For non- participating countries (0 = not at all, 10 = totally)
New Technologies adopted to improve		
data collection, processing, and dissemination		
Methods and technology in place for		
better data exchange and integration		
across different statistical domains and		
among various national and international entities		
Improved data quality		
Innovative methods and practices		
introduced in the production of official		
statistics.  Non-traditional data sources used for in		
the production process of official		
statistics		
Statistical production better aligned with		
the SDGs		
Data on all population groups specially on		
vulnerable segments are collected  Cost of statistical production has		
decreased		
A significant number of staff of the NSOs		
has obtained new skills		
Statistical Legislation and Governance of		
the National Statistical System has been		
strengthened International collaboration to share best		
practices, resources, and knowledge in		
statistical modernisation has increased		
The National Statistical System has		
better tools to mitigate crises, such as		
pandemics or natural disasters		
Accessibility and user-friendliness of		
official statistics has improved  New statistical information needs have		
been identified		
Public trust and transparency of official		
statistics has increased		

Q10. In your opinion, did the HLG-MOS activities achieve its objectives, namely help improve the competencies of statistical offices to modernise their statistical production and to address emerging issues? (Yes / No)

Q11. (If Yes) Please elaborate on the success (open text)

Q12. (If No) What objectives were not met, and why do you think this was the case? (open text)

Q13. Which outputs or activities of the HLG-MOS do you consider most important for the future activities of your NSO? (open text)

Q14. How **important** were the following obstacles and difficulties, in preventing <u>your NSO</u> from actively participating in the project?

	1 –	2 –	3 –	4 –	5 –
	Not at all	Slightly	Moderately	Very	Extremely
	important		important	important	
The availability of staff		•	•	•	•
The Covid-19 pandemic					
Staff turnover					
The financial resources					
of your office					
Lack of experiences or					
expertise					
The financial resources					
of your office (for					
participating in					
meetings)					
Language barrier					
Time difference					
Lack of support from					
management					
Lack of support from					
staff in general					
Lack of information on					
what activities are					
undertaking or how to					
join					
Overlap with other					
similar international					
initiatives					

Q15. Were there other obstacles or difficulties not listed above? Please specify. (open text)

### C. Efficiency

Q16. Were the following resources adequate in carrying out the HLG-MOS activities?

	1 – totally	2-	3- Just	4-	5 -
	insufficient	Insufficient	adequate	Sufficient	Excessive
Secretariat support					
from UNECE					
Collaboration tools					
On-line meeting					
facilities					
Meeting facilities to					
accomodate also					
online participants					
Financial support					
(e.g., for participation					
of in-person					
meetings)					

Q17. What additional resources would have been necessary to better achieve the expected results? (Open question)

Q18. In general, do you consider that the outputs of HLG-MOS were delivered on time, and were all activities were organised efficiently?Yes / No

Q19. (If No) Please explain the delays or inefficiencies encountered. (Open question)

### D. Sustainability

Q20. Are you aware of any measures taken by your NSO to ensure that outcomes or results from HLG-MOS activities continue to be used or integrated in the organisation after the activities end? If yes, please describe them? (Open question)

Q21. To what extent does your NSO has appropriated the outcomes of the work, and how is the stakeholders' engagement likely to continue, be scaled up, or replicated?

	1 – Not	2 – Slightly	3 –	4 –	5 –
	used	used	Moderately	Considerably	Extensively
			used	used	used
Tools and					
standards (e.g.,					
GSBPM, GAMSO,					
GSIM, etc.)					
Outcomes related					
to new data					
sources (e.g., big					
data)					
Outcomes related					
to new statistical					
methods (e.g.,					

ML, data			
integration)			
Outcomes related			
privacy (e.g., IPP,			
synthetic data)			
Outcomes related			
to Human			
Resource and risk			
management			
Outcomes related			
to communication			
and management			
of user relations			

Q22. To what extent do you think HLG-MOs activities are aligned with the projects and activities of....?

	1 –	2 -	3 -	4 –	5 -
	Not at all	Slightly	Moderately	Very	Extremely
Your institution					

Q23. How sustainable do you consider the contribution of your NSO to future work of the HLG-MOS groups in terms of the following resources?

	1 – Not sustainable at all	2 – Slightly sustainable	3 – Moderately sustainable	4 – Very sustainable	5 – Extremely sustainable
Remote participation of selected staff					
Physical participation of selected staff					
Leading activities					
Hosting events					

This questionnaire combines a range of Likert scale questions, Yes/No options, and open-ended questions to capture both quantitative and qualitative data on the initiative's Relevance, Effectiveness, Efficiency, and Sustainability. Open questions provide space for respondents to share detailed insights and suggestions.

### Annex 4. Compilation of outputs 2019-2023

### 1. Events including Workshops and Training Events

### 2019

- Workshop on Statistical Data Dissemination and Communication (Gdansk, Poland, June 2019)
- ModernStats World Workshop (Geneva, Switzerland, June 2019)
- Workshop on Culture Evolution (Geneva, Switzerland, September 2019)
- Workshop on Statistical Data Collection 'New Sources and New Technologies' (Geneva, Switzerland, October 2019)
- Workshop on Statistical Data Confidentiality (the Hague, the Netherlands, October 2019)
- GSIM eTraining workshop (Geneva, Helsinki, Oslo, Ottawa, Rome, and Stockholm, November 2019)
- HLG-MOS Workshop on the Modernisation of Official Statistics (Geneva, Switzerland, November 2019)

#### 2020

- HLG-MOS meeting (1 March 2020, New York)
- Machine Learning Sprint (31 March-16 April 2020, online)
- Workshop on Statistical Data Editing (31 August-4 September 2020, online)
- Workshop on the Covid-19 response in statistical data dissemination and communication (7-9 September 2020, online)
- Workshop on the Covid-19 response in human resources management and training (HRMT) (9-11 September 2020, online)
- Data collection and the impact challenges and opportunities of the Covid-19 pandemic (5-9 October 2020, online)
- Machine learning sessions (13-15 October 2020, online)
- The ModernStats World workshop (27-30 October 2020, online)
- Differential privacy workshop (30 October 2020, online)
- Machine learning webinar (16-17 November 2020, online)
- HLG-MOS Workshop on modernisation of official statistics (18-19 November 2020 online)
- Statsbot Webinar (20 November 2020, online)

#### 2021

- HLG-MOS Meeting: Held online on 29 January 2021.
- Expert Meeting on Statistical Data Collection: Conducted online from 27-30 September 2021, with 151 participants from 30 countries.
- Expert Meeting on Dissemination and Communication of Statistics: Occurred online from 11-14 October 2021, attended by 151 participants from 33 countries.
- HLG-MOS Modernisation Workshop and Webinars: Held online from 15-19 November 2021, with 148 representatives from 41 countries. Side events included:
  - Synthetic Data Webinar (17 November online): Attended by 73 participants from 24 countries.

- IPP Webinar (18 November online): Attended by 70 participants from 21 countries.
- Machine Learning Group Webinar (19 November online): Attended by 279 participants from 48 countries.
- Expert Meeting on Statistical Data Confidentiality: Originally planned as in-person in Poznan, Poland, but mostly online from 1-3 December 2021, with 169 participants from 32 countries.

### 2022

- HLG-MOS Meeting and Chief Statisticians Sprint: Held online on 10 March 2022.
- ModernStats World Workshop, 27-29 June 2022, Belgrade
- BSTN Sprints (and Executive Board Meeting), 12-13 July, Newport
- Applying data Science sprints, 13-14 July, Newport
- Machine Learning Sessions, 12-14 July, Newport
- Expert Meeting on Dissemination and Communication of Statistics: Conducted online from 13-15 September 2022.
- Expert Meeting on Statistical Data Editing: online from 3-6 October 2022.
- Workshop on HRMG, 11-13 October, Brussels
- Expert Meeting on Statistical Data Collection: Conducted in Rome, Italy, and online from 26-28 October 2022.
- HLG-MOS Modernisation Workshop and Seminars: Held in Geneva, Switzerland, and online from 22-24 November 2022, including:
  - Meta Academy Seminar on 24 November 2022 (in-person).
  - Input Privacy-Preservation Project Webinar on 24 November 2022 (hybrid).
  - o Machine Learning Group Webinar on 30 November 2022 (online).

#### 2023

- HLG-MOS, 26 February 2023, New York
- Machine Learning for Official Statistics Workshop: 5-7 June in Geneva, Switzerland.
- Expert Meeting on Statistical Data Collection: 12-14 June, online.
- Webinar on Cloud for Official Statistics, 14 September 2023, online
- Expert Meeting on Statistical Data Collection: 12-14 June 2023, online
- Expert Meeting on Disseminating and Communication of Statistics9-11 October in Lisbon, Portugal.
- HLG-MOS Workshop on the Modernisation of Official Statistics: 20-22 November in Geneva, Switzerland.

### 2. Manuals, Guidelines, and Methodological Resources

- Quality Framework for Statistical Algorithms (QF4SA)
- Outputs from the Supporting Standards Group, including work on linking GSBPM and GSIM, geospatial information for GSBPM, GSIM update, and organisation of the ModernStats World workshop
  - o Generic Statistical Data Editing Model (GSDEM) version 2.0
  - o Key Capabilities for Modernising Statistical Organisations placemat
  - o Linking GSBPM and GSIM for GSBPM phase 5

- Alignment of GSBPM Overarching Processes with GAMSO
- First version of the Core Ontology for Official Statistics
- o Metadata Glossary with 70 GSIM terms reviewed
- Common Statistical Production Architecture (CSPA) 2.0 document
- Outputs from the Capabilities and Communication Group, including Ethical leadership, Strategic Communication Framework, Culture Change and Internal Communications Strategy, Competencies Training and Development, and Future of work in the context of Modernisation of the workplace
  - Strategic Communication Framework Phase II Project elements (Stakeholder engagement; Internal communications; Employee engagement; Mission vision and values)
- Cloud for Official Statistics Project: Focused on developing guidelines and recommendations for cloud adoption in statistical organisations, addressing various themes like procurement, security, privacy, and skillsets required for cloud utilisation.
- Data Governance Framework for Interoperability Project: Aiming to develop a framework with elements, recommendations, and guidelines to achieve data interoperability in statistical organisations.

### 3. Pilot Studies

- Machine Learning Project, including pilot studies in coding and classification, edit and imputation, and imagery
  - o shared codes, practices, and webinar materials
- ModernStats Carpentry Project: A project to develop a partnership with the Carpentries organisation to create the ModernStats Carpentry, focusing on building global capacity in essential data and computational skills.

### 4. Promotion and Communication Materials

- Development of an interactive digital version of the CSPA 2.0 documentation and CSPA promotion material
- Social media strategies and extensions to complement the Strategic Communication Framework
- Training activities and strategies for NSOs to support modernisation, including communication and ambassadorship for official statistics.

## Annex 5. Project budget (UNECE)

### Project Budget

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Code	Object class	Activity/ Purpose	Units	Cost per unit (USD)	Total amount per object class (USD)
010	Staff and personnel (consultants)	A1.1. International expert to lead the work on the annual HLG-MOS project	2 Consultants per calendar year for the duration of the project x \$4,250 per month (2x3.5x12 months = 84 units)	4,250	357,000
010	Staff and personnel (consultant travel)	A1.2. Preparing and organising project sprints and workshops in support of the project deliverables	2 to 3 missions per year x \$3,600 (4x2.5= 10 units) <sup>8</sup>	3,600	64,800
		A1.3 Represent and present the project at relevant coordination meetings	2 missions per year x \$3,600 (4x2=8 units) <sup>9</sup>	3,600	
120	Contract service	A1.1 UN levied fee	Compulsory 1% levy on consultant contracts		3,570
160	Travel of Staff	A1.2. Preparing and organising project sprints and workshops in support of the project deliverables	3 missions per year x 3,600 (3x4=12 unites)	3,600	72,000
		A1.3 Represent and present the project at relevant coordination meetings	4 missions per year x1800 (4x4=16 units)	1,800	
160	Travel of meeting participants	A1.2. Support in participation of experts in project sprints and workshops in support of the project deliverables	4 missions of 2 participants per year x\$900 (4x3x2=24 units)	900	21,600
125	Operating and other direct costs	All activities	3,5 years \$ 500		1,018
135	Equipment vehicles and furniture	All activities	3,5 years \$ 500		1,750
Budge	t Sub-Total				521,738

2% for evaluation (for projects above 250,000\$	10,435
13% UN Programme Support Cost	67,826
Total budget *	600,000

Upon receipt of the new contribution from donor(s), when issuing the released budget for the new project, apart from the deduction of the required standard 13% UN Programme Support Costs, 15% operating reserve of the estimated annual expenditures during the year will be deducted from the cash available balance, which will be released during the last year of the project implementation.

# Annex 6. Summary of in-depth interviews

Topics	NSO #1	NSO #2	NSO #3	NSO #4	NSO #5
Priorities and Coordination	Debated based on BSTN recommendations, CES feedback. Internal coordination by International Relations office. Synergies with ESS DIME. Same staff involved in ESS and HLG-MOS.	No formal coordination with ESS DIME. Overlaps in standards development. Lower priority for innovation due to lack of legal basis.	No participation since COVID-19.	Alignment between CES and HLG priorities. Ideas from Chief Statisticians in CES.  Internal selection of innovation priorities.  No direct link with gender, disability, environmental issues.	Some overlap between HLG-MOS and ESS innovation activities.
Resources	About 20 staff from Methodology and IT Departments. Direct costs include travel and working time. ESS offers funding advantages.	Limited participation, mostly 2 people from Methodology Department.	No current participation.	NSOs can contribute to WGs and outputs, even if partially developed.	Innovative projects in the Innovation Department, but no top management demand. Human resource shortage. ESSNet provide easier financing.

Topics	NSO #1	NSO #2	NSO #3	NSO #4	NSO #5
Difficulties	Language issues, lack of technical skills  Focus on other priorities, top management not always convinced of skill enhancement.	Cultural lack of international cooperation among staff.  Legal obligations prioritised over innovation.  Existence of departmental siloes.	Staff shortage in Methodology and IT Departments. Governmental focus on Cloud migration. No internal innovation group. Financial constraints for next 2-3 years.	Difficulties in scheduling online meetings due to time zone differences.	Time zone differences pose challenges for online meetings.
Impact	Dissemination within Methodology department.  Organisation-wide training on standards. Accelerated knowledge and skill acquisition.	Activities disseminated by International Relations Department. Significant skill impact on staff involved in HLG-MOS. Long-term impact.	Useful results, but no formal innovation plans.  Networking beneficial, especially in face-to-face meetings.  Limited staff awareness of innovation activities.	NSO Management Board briefed about HLG-MOS activities.  Frequent presentations by participating staff.  Outputs requested by NSO colleagues.	Weak and unsystematic dissemination within NSO.  Participation based on personal commitment and availability, lacking sustainability.
Possible Improvements in HLG-MOS Management	Suggests expanding the Board to include non-EU countries.	Difficult access to products due to multiple wiki sites.  Need to take stock of all results and presentations.	Suggests UNECE financing and online meetings for easier participation.	Recommends rationalizing outputs.  Praises UNECE's secretarial support.	The UNECE does provide secretarial support but not technical advice to NSOs

# Annex 7. Summary of questionnaire answers (grouped by evaluation questions)

Category	Evaluation Questions	Insights from interviews	Insights from questionnaire
Relevance	To what extent did the project	The topics for development in the HLG-	In response to question Q3, which asked participants to
	respond to the priorities and needs	MOS groups are largely defined by the	rate the extent to which the HHLG-MOS addressed the
	of national statistical offices in	BSTN, and endorsed by the larger	priorities and needs of national statistical offices (NSOs) for
	beneficiary countries in modernising	statistical community at a high level	modernizing their statistical production, the findings
	their statistical production?	(CES).	indicate a positive reception. The average scores based on
			the perceptions of the effectiveness of HLG-MOS in meeting
		The interviewees highlighted varying	the modernisation needs of their own institution, NSOs
		levels of coordination - including	participating in HLG-MOS activities, and other NSOs were
		informally - with other initiatives, such	4.420, 4.500, and 4.250, respectively, on a scale (1-5) where
		as those dealt with the group of	higher scores denote stronger agreement. The highest
		Methodology directors of EU NSOs (ESS	average score of 4.500 was attributed to the NSOs
		DIME).	participating in HLG-MOS activities, suggesting that those
			directly involved with HLG-MOS felt their needs were being
		At the national level, the priorities for	effectively addressed.
		work are largely determined by the	
		legal obligations (e.g. EU Regulations on	The top 3 priorities according to the questionnaire answers
		statistics for its Member States), and	were: international collaboration to share practices and
		therefore, since innovation activities do	resources; innovation in official statistical methods and
		not have in general a legal basis,	facilitating better data exchange across domains and
		receive lower priority.	institutions.

Category	Evaluation Questions	Insights from interviews	Insights from questionnaire
Relevance	To what extent were the project activities consistent with global and regional priorities and aligned with the SDGs?	The project design and activities are endorsed by the CES, which is the highest coordination body in the UNECE Region for official statistics.	The distribution of responses to question Q5, which inquired about the alignment of HLG-MOS activities with global and regional priorities and the Sustainable Development Goals (SDGs) is moderate. With respect to the topics and information needs of the SDGs, the score was 3.1 on a scale (1-5). With respect to the principle of "leave no one behind", the score was 3.3. It seems that respondents consider that the HLG-MOS activities are rather aligned with other initiatives of statistical nature (increasing data for monitoring the SDGs) with a score of 3.44.
Relevance	How relevant were the project activities vis-à-vis the program of work of the UNECE? What value has UNECE added in this area?	The Secretariat of the CES is provided by the UNECE and therefore the work program of UNECE is taken into account. The evaluation by the interviewees of the secretarial support by UNECE to the working groups of HLG-MOS was highly praised.	
Relevance	To what extent were gender, human rights, disability perspectives and climate change considerations integrated into the design and implementation of the project? How can these perspectives be better included in future projects design and implementation?	J , .	Only one-quarter to one-third of respondents consider that any of these topics has been taken into account in the design of the project. Examples of considering climate change included not only the better measurement through innovative data sources, but also the mitigation of emissions by replacing physical by online meetings. One participant mentioned the fair representation of genders at all levels of activities.
Effectiveness	To what extent were the project design and set-up effective for meeting the needs of statistical offices in beneficiary countries?		(sees Tables A and D).

Category	<b>Evaluation Questions</b>	Insights from interviews	Insights from questionnaire
Effectiveness	To what extent did the project	The impact of participation in HLG-MOS	89% of the respondents consider that the HLG-MOS
	achieve its objectives and expected	activities varied, with some NSOs	achieved their objectives, improving the competencies of
	results, namely to improve the	seeing organisation-wide benefits and	NSOs to modernise their processes and products.
	competencies of statistical offices in	skill development, while others had	
	the beneficiary countries to	limited dissemination and awareness of	
	modernise their statistical	innovation activities within their	
	production and to address the	organisations. Training and accelerated	
	emerging issues identified by HLG-	acquisition of knowledge and skills was	
	MOS in the field of official statistics?	clearly achieved for the participation	
		staff, but for non-participating	
		colleagues in NSOs the impact was	
		lower, and depended on the internal	
		dissemination of results (e.g. by the	
		departments in charge of International	
		Relations, Methodology, Training).	
		Networking with colleagues in other	
		countries was seen as beneficial.	

Category	Evaluation Questions	Insights from interviews	Insights from questionnaire
Effectiveness	To what extent are the project activities coherent and harmonised with those of other partners operating within the same context, particularly those of other UN system entities?		The responses about the achievement of results of the HLG-MOS activities indicate significant progress and impact. More than 40% of the responses to Q8 indicate that HLG-MOS activities were very coherent (with those of other partners such as UN initiatives (e.g. UN Global Pulse on the use of innovative data sources) and especially with those carried out within the European Statistical System (ESS). They highlight the global use of frameworks, standards, and best practices developed by HLG-MOS, with increasing participation in events. Key achievements include updating crucial models like GSBPM and GSIM, enhancing interoperability, transparency, and international cooperation in statistical processes. The HLG-MOS is noted for its unique, effective collaboration, providing tools for modern challenges like AI/ML, cloud technology, data science, and building training platforms. Notably, efforts like the Machine Learning project have created a learning and sharing community, establishing UNECE standards as a benchmark in the standardisation of statistical processes.  On the negative side, it was mentioned that the activities did not widely reach the NSOs' staff (only the participants in activities), and one participant mentioned that the overall Official Statistical system is in crisis and that improving it needs a big change.

Category	Evaluation Questions	Insights from interviews	Insights from questionnaire
Effectiveness	Which obstacles and difficulties did statistical offices face, if any, that prevented them from actively participating in the project?	Common challenges include language barriers, technical skill gaps, cultural issues (i.e. orientation to innovation), and legal obligations. Lack of human resources in the NSO, prioritising the work which is required by a legal basis. Organisational structures, such as departmental silos, and external factors like time zone differences for online meetings, also posed significant challenges.	(see Table B)
Effectiveness	What were the challenges/obstacles (including COVID-19) to achieving the expected results? How successfully did the project overcome these?	The COVID-19 pandemics obliged to move to online meetings, which decreased the interaction with colleagues and the resulting networking effect, which is considered valuable by all interviewees.	
Efficiency	Were the resources adequate for achieving the results?	Responses from interviews varied from having dedicated up to 20 staff from departments for innovation (mainly departments responsible for Methodology or IT) to facing human resource shortages and financial constraints. Some NSOs benefit from funding advantages (e.g. through the participation in ESSnet or ESS.VIP projects), while others struggle with participation due to limited resources.	(see Table C)

Category	Evaluation Questions	Insights from interviews	Insights from questionnaire
Efficiency	Were the results achieved on time and were all activities organised efficiently?		95% of participants consider that outputs of HLG-MOS activities were on time and all activities organised efficiently. One participant complains that information is not widely disseminated except to the participants in teh activities.
Efficiency	To what extent were the resources used economically and how could the use of resources be improved?		The use of resources could be improved by increasing the promotion of results (both by UNECE staff and within the NSOs). Hybrids meetings did not achieve the quality of sound. Using open sources instead of commercial software.
Sustainability	What measures were adopted to ensure that project outcomes would continue after the project ended and to what extent have these measures addressed the existing risks for sustainability?		The responses to the question about NSO measures taken for sustaining outcomes from HLG-MOS activities show varied approaches. Some NSOs have taken specific actions like integrating international standards like GSBPM and GSIM as internal production standards, and expanding competencies in areas like Machine Learning. Others have focused on activities like presenting outcomes to senior management committees, network building, training, and translation of content. However, a few respondents indicated either no measures in place or expressed concern about the lack of such measures. This highlights a range of engagement levels in integrating HLG-MOS outcomes into organisational practices for sustainability.
			Some respondents mentioned the gap between innovation and adoption / implementation and the need to better disseminate the results to the statistical community. One respondent said "I can only note the importance of NSOs to encourage and support their employees to attend the occasional sprints. The sprints are very work-intensive,

Category	<b>Evaluation Questions</b>	Insights from interviews	Insights from questionnaire
			significantly advance progress during and after as a result of the team building and personal/professional connections that occur at the meeting.". More open-source software to be used. Funding for the participation of NSOs' staff and invited speakers would ensure scaling up the work.
Sustainability	To what extent do the partners and beneficiaries 'own' the outcomes of the work? How is the stakeholders' engagement likely to continue, be scaled up, or replicated?		The responses on sustainability indicate that the participants consider that physical participation and hosting events are the less sustainable contributions. Remote participation is considered from moderately to completely sustainable.
Sustainability	To what extent project activities streamlined with countries projects and activities?		72% of respondents indicated that the alignment of HLG-MOS activities with the country projects is done informally.