

Enhancing Leadership Advocacy for Effective User Engagement in Official Statistics

SIAP 2025 Management Seminar - Concept Paper

Prepared by

Gabriel Gamez

Chief, Statistical Capacity Management Section

United Nations Statistics Division

Executive Summary

Official statistics are only fully valuable when they are used. In a rapidly evolving data environment, National Statistical Offices (NSOs) and National Statistical Systems (NSS) face growing expectations from policymakers, civil society, the private sector, the media and the general public for timely, accessible and trustworthy data. User engagement is therefore not an optional activity but a core leadership responsibility and a fundamental component of the management and organisation of NSS (see Section 1).

This concept paper underpins the SIAP 2025 Management Seminar on “Enhancing Leadership Advocacy for Effective User Engagement in Official Statistics”. The seminar is designed for Chief Statisticians and senior management teams from Asia and the Pacific. It focuses on how leadership can systematically strengthen user engagement as part of institutional governance, organisational culture and modernisation processes, and how this can be translated into concrete action plans (Sections 4, 5 and 7).

The paper brings together international normative and reference frameworks, good practices from across regions and the specific challenges and opportunities faced by Asia-Pacific NSOs. Section 1 briefly situates user engagement within key international frameworks and principles. The paper emphasises that user engagement has two complementary dimensions. The first is external engagement with diverse users of statistics throughout the statistical cycle, from planning and design through to dissemination and use (Sections 2 and 3). The second is internal engagement that builds staff capacity, motivation and a user-oriented organisational culture so that engagement is embedded in day-to-day work (Sections 4 and 5).

The Asia-Pacific region is characterised by diversity in country size, capacity, institutional arrangements and levels of digitalisation. Across the region, demand for disaggregated, interoperable and user-friendly data is increasing, driven by the 2030 Agenda for Sustainable Development, national development strategies, climate and disaster risk agendas and commitments on gender equality and leaving no one behind. At the same time, NSOs must respond to growing competition in the broader data ecosystem and maintain trust in official statistics (Sections 1 and 6).

User engagement is central to meeting these demands. It supports better alignment between statistical production and national priorities; greater relevance, accessibility and interpretability of official statistics for different user groups; stronger public trust and accountability; and more efficient use of limited resources by focusing on what users need most (Sections 2 and 3). International frameworks, including the Fundamental Principles of Official Statistics, the United Nations National Quality Assurance Frameworks Manual for Official Statistics, and the Handbook on Management and Organization of National Statistical Systems, underline the importance of relevance, accessibility, interpretability, and trust as core quality dimensions. Regional and analytical work provides further practical guidance on user engagement, open data and communication (Section 1; references and additional readings are listed in the Annex).

The concept paper is intended to support senior leaders in NSOs to clarify why user engagement is a strategic leadership issue rather than only a technical function; to reflect on the needs and behaviours of different user groups; to identify concrete mechanisms, methods and leadership practices that support engagement; to consider how innovation and capacity development can be leveraged responsibly and inclusively; and to situate these issues within the specific realities of Asia and the Pacific (Sections 2 to 7). broader culture of informed decision-making and accountability (see Sections 5 and 6).

The main messages of the concept paper can be summarised as follows:

1. **User engagement is integral to the quality, relevance and trustworthiness of official statistics** (Sections 1, 2 and 3). It is not limited to dissemination or communication at the end of the statistical cycle, but is a process that spans planning, design, production and use. Engagement with users helps NSOs to understand evolving needs, identify data gaps, prioritise resources and improve the interpretability and accessibility of their products. It also reinforces accountability and supports data literacy among different user groups.
2. **Different user groups have diverse and evolving needs that require tailored engagement** (Section 2). Policymakers, line ministries, local governments, civil society organisations, the private sector, media, academia and the public extensively use statistics in diverse ways. Their needs range from detailed microdata and complex indicators to simple visualisations and clear narratives. Digital transformation, new data sources and increased attention to inequalities are changing what users expect from official statistics. Many users also face barriers to access and use, including limited data literacy, complex interfaces, language barriers, and connectivity constraints, which can reinforce inequalities if left unaddressed.
3. **Effective user engagement combines structured strategies, appropriate mechanisms and clear communication** (Section 3). A user engagement cycle that includes identifying and prioritising user groups, choosing appropriate engagement mechanisms and using feedback to improve products and services helps NSOs to organise their efforts. Tools such as stakeholder mapping, user journey analysis and

communication frameworks support clear, accessible and honest communication. Practical mechanisms include advisory bodies, user groups, consultations, surveys, feedback tools and digital platforms. A step-by-step approach to developing a user consultation strategy can help NSOs to structure these activities.

4. **Governance, leadership and organisational culture are critical enablers of user engagement** (Section 4). User engagement cannot be sustained as a series of isolated projects. It requires governance arrangements that clarify institutional mandates, coordination mechanisms, planning processes, advisory structures and reporting practices that encourage a focus on users. Leadership has a significant role in setting expectations, modelling user-oriented behaviour, allocating resources and advocating for the value of statistics. Leadership skills such as strategic communication, active listening, negotiation and empathy are critical. A user-oriented organisational culture encourages internal collaboration, openness to feedback and continuous improvement.
5. **Innovation and capacity development must go hand in hand and remain people-centred** (Section 5). Digital tools, open data portals, interactive dashboards and emerging technologies such as artificial intelligence offer new ways to engage users and make data more accessible. They also bring challenges related to ethics, inclusiveness, transparency and technical capacity. Responsible innovation requires strong governance, clear safeguards and active consideration of users who may have limited connectivity, language constraints or lower levels of data literacy. Innovation is effective only when NSOs invest in staff capacity development in areas such as communication, user research, design, data visualisation, and the responsible use of innovative technologies.
6. **Asia-Pacific NSOs face common challenges but also significant opportunities for peer learning and regional cooperation** (Section 6). Many NSOs in the region work with limited human and financial resources, fragmented data ecosystems and high expectations from national and international stakeholders. Small Island Developing States face particular constraints. At the same time, there are numerous examples of good practice, including structured user consultations, the use of open data portals and innovative communication approaches. Regional and subregional collaboration, including through SIAP and the United Nations Economic and Social Commission for Asia and the Pacific, supports peer learning, capacity development and shared approaches to user engagement.
7. **Sustained leadership commitment is essential to embed user engagement in statistical development** (Section 7). User engagement should be reflected in national strategies for the development of statistics and other planning instruments, in quality assurance frameworks and in modernisation initiatives. It should be supported by realistic resource planning and partnerships with other actors in the data ecosystem. Long-term leadership commitment is needed to ensure that user perspectives remain central to statistical development and that actions agreed upon at seminars and other forums are followed up on.

The SIAP 2025 Management Seminar will use this concept paper as a reference and discussion document. The seminar will be structured around interactive sessions that combine short presentations with peer exchange, group work and case studies from countries in the region and beyond. It will focus on understanding user groups and their needs in different national contexts; exploring practical mechanisms and tools for engagement, including advisory bodies, consultations, user journeys and communication practices; reflecting on governance and leadership roles in strengthening user engagement, including organisational culture and internal communication; considering how innovation and capacity development can be aligned to support more user-centred statistics; and developing leadership-level action plans for strengthening user engagement in participants' own institutions (Sections 2 to 7).

By the end of the seminar, participants are expected to have developed or refined concise action plans outlining specific leadership decisions and institutional measures to enhance user engagement; to have strengthened their understanding of how organisational culture, internal communication and staff development contribute to a user-oriented NSS; to have identified opportunities for regional cooperation and peer learning on user engagement and communication; and to have contributed examples and experiences that can inform future SIAP training, e-learning modules and guidance materials on user engagement (Sections 4 to 7).

The seminar is expected to contribute to regional statistical development by reinforcing leadership skills, strengthening the integration of user perspectives into planning and modernisation and supporting the implementation of international frameworks related to the quality, relevance and accessibility of official statistics (Sections 1 and 7, with references listed in the Annex).

1. Introduction

This concept paper supports the SIAP 2025 Management Seminar on “Enhancing Leadership Advocacy for Effective User Engagement in Official Statistics”. It is intended for National Chief Statisticians and senior management teams and should be read alongside the Executive Summary. While the Executive Summary presents the main messages of the paper, this section briefly sets out the context, objectives and structure of the document.

Across Asia and the Pacific, demand for timely, disaggregated and user-friendly data continues to grow. Governments, parliaments, civil society, the private sector, the media, academia and the public at large increasingly rely on data to inform national development plans, the 2030 Agenda for Sustainable Development, climate and environmental commitments and other national and international agendas. At the same time, many National Statistical Offices (NSOs) work with constrained resources and operate within complex, decentralised data ecosystems. Addressing gaps between the production and the use of official statistics has therefore become a central leadership challenge for National Statistical Systems (NSS) (see Sections 2 and 6).

The paper focuses on user engagement as a strategic leadership issue rather than only a technical function. It emphasises two complementary dimensions of user engagement. The first is external engagement with diverse users of statistics throughout the statistical cycle, from needs assessment and planning to dissemination and use. This requires understanding who the users are, what they need, how they access and interpret statistics and how they can provide feedback (see Sections 2 and 3). The second is internal engagement, which concerns staff capacity, motivation and organisational culture. A user-oriented culture supports collaboration, openness to feedback and continuous improvement. It allows engagement to become part of day-to-day work rather than an isolated activity (see Sections 4 and 5).

Table 1. Quality dimensions and their link to user engagement
(Based on the UN-NQAF)

Quality dimension	Link to user engagement
Relevance	Requires systematic identification of user needs and priorities
Accessibility	Depends on user-friendly formats, clear portals, and open dissemination practices
Interpretability	Strengthened through explanatory notes, metadata, and transparent communication
Accuracy and reliability	Supported by feedback from users on anomalies, gaps, and limitations
Timeliness	Informed by user expectations related to planning and reporting cycles
Coherence	Facilitated when users understand how related datasets connect and complement each other

International frameworks provide an essential foundation for integrating user engagement into the management and organisation of official statistics. The Fundamental Principles of Official Statistics, the United Nations National Quality Assurance Frameworks Manual for Official Statistics, and the Handbook on Management and Organization of National Statistical Systems underline relevance, accessibility, interpretability, and trust as core quality dimensions. Table 1 presents selected quality dimensions and illustrates how they relate to user engagement across the statistical cycle. These and other references are used throughout the paper and listed in the Annex for readers who wish to explore them in more detail.

The sections that follow present: an overview of main user groups and their evolving needs (Section 2); strategies, mechanisms and communication practices for engaging users (Section 3);

the role of governance, leadership and organisational culture (Section 4); the interplay between innovation and capacity development (Section 5); and key challenges and opportunities for Asia-Pacific NSOs (Section 6). Section 7 brings these elements together by focusing on leadership-level action plans and the seminar's expected outcomes.

2. Users of Statistics and Their Evolving Needs

Users of official statistics form a broad and diverse community. They include policymakers and planners in central and local government, parliamentarians, line ministries and specialised agencies, civil society organisations, the private sector, the media, academia, international organisations and the general public. These actors use statistics to inform policies and programmes, allocate resources, monitor progress, support advocacy and accountability, conduct research and participate in public debate. Understanding who these users are and how they use statistics is the starting point for effective engagement (see Sections 3 and 4).

User needs are not uniform. Some users require detailed microdata and complex indicators, while others need simple, clearly explained figures that are easy to understand and communicate. Many users depend on intermediaries, such as research institutes, think tanks or the media, to interpret and communicate statistics to broader audiences. A clear picture of user groups and their typical needs can help National Statistical Offices (NSOs) and National Statistical Systems (NSS) prioritise efforts and design products and services better aligned with demand.

Annex 1, Example Box 1, presents experiences from Kazakhstan, Bangladesh, the Russian Federation, and Lao PDR on how structured consultations, user satisfaction surveys, and SDG platforms have been used to understand better and respond to evolving user needs.

2.1 Main user groups and their typical needs

Different user groups rely on official statistics in various ways and for different purposes. Policymakers and planners often need timely, disaggregated and policy-relevant statistics, accompanied by clear explanations of concepts, methods and limitations. Line ministries and sectoral agencies may require detailed data for programme planning and monitoring in specific domains such as education, health, agriculture or labour. Local governments need information at subnational levels to support local planning and service delivery. Civil society organisations and community-based organisations use statistics to support advocacy, monitor government commitments and design interventions. The private sector uses statistics for market analysis, investment decisions and risk assessment. The media and data journalists inform the public and stimulate debate, while academics and researchers require access to microdata and well-documented metadata for in-depth analysis. The wider public increasingly seeks accessible and trustworthy statistics to understand issues that affect daily life.

Table 2 provides an indicative overview of the main user groups and their typical needs. It is not exhaustive and does not capture the full diversity of users within each group. Instead, it serves as a starting point for country-level analysis. NSOs are encouraged to adapt and expand this mapping

to reflect their own national context, including emerging user communities and new institutional actors in the data ecosystem. Section 3 discusses how such a mapping can be used in stakeholder analysis and engagement strategy design.

Table 2. Main user groups and their typical needs

(Based on the UNSD Handbook, the UK Government Statistical Service strategy, and the World Bank Open Data guidance)

User group	Typical information needs	Illustrative examples
Policymakers	Timely data, analytical briefs, disaggregated indicators	Dashboards linked to national planning or budgeting cycles
Researchers and academics	Machine-readable data, microdata access, metadata, and methodological information	Open data portals, structured datasets, and research microdata
Private sector	Granular economic and demographic data, business statistics	Business registers, economic indicators, and price statistics
Civil society and media	Clear narratives, visualisations, thematic fact sheets	Infographics, press material, quick explanatory notes
Public	Simple information, context, intuitive visuals	Key indicators pages, interactive charts
International bodies	Harmonised and comparable statistics	SDMX feeds, structured SDG reporting

This mapping is indicative rather than exhaustive. Within each group, there are more specialised users with specific sectoral, thematic, or methodological needs. A sound understanding of these differences is crucial for designing effective engagement and communication strategies tailored to each audience.

2.2 Evolving needs in a changing data environment

Users' needs and expectations are changing as data ecosystems evolve. Digital transformation, new data sources and growing attention to complex, cross-cutting challenges are reshaping what users expect from official statistics and how they access and use them. Users increasingly expect statistics that are more timely, supporting real-time or near-real-time decision-making; more disaggregated, including by sex, age, location, disability status and other characteristics in line with the 2030 Agenda commitment to leave no one behind; more integrated, allowing them to combine data across domains such as social, economic, environmental and governance indicators; and more accessible and interactive, including through user-friendly portals, dashboards, visualisations and application programming interfaces (APIs).

New actors have also emerged as key users and intermediaries. These include data journalists, civic technology organisations, private data providers and platform developers who reuse and repackage official statistics for specific audiences. At the same time, many traditional user groups are adopting new ways of working with data, such as integrating official statistics with administrative records, geospatial information or privately held data. International assessments on the future of national statistical systems and national data ecosystems underline that NSOs must pay attention not only to what statistics are produced, but also to how they are delivered and used. This includes understanding users' digital behaviours and expectations, as well as the platforms and channels through which they access information. Innovation in dissemination and communication is discussed further in Section 5.

The diversity of user groups and the rapid pace of change mean that NSOs cannot rely on a single engagement model. They need a combination of approaches, tailored to different users and contexts. Sections 3 and 4 present practical tools, including stakeholder mapping and user journey analysis, which can help NSOs to better understand and respond to evolving needs.

2.3 Barriers to accessing and using official statistics

Even when data are available, many users face barriers that limit their ability to find, understand and use official statistics. These barriers can be practical, technical, institutional or contextual, and they may differ significantly across user groups. Some users are unaware that certain data exists or is accessible, or may have difficulty finding data when websites are complex to navigate, search functions are limited, or data are scattered across different platforms. In other cases, a lack of clarity and documentation, including insufficient metadata, unclear definitions or inconsistent classifications, makes it difficult to interpret and compare statistics.

Language and communication barriers can also limit use, for example, when statistical products rely heavily on technical terminology or are not available in national or local languages. Digital and connectivity constraints, particularly for users in rural or remote areas or for those who rely primarily on mobile phones and low-bandwidth connections, can further restrict access. Many users, including government employees, face limitations in data literacy and analytical capacity, which can prevent them from interpreting and applying statistics correctly. In addition, legal or institutional constraints on microdata access, or unclear conditions for data reuse, can discourage potential users.

These barriers can reinforce existing inequalities in data use. Well-resourced institutions may have the capacity to overcome them, while less-resourced organisations and individuals may not. As a result, the benefits of official statistics may not be evenly distributed across society. Table 3 summarises the common barriers faced by users of official statistics and their effects. It can be used as a diagnostic tool when planning engagement activities or reviewing dissemination practices.

Table 3. Common barriers faced by users of official statistics

(Based on Seale et al. 2023, Open Data Watch, and UN NQAF accessibility guidance)

Barrier	Description	Examples of effects
Communication and language	Information is too technical or available only in dominant languages	Misinterpretation or reliance on unofficial sources
Digital access and literacy	Limited access to technology or inadequate skills to navigate portals	Lower use of open data platforms and online tools
Cultural and community relevance	Data do not reflect community priorities or lived realities	Lack of trust, disengagement, or low use of official statistics
Navigation and usability	Websites or portals are difficult to search or understand	Users abandon attempts to access data
Lack of transparency or metadata	Methods or limitations are not clearly explained	Misuse or misunderstanding of statistical information

Addressing these barriers often requires a combination of measures, including improvements in dissemination systems, clearer communication and support for user capacity development. Mechanisms and methods for addressing such barriers through structured engagement are discussed in Section 3, while broader issues related to organisational culture, innovation and capacity development are explored in Sections 4 and 5. Engagement with users also strengthens accountability. By consulting users on their needs and experiences, NSOs can identify where statistical products, dissemination tools, or communication practices may need improvement and demonstrate how user feedback has been incorporated.

3. Strategies for Effective User Engagement

Effective user engagement requires a deliberate, structured approach integrated into the planning, production, and dissemination of official statistics. It is not a single activity, but a continuous process that connects the mapping of user groups and needs (Section 2) with governance arrangements, organisational culture and capacity development (Sections 4 and 5). A structured approach helps National Statistical Offices (NSOs) and National Statistical Systems (NSS) make engagement systematic rather than ad hoc, and to ensure it contributes directly to the quality, relevance, and trustworthiness of official statistics.

This section introduces key elements of such an approach. It presents the user engagement cycle, discusses how understanding user behaviour and user journeys can inform design and dissemination, highlights the foundations of effective communication, and reviews mechanisms

and methods for user engagement. It concludes with a step-by-step approach for developing a user consultation strategy that operationalises the engagement cycle in practice.

Annex 1, Example Box 2, highlights approaches from Armenia, Georgia, and the Philippines that illustrate how user consultations, feedback mechanisms, and national statistical events can support more systematic and sustained engagement with users.

3.1 The user engagement cycle and its importance

User engagement is most effective when understood as a continuous cycle intricately linked to the statistical production process. The cycle begins with understanding user needs by mapping user groups, their typical uses of statistics, and the barriers they face (Section 2). This understanding helps NSOs set priorities, define key questions, and identify which indicators, breakdowns, and formats are most relevant to different audiences.

Engagement continues through consultation and participation, which provide structured opportunities for users to express their needs, comment on plans and share feedback on existing products. User perspectives can be sought when developing national statistical strategies and work programmes, designing surveys and improving administrative data, and planning new dissemination tools. Consultation helps to identify gaps, clarify priorities and ensure that statistical activities remain aligned with policy needs and broader societal demands.

Once data have been produced and released, engagement focuses on communication and feedback. Users need clear explanations of concepts, methods, classifications, and limitations, along with guidance on interpreting results. Feedback from users on the usability of dissemination platforms, the clarity of metadata, and the accessibility of products provides essential information for further improvement. Documenting how such feedback is considered is vital for maintaining trust and demonstrating accountability.

Leadership plays a crucial role in ensuring that this engagement cycle is embedded in institutional practice. This includes allocating time and resources to engagement activities, establishing coordination mechanisms among producers of official statistics, and integrating user perspectives into planning, quality assurance, and monitoring processes. It also requires attention to inclusiveness, as users may differ significantly in their opportunities to engage. Section 3.5 translates this cycle into a practical sequence of steps for developing and implementing a user consultation strategy, while Section 4 discusses the governance and leadership conditions that support it.

3.2 Understanding user behaviour and user journeys

Understanding how users seek, access and interpret official statistics is an essential foundation for designing effective engagement strategies. Users interact with statistical information in many different ways, depending on their skills, the tools available to them and the purposes for which they use data. Some experienced users can navigate complex databases and documentation with

ease, while others struggle to locate data, understand definitions or interpret visualisations. Engagement strategies, therefore, need to be informed by knowledge of how users behave and how they experience statistical products and services.

Approaches developed in other fields, including design thinking and service design, can be helpful in this context. One such method is user journey mapping, which examines the steps a user follows when searching for information, downloading datasets or consulting statistical publications. By analysing these steps, NSOs can identify where users encounter difficulties, such as challenges locating variables, uncertainty about definitions or confusion about navigation paths. This analysis can highlight opportunities to improve accessibility, clarity and navigability.

The AEIOU method offers a straightforward framework for understanding user journeys by focusing on activities, environments, interactions, objects and user characteristics. These elements help NSOs to understand the circumstances under which users seek information, the channels and devices they use, the paths they follow and the points at which they may abandon a search or misinterpret a concept. Table 4 summarises the AEIOU elements and illustrates how they can be applied to analyse user journeys for official statistics. Insights from such analysis can inform improvements in platform design, metadata structures, explanatory materials and user support.

Table 4. AEIOU elements for understanding user journeys

Based on Harvard Business School Online, Improve Product and Service Design with AEIOU, and adapted with concepts from the United Nations Statistical Handbook.

AEIOU element	Meaning	Application for NSOs
Activities	What users do	Searching for data, reading releases, or browsing indicators
Environments	Where users access information	Websites, mobile devices, libraries, or offices
Interactions	How users navigate and interact	Opening tables, scrolling through dashboards, or accessing metadata
Objects	What users use	Tables, dashboards, charts, or publications
Users	Who they are	Policymakers, journalists, analysts, or students

User journey analysis is particularly valuable when NSOs plan changes to websites, data portals and other digital dissemination tools. It can help ensure that users can locate key products, navigate platforms logically, and understand what they find. It also supports inclusiveness by identifying and addressing barriers that disproportionately affect users with limited digital skills, poor connectivity or limited familiarity with statistical concepts. Section 5 returns to these issues from the perspectives of usability, design, and user experience.

3.3 Foundations of effective communication

Clear and purposeful communication is a vital component of user engagement. Users rely on official statistics to monitor social, economic and environmental conditions, assess progress and contribute to public debate. They therefore need information that is understandable, meaningful and presented in ways that support correct interpretation. Communication is not only about dissemination at the end of the production process. It concerns how NSOs shape messages, explain methods, structure metadata, design visualisations and respond to questions throughout the engagement cycle.

Different user groups have different communication needs (Section 2). Policymakers and planners may prefer concise analytical notes that highlight key messages and policy implications. Journalists often need rapid access to headline results, supported by clear explanations and illustrative examples. Researchers and analysts require detailed documentation of methods, classifications and limitations. The general public may benefit from intuitive and straightforward messages, supported by visualisations and short explanations. Communication strategies should therefore be tailored to user needs rather than based solely on technical perspectives.

Table 5. Communication principles relevant to user engagement

Based on Stival et al. 2025, Communicating Complex Statistical Models; Harvard Business School Online, Data Storytelling; and the United Nations Statistical Handbook.

Principle	Description	Application
Framing	Placing data in a meaningful context	Linking indicators to national policy priorities or development goals
Accessibility	Providing information that users can reach and navigate	Clear landing pages, tables that can be opened on mobile devices, and accessible visualisations
Relevance	Ensuring that information corresponds to user priorities	Highlighting thematic areas or indicators that respond to information needs
Simplicity	Reducing unnecessary complexity	Plain language summaries, avoidance of technical terminology, and straightforward charts

Communication frameworks can help NSOs present information clearly and consistently. One example is the FARSI set of principles, which refer to framing, accessibility, relevance, simplicity and interpretability. These principles can guide the preparation of statistical messages and the design of charts, dashboards, metadata pages, press materials and data visualisations. Table 5 presents the FARSI principles and illustrates their application in the context of official statistics.

Applying such principles can make communication more inclusive and user-centred. Users with limited technical background can more easily understand information when it is clearly framed, uses accessible language, focuses on relevant messages and avoids unnecessary complexity. Communication also supports transparency by explaining how data are collected and processed, the confidentiality rules applied and the release schedule. This, in turn, prevents misinterpretation, strengthens trust and reinforces accountability.

3.4 Mechanisms and methods for engaging users

User engagement requires concrete mechanisms that enable meaningful interaction between producers and users of official statistics. These mechanisms allow users to express their needs, clarify expectations, identify limitations and contribute to the continuous improvement of statistical products and services. They can take many forms and should be combined in ways that reflect the characteristics of different user groups, the type of information being produced and the institutional context.

Mechanisms for engagement include formal structures such as statistical advisory councils, user committees and working groups, as well as consultations, surveys, workshops, literacy sessions and public events. Each mechanism serves a specific purpose and is suited to particular topics and stages of the statistical production cycle. Engagement methods should therefore be selected with care, ensuring that they match user needs and the objectives of the statistical activity. Table 6 summarises common engagement mechanisms and suggests when each is most appropriate.

The statistical advisory council deserves particular attention. In many countries, such councils bring together representatives of major user groups, including government institutions, academia, the private sector, civil society and international partners. They play a significant role in reviewing strategic and operational programmes, validating priorities, commenting on methodological changes and providing feedback on dissemination and communication practices. Their involvement helps ensure that engagement is anchored in governance and becomes part of institutional decision-making rather than an isolated activity (see also Section 4).

Engagement mechanisms should also be inclusive. Some users face specific barriers due to language, location, disability, connectivity or limited experience with data. Engagement activities should therefore be designed to support broad participation. This may include offering information in multiple languages, ensuring physical and digital accessibility for persons with disabilities, organising specific sessions for civil society or journalists and providing tailored explanations for groups with limited data literacy. Inclusiveness also requires attention to user groups whose voices may be less visible or less represented in traditional consultation settings.

Table 6. Engagement methods and when to use them

Based on the United Kingdom Government Statistical Service User Engagement Strategy, the United Nations Statistical Handbook, and Open Data Watch, Overcoming Data Graveyards.

Method	Purpose	When to use
Bilateral consultations	To gather targeted views from specific users	When revising indicators or planning new statistical series
User panels	To maintain continuous dialogue	When regular feedback is required across sectors or themes
User satisfaction surveys	To assess perceptions of accessibility, relevance, and quality	After major releases or updates to dissemination tools
Focus groups	To understand expectations, concerns, or misinterpretations	When designing new dissemination tools, formats, or portals
Workshops and literacy sessions	To build knowledge and understanding among users	When launching new or complex statistical products
Public events	To increase visibility, awareness, and participation	During major statistical campaigns or thematic events
Statistical Advisory Council	To provide structured and representative advice on strategic and operational programmes and to review implementation results	Throughout the planning cycle and during the preparation of implementation reports

In addition to formal mechanisms, NSOs increasingly use digital tools such as website feedback forms, online user surveys, web analytics, real-time chat functions, and social media channels. These tools can provide rapid feedback on how users navigate platforms, which products they access, where they encounter difficulties and what improvements may be needed. They can also reach users who are unable to participate in in-person activities. Whatever mechanisms are used, they should be planned, documented and regularly reviewed to ensure that they are effective and that user input is followed up.

3.5 A step-by-step approach for developing a user consultation strategy

Strengthening user engagement requires not only an understanding of user groups and mechanisms but also a structured approach to consultation that links the engagement cycle to practical activities. A user consultation strategy can help NSOs to organise engagement in a way that is aligned with institutional priorities, realistic given available resources and responsive to user needs. The steps below synthesise international guidance and country practices into a

practical pathway for planning and managing user consultation. They can be adapted to different institutional contexts and are intended to operationalise the engagement cycle described in Section 3.1.

1. **Map and understand user groups.** Identify and analyse the different types of users who rely on official statistics, considering their needs, interests, capacities and preferred communication channels. Mapping should reflect national priorities and the diversity of users described in Section 2, including those who may be underserved or underrepresented in current engagement activities.
2. **Define consultation objectives and scope.** Clarify why the consultation is being undertaken and what decisions or improvements it should inform. Objectives may include identifying emerging data needs, prioritising statistical activities, assessing the usability of dissemination tools or gathering feedback on methodological changes. Clear goals help to focus engagement on the most critical issues and to manage expectations.
3. **Prioritise topics and timing.** Not all issues can be addressed at once. NSOs should identify priority topics for consultation and determine when engagement will be most useful in the statistical cycle, for example, when designing a new survey, revising a classification, developing an open data portal or updating a national statistical plan. A realistic timeline helps ensure consultation results can be used in decision-making.
4. **Select appropriate consultation methods.** Methods should be chosen to match objectives, user groups and available resources. Options may include advisory council meetings, focus groups, workshops, online surveys, bilateral meetings, written comments or combinations of these. The mapping of user groups and the overview of mechanisms in Section 3.4 can help in this selection.
5. **Develop a consultation plan.** The plan should specify roles and responsibilities, target user groups, methods, expected outputs and follow-up arrangements. It should also set out how information will be communicated before, during and after the consultation, including how contributions will be recorded and used.
6. **Implement consultation activities.** Consultations should be conducted transparently and respectfully, with clear communication about how user input will be considered. Particular attention should be paid to the participation of under-represented groups and to practical issues such as language, accessibility and connectivity.
7. **Analyse feedback and identify priorities for action.** Inputs from consultation activities should be reviewed systematically and synthesised into key findings. These findings can inform adjustments to statistical products, dissemination practices, methodological improvements or capacity-building activities.

8. **Communicate results and actions.** Users should be informed about the outcomes of the consultation and the main decisions or changes that follow. Communicating results demonstrates that user input is valued, encourages continued participation, and supports accountability.
9. **Integrate feedback into planning and quality processes.** Consultation findings should be reflected in work programmes, quality-assurance procedures and monitoring frameworks, so that user engagement contributes directly to improvements in statistical production and communication.
10. **Monitor, evaluate, and adapt the consultation strategy.** NSOs should periodically review their consultation practices, drawing on indicators such as participation rates, user satisfaction, quality of feedback and improvements introduced. Lessons learned can guide adjustments to future consultation cycles and help strengthen engagement over time.

This structured approach helps to ensure that user consultation is meaningful, inclusive and sustainable. It embeds user input into the institutional processes that govern the production and dissemination of official statistics, thereby supporting a culture of continuous improvement.

4. Governance, leadership, and organisational culture

Governance, leadership, and organisational culture are central to ensuring that user engagement is planned, coordinated, and integrated into day-to-day work. They provide the structures and behaviours through which National Statistical Offices (NSOs) and other producers of official statistics can translate the principles of relevance, accessibility, interpretability, and trust into practice (see Section 1 and Table 1). Governance defines roles, mandates, and processes; leadership sets direction and allocates resources; organisational culture shapes how staff interact with users and with one another. Together, these elements determine whether user engagement is sustained and effective or remains occasional and fragmented.

International guidance underlines that user engagement should be embedded in institutional arrangements rather than treated as a series of separate projects. This section, therefore, focuses on how governance and coordination mechanisms can support engagement, the responsibilities leaders have in this area, which leadership skills and capacities are most important, how a user-oriented organisational culture can be fostered, and how an environment that supports innovation, transparency, and trust can be created. It complements the practical tools presented in Section 3 and provides the institutional perspective within which innovation and capacity development for user engagement are discussed in Section 5.

Annex 1, Example Box 3, highlights leadership practices from New Zealand, Singapore and Samoa, illustrating how governance arrangements, organisational structures and communication protocols can foster a user-oriented culture within national statistical systems.

4.1 Governance and coordination mechanisms that support engagement

Governance mechanisms provide the structures through which user engagement is linked to national priorities, legal mandates, and quality requirements. Clear institutional mandates, ideally reflected in statistical legislation and related regulations, specify the roles and responsibilities of the NSO and other producers of official statistics. They clarify who is responsible for compiling specific statistics, who leads on dissemination and communication, and how coordination with other public institutions should be conducted. When mandates explicitly recognise the importance of user engagement, they provide a strong basis for embedding engagement in institutional practice.

Planning processes are another central governance mechanism. National strategies for the development of statistics, multi-year programmes of work, and annual work plans provide opportunities to identify user needs, prioritise statistical activities, and allocate resources accordingly. When these planning instruments are informed by systematic consultation with user groups (Section 3), statistical programmes are more likely to remain relevant and trusted. Linking user engagement to planning processes also helps avoid duplication of effort and ensure coherence across different domains.

Institutional development often includes the establishment of internal committees or working groups that bring together managers from different departments, such as social, economic, environmental, and geospatial statistics, as well as units responsible for dissemination, communication, and methodology. These structures facilitate coordination on issues such as release calendars, communication strategies, and responses to cross-cutting user demands. They can also provide a space to discuss user feedback and agree on follow-up actions.

Coordination across producers of official statistics is another critical dimension of governance. Many countries have decentralised national statistical systems in which line ministries, central banks, independent agencies, or subnational authorities produce statistics under their own mandates. Users often require datasets that combine information from several institutions. Effective coordination mechanisms, such as national statistical councils or inter-institutional committees, help align standards, share information on planned surveys and indicators, and work collaboratively to address user needs that cross institutional boundaries.

Advisory bodies are a further critical governance mechanism. As described in Section 3, statistical advisory councils or user groups bring together representatives of key user communities, including government, academia, the private sector, civil society, and international organisations. They can review strategic and operational plans, comment on dissemination and communication practices, and provide feedback on methodological changes. When advisory bodies are well structured and meet regularly, they help ensure that user perspectives are considered at both strategic and operational levels.

Reporting processes reinforce governance for engagement by closing the loop between user inputs and actions taken by the NSO. This can include reporting to advisory councils on how their

recommendations have been addressed, publishing summaries of consultation results and follow-up actions, or integrating user feedback into annual reports and performance reviews. Such practices demonstrate accountability, strengthen trust, and encourage continued participation in engagement activities.

Quality assurance systems complete this picture. They establish standards and procedures for planning, production, dissemination, and documentation of statistics, and can explicitly include user engagement as one of the quality dimensions to be monitored. When user feedback is incorporated into quality reviews and improvement plans, engagement becomes part of the broader quality-assurance framework rather than a separate activity. Governance mechanisms should support coordination across the NSS so that leadership and organisational culture operate within arrangements that consistently value user engagement.

4.2 Leadership responsibilities for user engagement

Leadership plays a crucial role in building and maintaining a culture that values engagement with users of statistics. Chief Statisticians and senior managers are responsible for setting the vision for user engagement, defining priorities, and ensuring that these priorities are reflected in institutional strategies, work programmes, and everyday practice. By articulating a clear commitment to user engagement, leaders signal that understanding and responding to user needs is an integral part of producing official statistics, not an optional add-on.

International frameworks on official statistics emphasise that leadership should promote relevance, accessibility, interpretability, and trust. This translates into specific responsibilities. Internally, leaders must ensure that staff have the clarity, guidance, and resources required to engage with users effectively. This includes providing clear expectations, supporting staff who interact with users, encouraging collaboration across departments, and recognising good practice in engagement and communication. Externally, leaders represent the NSO and the wider NSS in dialogue with users, partners, and stakeholders, explaining the value of official statistics and listening to concerns and suggestions.

Leadership responsibilities also extend to safeguarding professional independence and maintaining public confidence in official statistics. When engaging with users, leaders must balance responsiveness to needs with adherence to professional standards, confidentiality rules, and ethical principles. They should ensure that engagement processes are transparent, inclusive, and respectful, and that no user group is given privileged access to data or influence over statistical results, contrary to established principles. Clear communication about methods, data limitations, and revisions is an integral part of this responsibility.

Another key leadership responsibility is to ensure that user engagement is adequately resourced and coordinated. This includes allocating staff time for engagement activities, supporting training and capacity development, and integrating engagement-related tasks into job descriptions and performance management systems where appropriate. Leaders also need to ensure that

engagement findings inform decision-making by following up on consultation results, adjusting plans where necessary, and communicating the actions taken to users.

Finally, leadership should champion user engagement beyond the NSO. Chief Statisticians can encourage partner institutions within the NSS to adopt similar practices, promote the importance of user engagement in national and regional fora, and support initiatives that strengthen data literacy and responsible use of statistics in society. In this way, leadership contributes not only to the performance of the NSO but also to a broader culture of informed decision-making and accountability (see Sections 5 and 6).

4.3 Leadership skills and capacities

Strengthening user engagement requires leaders with specific skills and capacities to guide their organisations, motivate staff, and represent the NSO in dialogue with users. These are not limited to technical expertise in statistics. They include interpersonal, strategic, and change-management skills that support effective communication and collaboration.

Communication is a core leadership skill. Leaders must be able to explain why statistics matter, what they show and what they do not show, and how they can be used responsibly. This involves translating technical concepts into language that non-specialists can understand, framing messages for different audiences, and supporting responsible public debate. Active listening is equally important. Leaders need to pay attention to user concerns, questions, and suggestions and demonstrate that these inputs are taken seriously. Listening to diverse users also helps leaders anticipate emerging issues and changes in user needs.

Strategic influence is another crucial leadership capacity. Leaders must be able to articulate the value of user engagement within government and in the broader data ecosystem, advocate for the resources needed to support engagement, and build alliances with partners who share similar objectives. This includes engaging with senior officials in line ministries, development partners, and regional or international organisations. In doing so, leaders help ensure that user engagement is recognised as a key aspect of statistical development.

Leadership also requires an understanding of internal processes and organisational dynamics. Leaders need to foster an environment where staff feel empowered to propose improvements, share insights from user interactions, and collaborate across units. When managers model openness, respect, and responsiveness, staff are more likely to adopt similar behaviours in their own interactions with users. Empathy and cultural awareness are essential to this, as they enable leaders to appreciate the perspectives and constraints of both users and staff, including those who may be underserved or underrepresented in traditional consultation processes.

Leadership capacities must be strengthened over time. This requires investment in training, peer learning, and mentoring, as well as opportunities to gain experience from experiences in other countries. Regional initiatives, including management seminars and other SIAP activities, can play

an essential role in building leadership capacities for user engagement by providing spaces for reflection, exchange of experiences, and exposure to new tools and approaches (see Section 5).

4.4 Building a user-oriented organisational culture

Leadership alone is not sufficient. User engagement must also be grounded in an organisational culture that values users and considers engagement a natural part of producing and communicating official statistics. Such a culture supports internal collaboration, encourages staff to think about how their work will be used, and recognises that statistics generate the most value when they respond to real needs and are accessible to those who rely on them.

Internal communication is a foundation of a user-oriented culture. Staff need to understand institutional priorities and how user engagement contributes to them. Regular internal discussions on user feedback, dissemination practices, and communication strategies can help staff across departments see their role in supporting engagement. When different units, including those responsible for data collection, analysis, dissemination, communication, and IT, have a shared understanding of user needs, they are better able to coordinate efforts and maintain consistent messages.

A user-oriented culture also requires collaboration. Engagement with users often involves inputs from several parts of the organisation, and sometimes from several institutions in the NSS. Collaboration helps ensure that different perspectives are considered, avoids inconsistent messages, and enables a comprehensive response to user questions or concerns. Encouraging staff to work in cross-functional teams on engagement and communication initiatives can strengthen this collaborative culture.

Inclusiveness is another essential dimension of organisational culture. A user-oriented culture recognises that not all users have the same capacity to access and use statistics, and that some groups are more likely to be overlooked. It therefore promotes practices that make statistics accessible to a wide range of users, including through plain language, intuitive dissemination tools, and support for data literacy. It also values diversity within the organisation, recognising that staff with diverse backgrounds and experiences can bring important insights into user needs and behaviours.

Curiosity and openness characterise a user-oriented culture. Staff are encouraged to ask how users experience statistical products, to explore new ways of presenting information, and to learn from feedback and mistakes. This attitude supports continuous improvement and innovation, as described in Section 5. Finally, embedding a user-oriented culture requires attention to incentives and recognition. When engagement is visible in performance discussions, professional development plans, and recognition schemes, staff are more likely to see it as part of the organisation's identity rather than a collection of isolated activities.

4.5 Creating an environment that supports innovation, transparency, and trust

Governance, leadership, and organisational culture together create the environment in which innovation, transparency, and trust can flourish. Innovation in user engagement and communication depends on a culture that values learning, experimentation, and responsible risk management, and on governance arrangements that support such initiatives while safeguarding professional standards. Section 5 discusses specific tools and approaches for innovation and capacity development; this subsection focuses on the enabling environment that leadership can foster.

Innovation requires that staff have the space to assess innovative approaches, such as improved visualisations, interactive tools, or new consultation methods, and that lessons from these efforts are captured and shared. Leaders can support this by encouraging pilot initiatives, providing modest resources for experimentation, and ensuring that successful innovations are integrated into regular practice. At the same time, safeguards must be in place to protect confidentiality, respect ethical principles, and maintain the integrity of official statistics.

Transparency is essential for maintaining trust in official statistics and in the institutions that produce them. A transparent environment is one in which methods, sources, and limitations are clearly documented; release calendars are published and respected; revisions are explained; and user questions or concerns receive timely and respectful responses. Transparency also includes openness about the role of user engagement: explaining how feedback is collected, how it is used, and what constraints may limit the immediate implementation of suggestions.

The environment created by governance and leadership should also encourage staff to raise issues or concerns that require management attention. This may include risks related to data quality, confidentiality, or the misuse of statistics, as well as obstacles to effective user engagement. When staff feel safe to speak up, potential problems can be addressed early, and engagement practices can be improved.

Building an environment that supports innovation and transparency, therefore, involves both formal mechanisms and informal behaviours. Formal mechanisms include policies, guidelines, and procedures that promote openness, ethical conduct, and responsiveness. Informal behaviours include everyday interactions that demonstrate respect for users, colleagues, and partners. When both aspects are aligned, staff are better equipped to contribute to a culture of openness and responsiveness, and users are more likely to trust and rely on official statistics.

Trust is built over time through consistent behaviour, transparency, and responsiveness. By combining strong governance, committed leadership, and a user-oriented organisational culture, NSOs and the wider NSS can strengthen the relevance and public value of official statistics and ensure that user engagement contributes meaningfully to statistical development.

5. Innovation and Statistical Capacity Development for User Engagement

Innovation and capacity development are essential for strengthening user engagement in official statistics. New tools, technologies and approaches can help National Statistical Offices (NSOs) and other producers of official statistics better understand user behaviour, provide information in more accessible, user-friendly formats, and respond more quickly to emerging needs. Capacity development ensures that staff and institutions can make effective, responsible and sustainable use of these innovations. Together, innovation and capacity development create the conditions for user engagement to fully contribute to the quality, relevance, and public value of official statistics.

Building on the governance, leadership and organisational culture elements presented in Section 4, this section focuses on how innovation can support user engagement, how usability and user experience can be improved, how new technologies can be used responsibly and inclusively, how user engagement can be embedded in statistical development planning, and how capacity development can sustain these efforts over time. It also prepares the ground for the regional perspectives presented in Section 6.

Annex 1, Example Box 4, draws on experiences from Bhutan, the Maldives, Tajikistan, Australia, India, Pakistan, and international partners to illustrate how innovation and modernisation efforts can be harnessed to enhance user engagement.

5.1 The role of innovation in strengthening engagement

Innovation has become an essential element of user engagement. Digital transformation enables NSOs to provide information in multiple formats, through a variety of channels and with greater flexibility than in the past. Well-designed websites, open data portals, interactive dashboards and visualisation tools can make statistics easier to find, understand and reuse. When implemented carefully, such tools support users who wish to explore data in more detail, integrate datasets from several sources or visualise trends and patterns.

Innovation can also support transparency and accessibility. Improved dissemination platforms allow NSOs to publish release calendars, methodological notes, metadata, and conditions for microdata access in easier-to-navigate formats. Advanced search functions, filters and application programming interfaces (APIs) help users to locate relevant data, while automated notifications and subscription services keep users informed of new releases and updates. These developments play a key role in supporting relevance and preventing the underuse of data.

Modern technologies create opportunities for NSOs to collaborate more effectively with users and partners. Online consultation tools, web forms for feedback, virtual workshops, and collaborative platforms can be used to gather information on user needs and experiences. Web analytics provide additional insights into how users interact with websites and portals, including which pages they visit, where they encounter difficulties and how long they spend on distinct types of content. These insights can inform improvements in design, navigation and

documentation, complementing the stakeholder mapping and user journey analysis described in Section 3.

Innovation, however, must be implemented with care. New platforms and tools can introduce risks related to confidentiality, security and misinterpretation if not properly governed. They may also create or exacerbate barriers for users with lower levels of digital literacy or limited connectivity. To ensure that innovation strengthens rather than weakens engagement, NSOs need clear policies and guidelines, appropriate safeguards and a strong focus on inclusiveness. Innovation should be treated as a means to support user engagement and public value, not as an end in itself.

5.2 Usability, design, and user experience

Usability and user experience are central to effective user engagement. Even when data are technically sound and relevant, users may face difficulties if websites, portals or publications are hard to navigate or understand. Improving usability means paying attention to how users move through digital platforms, where they expect to find information and how they interpret what they see on screen. It builds directly on the understanding of user behaviour and user journeys described in Section 3.

The structure of digital platforms plays a key role. Clear, logical menus, well-organised thematic categories, intuitive search functions, and consistent layouts make it easier for users to locate datasets, publications and metadata. Users should not have to navigate multiple layers of content to access basic information. A coherent structure also helps ensure that users with various levels of familiarity with statistics can find what they need.

Visual design is equally important. Users benefit from charts, tables, and maps that are clear, consistent, and aligned with the messages they convey. Compelling visualisations avoid unnecessary complexity and support interpretation, including for users with limited experience in reading statistical charts. Choices about colour, fonts, labelling and legends affect how easily users can understand and compare information. Accessibility standards, including those related to colour contrast, font size and compatibility with screen readers and other assistive technologies, should be considered from the beginning of any design process.

Usability also depends on clear documentation. Metadata, glossaries, explanatory notes, and methodological descriptions help users interpret statistics correctly and understand limitations, comparability issues, and revisions. When documentation is well-structured and linked directly to tables, charts, or datasets, users are better equipped to assess whether the data are suitable for their purposes. Clear documentation reduces the risk of information being misapplied or misunderstood.

Understanding user behaviour can further improve usability. Simple tools such as user testing, user journey observation, and analysis of frequently asked questions can reveal aspects of navigation or presentation that are unclear or confusing. Regular review of these insights,

combined with feedback from user consultations and advisory bodies, supports continuous improvement. Enhancing usability, design and user experience helps ensure that statistical products and services are accessible to a wide range of users and supports engagement and satisfaction.

5.3 Responsible and inclusive use of innovative technologies

Innovative technologies offer significant opportunities for improving user engagement, but also raise important questions about ethics, inclusiveness and professional standards. Tools such as artificial intelligence, machine learning, and natural language processing can support engagement by helping NSOs summarise information, translate content, classify user queries, identify patterns in user feedback, and improve search and recommendation functions. If used well, these tools can make it easier for users to find relevant statistics and understand the information they access.

The responsible use of such technologies requires strong governance. NSOs need clear policies on how and where these tools are used, which tasks remain under direct human control and how outputs from automated systems are checked before publication. It is imperative to distinguish clearly between official content and content produced wholly or partly by automated tools. Users should not be left uncertain about whether a statistical explanation, summary or answer to a query has been validated by NSO staff.

Cooperation with external technology partners can support innovation, but must be managed carefully. Agreements with private or public providers of digital services should define responsibilities, data protection requirements, security measures and intellectual property rights. They should also make clear which parts of a platform or service are under the direct control of the NSO and which are provided by external partners. Transparency about such arrangements helps maintain trust and clarify accountability.

Inclusiveness must guide any innovation involving modern technologies. New tools should not widen gaps in access to statistics between well-connected and less-connected users, or between those with and without advanced digital skills. NSOs should consider whether adopting modern technologies may inadvertently exclude certain groups, for example, by assuming constant internet access, familiarity with particular devices, or advanced literacy. In some cases, maintaining or improving non-digital channels of communication will be essential to preserve equity in access.

Finally, innovative technologies should reinforce, rather than weaken, professional independence, confidentiality and the integrity of official statistics. They should be used to enhance the effectiveness and quality of engagement, for example, by automating routine tasks or improving search functions, allowing staff to focus on more complex engagement activities and analysis. Clear ethical guidelines, regular review and staff training are needed to ensure that these tools are used responsibly and in line with established principles.

5.4 Embedding user engagement in statistical development planning

Embedding user engagement in statistical development planning ensures that engagement is not treated as a separate activity but becomes part of how statistical systems evolve. National strategies for the development of statistics, sectoral plans and other strategic documents are key instruments for translating user needs into priorities, aligning resources with demand and coordinating work across producers of official statistics. When these strategies are informed by systematic user engagement, they are more likely to support relevant and trusted statistics (see also Section 4).

National strategies for the development of statistics are central in this regard. They provide a framework for identifying priority domains, setting targets, planning investments in data sources and infrastructure and coordinating activities across institutions. Incorporating user engagement into the preparation and implementation of such strategies helps to ensure that planned activities reflect the needs of policymakers, civil society, the private sector and other user communities. It also allows strategies to address cross-cutting issues such as gender equality, climate resilience and sustainable development, where demand for integrated, disaggregated data is often particularly strong.

Annual and multi-year work programmes offer additional opportunities to embed engagement. They can specify which consultations will take place, which user groups will be involved and how feedback will inform decisions on survey design, administrative data improvements, new indicators, dissemination tools or open data initiatives. Monitoring and evaluation of these programmes should track not only outputs, such as the number of publications or releases, but also outcomes related to user satisfaction, accessibility and use. This helps assess whether engagement activities have informed decisions and contributed to improvements over time.

Embedding engagement in development planning also supports coordination across institutions within the national statistical system. When user perspectives are reflected in shared strategies and programmes of work, producers of statistics can align their efforts, avoid duplication and ensure that outputs across institutions are consistent and complementary. Integrating user engagement into planning processes, therefore, contributes to sustainable statistical development and provides a basis for prioritising innovation and capacity development.

5.5 Capacity building for communication and user engagement

Capacity building is crucial for enhancing user engagement and is a core component of statistical development. Innovation can only be effective if staff have the knowledge, skills and confidence to use new tools and approaches, and if institutions provide the necessary support and incentives. Capacity development for communication and user engagement is therefore central to the mandates of many training and regional institutions, including SIAP.

Communication skills are central. Staff need to be able to explain statistical concepts clearly, translate technical results into accessible messages, prepare visualisations that support

understanding and respond to questions from a wide range of users. This applies not only to staff in dedicated communication units, but also to subject-matter specialists, analysts and managers who interact with users as part of their work. Training in writing for non-specialists, presenting data clearly and engaging with the media and other intermediaries can significantly improve how statistics are understood and used.

Technical skills also support engagement. Staff need to understand digital dissemination tools, data visualisation software, web content management systems and other technologies used to make statistics accessible. They must be able to apply standards for metadata, documentation and accessibility, and to ensure that dissemination tools function as intended. Innovation requires additional skills, including the ability to navigate emerging technologies, assess their potential benefits and risks, and work with data scientists, designers, and IT specialists. These skills support both user engagement and the integrity of the national statistical system.

Capacity building must also support collaboration. Effective engagement often involves staff from several units or institutions working together, for example, on thematic portals, cross-cutting publications or consultation processes. Training and organisational development efforts should therefore promote teamwork, coordination and shared understanding of user needs. This supports a coherent and consistent approach to engagement and helps distribute responsibilities appropriately.

Peer learning and international cooperation are valuable sources of capacity development. Exchanges between NSOs, participation in regional networks, management seminars and technical workshops allow staff and leaders to learn from practical experiences in other countries, adapt good practices and strengthen professional communities. Such activities can focus specifically on user engagement, communication, innovation, or data literacy, and may involve both statisticians and partners, such as communication specialists and IT experts.

Capacity building should be embedded in institutional strategies and human resource policies. It requires sustained investment, planning and monitoring, rather than ad hoc training activities. When capacity development for communication and user engagement is integrated into staff development plans, performance assessments and organisational priorities, it contributes to a culture of openness and responsiveness within the NSS. Ultimately, capacity building strengthens the ability of NSOs and other producers of official statistics to engage with users in ways that support informed decision-making, accountability and sustainable development, and helps ensure that user engagement becomes a shared responsibility and a natural part of everyday work.

6. Challenges and Opportunities for Asia-Pacific NSOs

National Statistical Offices (NSOs) in the Asia-Pacific region operate in highly diverse institutional, technological and resource environments. They serve countries of quite different sizes and capacities, from large economies with extensive data infrastructures to small islands and

landlocked developing States with limited human and financial resources. They also operate in data ecosystems where the responsibility for producing statistics is often shared among several institutions. These conditions shape their ability to produce relevant, high-quality statistics, engage users, and respond to emerging needs.

The regional context has direct implications for user engagement. Demand for disaggregated, timely and user-friendly data is rising, driven by national development plans, the 2030 Agenda for Sustainable Development, regional commitments and other global processes. At the same time, NSOs must address persistent data gaps, manage fragmented data systems, respond to rapid technological and user-expectation changes, and counter misinformation while maintaining trust. This section examines how these regional dynamics affect user engagement and highlights opportunities to strengthen inclusive, effective engagement practices across the Asia-Pacific region.

Annex 1, Example Box 5, provides examples from the Solomon Islands, Georgia and Lao PDR that demonstrate how regional and subregional cooperation and peer learning can support user engagement through shared tools and collaborative initiatives.

6.1 Regional challenges affecting user engagement

Several challenges influence the ability of NSOs in the region to engage effectively with users. Limited and unpredictable funding, staff shortages, and high turnover can constrain NSOs' capacity to invest in user engagement, communication, and dissemination tools. Competing priorities, including the simultaneous need to meet international reporting requirements and to respond to national demands, put pressure on scarce resources and can limit the time available for consultation with users.

Institutional arrangements also matter. In many countries, responsibility for producing official statistics is spread across multiple entities, including line ministries, central banks, and independent agencies. Users may find it difficult to know where to obtain particular data, or encounter inconsistencies in concepts, classifications and dissemination practices. Coordination challenges within decentralised systems can hinder the development of coherent engagement strategies and limit NSOs' ability to present a unified interface to users (see Section 4).

Constraints on the user side further influence engagement. In several countries, key user groups such as civil society organisations, local governments, small and medium-sized enterprises, or local media may have limited opportunities to participate in consultations or may lack the capacity to articulate their data needs. Geographic dispersion, including archipelagic and mountainous countries, can make in-person engagement costly and logistically challenging. Language diversity and digital divides add further complexity.

NSOs in Small Island Developing States often face particularly acute challenges. Small teams must cover many statistical domains, often with high exposure to external shocks and frequent staff turnover. Limited connectivity and infrastructure can constrain both data collection and

dissemination. At the same time, these countries must respond to intensive demands related to climate change, disaster risk reduction and resilience. These factors affect their ability to maintain regular engagement with users and underscore the importance of regional support and tailored capacity development.

6.2 Inclusiveness, data literacy, and equitable regional engagement

Inclusiveness is a crucial component of effective user engagement in the Asia-Pacific region. It requires that all relevant user groups have a fair opportunity to access, understand and use official statistics, regardless of their location, language, resources or level of expertise. In practice, achieving inclusive engagement can be challenging in a region as diverse as Asia and the Pacific.

Many countries are multilingual, and information is often produced in more than one national or local language. NSOs must decide which languages to use for disseminating key products, balancing resource constraints with the need to reach users beyond a narrow group of specialists. When statistics and explanatory materials are available only in a single official language or rely heavily on technical jargon, users with limited prior exposure to statistical information may be excluded.

Data literacy is another key dimension of inclusive engagement. Users need a basic understanding of concepts such as indicators, margins of error, comparability and revisions to interpret and use statistics appropriately. In many countries, opportunities to build data literacy among policymakers, journalists, civil society, private-sector actors, and the general public remain limited. This can lead to situations in which official statistics are underused, misinterpreted, or overshadowed by alternative sources of information that may not meet professional standards. Strengthening data literacy helps ensure that official statistics are used as a basis for informed decision-making, public debate and accountability.

Digital inclusion is equally important. While some countries in the region have advanced digital infrastructure and high levels of connectivity, others still face significant gaps in internet access, particularly in rural and remote areas. Even where connectivity exists, users may lack devices, skills or confidence to navigate online platforms. Engagement strategies that rely exclusively on digital tools risk excluding users without reliable internet access or those who struggle to use online systems. Inclusive engagement, therefore, requires a mix of digital and non-digital channels, as well as attention to accessibility for persons with disabilities and other groups who may face specific barriers.

Inclusive engagement also requires dedicated outreach to groups whose voices are not always heard in national discussions on statistics. These may include grassroots civil society organisations, community leaders, local authorities, youth groups, organisations representing persons with disabilities, women's groups and others. Ensuring that such groups can express their needs and provide feedback helps NSOs to identify data gaps, improve relevance and strengthen the role of official statistics in supporting inclusive development. Capacity development initiatives, including those supported by SIAP and other regional partners, can play an essential

role in fostering inclusive engagement by combining training in statistics, communication, and user engagement.

6.3 Opportunities for strengthening engagement in the Asia-Pacific region

Despite these challenges, there are significant opportunities for strengthening user engagement in the Asia-Pacific region. Many NSOs have already introduced innovative practices in dissemination, communication and consultation, making use of modern technologies and approaches while building on existing institutional arrangements. These experiences provide valuable lessons for other countries in the region.

Some NSOs have redesigned their websites and data portals to improve usability and accessibility, including through responsive design that adapts to mobile devices, simplified navigation structures, and clearer labelling of datasets and publications. Others have developed thematic dashboards and visualisations focused on national development priorities, such as the Sustainable Development Goals, gender equality, poverty reduction or climate-related indicators. These tools help users to locate and interpret relevant statistics more easily and can be combined with explanatory materials and user guides.

Other countries have strengthened formal and informal consultation mechanisms with key user groups, including advisory councils, sectoral working groups and regular dialogues with policymakers, civil society and the private sector. These mechanisms provide spaces to discuss data needs, interpret emerging trends and explore how official statistics can better support policy design and monitoring. Where such mechanisms function well, they can significantly improve the alignment between statistical production and user needs (see Section 3).

Regional initiatives have also demonstrated strong potential. Programmes coordinated by regional and subregional organisations, including the United Nations Economic and Social Commission for Asia and the Pacific, SIAP and others, have helped countries develop or improve dissemination platforms, open data initiatives, data literacy programmes and statistical communication strategies. Participation in these initiatives allows NSOs to learn from peers, adapt approaches that have proven effective in similar contexts and benefit from shared tools and guidance. These opportunities can be significant for small and resource-constrained NSOs.

6.4 The role of regional cooperation and peer learning

Regional cooperation and peer learning are crucial for enhancing user engagement. They enable NSOs to share experiences, identify shared challenges and explore solutions that can be adapted to different national contexts. Cooperation can take many forms, including regional workshops and seminars, technical assistance projects, peer reviews, joint training programmes and online communities of practice.

Regional cooperation can support the development of common approaches to communication, dissemination and user consultation, while allowing for adaptation to national circumstances. It

can also help countries align their statistical practices with regional and global frameworks, including those related to sustainable development, disaster risk reduction, and climate change. This alignment can strengthen the comparability of statistics, support regional reporting and analysis, and also respond to national user needs.

Peer learning is particularly valuable when countries share practical experiences of what has worked in their context. Examples include redesigning statistical websites, implementing user satisfaction surveys, developing data literacy programmes, establishing advisory councils, or using innovative tools such as data visualisation platforms. Learning from such experiences can help other NSOs avoid common pitfalls, adapt proven approaches and build confidence in trying new methods.

Regional cooperation also extends to thematic networks and communities, such as those focusing on gender statistics, environment statistics, geospatial information, big data or the use of administrative data. These networks often address challenges that are common to many countries and can be used to discuss how user engagement can be tailored to specific domains. They provide opportunities to develop shared methodologies, tools and communication strategies that support users working on particular issues.

Finally, regional cooperation can support capacity development for user engagement by pooling resources, providing training opportunities, and facilitating collaboration among NSOs, academic institutions, and other partners. Activities organised by SIAP and other regional bodies play a key role in this regard, providing platforms for knowledge sharing, joint reflection and the development of leadership and technical skills needed for engagement (see also Section 5).

6.5 Supporting user engagement through inclusive regional strategies

Inclusive regional strategies can help NSOs strengthen user engagement by tailoring support to the diverse needs and capacities of countries across the region. Such strategies recognise that countries differ significantly in terms of resources, institutional arrangements and digital infrastructure, and that a one-size-fits-all approach is unlikely to be effective. They therefore combine common frameworks and tools with flexibility for national adaptation.

Regional and subregional initiatives can support engagement by focusing on critical themes such as data literacy, digital inclusion, communication skills and the design of user-friendly dissemination tools. They can promote approaches that are sensitive to language diversity, geographic dispersion and distinct levels of connectivity. For example, regional programmes may include guidance and support for multilingual dissemination, mobile-friendly platforms, low-bandwidth solutions, and outreach to users who rely on radio, print media, or community-based channels.

Inclusive strategies should also pay particular attention to countries with the most significant constraints, including many Small Island Developing States and least developed countries. Targeted support, peer partnerships and tailored capacity-building initiatives can help these NSOs

to develop engagement approaches that are feasible within their resource constraints while still addressing key user needs. Partnerships with regional training institutions, including SIAP, can provide sustained support in areas such as communication, user engagement, innovation management and data literacy.

Section 7 builds on the regional challenges and opportunities outlined here by summarising key messages of the concept paper and focusing on leadership-level action plans and expected outcomes of the SIAP 2025 Management Seminar.

7. Conclusions and Expected Outcomes of the SIAP 2025 Management Seminar

This concept paper outlines why user engagement is central to the management and organisation of NSS and how leadership can institutionalise engagement within NSOs and across the broader NSS. It has drawn on international normative and reference frameworks, examined the diversity and evolving needs of users, presented strategies and mechanisms for engagement, highlighted the importance of leadership and organisational culture, and explored the role of innovation, governance, and capacity development. It has also considered how the specific Asia-Pacific context creates both challenges and opportunities for user engagement.

The SIAP 2025 Management Seminar builds on these messages. It provides a platform for Chief Statisticians and senior managers to reflect on their own institutional contexts, share experiences, and develop practical approaches to strengthening user engagement. This section summarises the key messages of the concept paper, outlines expected outcomes for participants, explains how the seminar will contribute to regional statistical development, and looks ahead to sustaining user engagement beyond the seminar.

7.1 Summary of key messages

This concept paper highlights that user engagement is not a peripheral activity, but a fundamental component of the management and organisation of national statistical systems. User engagement contributes directly to the relevance, quality and trustworthiness of official statistics. It requires continuous interaction between producers and users and must be supported by strong leadership, a user-oriented organisational culture, appropriate governance mechanisms, inclusive practices and responsible innovation. International guidance confirms that user engagement is integral to quality assurance, professional independence and accountability to the public.

The preceding sections have shown that NSOs can enhance engagement by understanding the diverse needs of different user groups, employing a range of engagement mechanisms and communicating information clearly through both traditional and digital channels. Engagement should be integrated into planning, development strategies, quality frameworks, and innovation plans, and should be supported by staff capacities, internal coordination, and clear institutional arrangements. The sections have also emphasised that regional cooperation and peer learning in Asia and the Pacific can support this work by facilitating the exchange of good practices, providing technical assistance and encouraging shared approaches where appropriate.

7.2 Expected outcomes for participants from NSOs

The SIAP 2025 Management Seminar is expected to support participants in strengthening leadership for user engagement in their own institutional contexts. In particular, it aims to:

- **Development of leadership-level action plans.** Participants will prepare or refine concise plans outlining specific actions to strengthen user engagement. These plans will identify leadership roles, communication priorities, resource needs and opportunities for sustained engagement. They will also consider long-term sustainability by integrating engagement into planning, quality assurance and institutional processes.
- **Strengthened user-oriented organisational culture.** Participants will reflect on how organisational values, behaviours, internal communication and staff responsibilities can support user engagement. They will explore ways to empower staff, encourage openness and promote responsiveness to user needs, building on the perspectives presented in Sections 4 and 5.
- **Enhanced regional collaboration.** The seminar will support cooperation between NSOs by providing a space to exchange practical experiences in user engagement strategies, innovation, and capacity development. Participants will explore opportunities for joint initiatives, peer learning, shared tools and coordinated approaches to engagement, consistent with the regional perspectives presented in Section 6.
- **Integration of user perspectives into planning and modernisation.** Participants will reflect on how user engagement can be incorporated into national strategies for the development of statistics, annual work programmes and modernisation projects. This includes strengthening mechanisms for documenting, analysing and responding to user feedback, as well as aligning innovation efforts with user needs.
- **Collection of practical examples and success stories.** The seminar will gather examples of good practices and challenges from across the region. These will inform future guidance, capacity development activities and regional initiatives. They will also provide material to enrich this concept paper further and related SIAP activities, including e-learning and training modules on user engagement.

7.3 Contributions of the SIAP 2025 Management Seminar to regional statistical development

The SIAP 2025 Management Seminar will contribute to regional statistical development by reinforcing the role of user engagement as a core dimension of statistical leadership and governance. It will support participating NSOs in integrating engagement more systematically into the core management functions of statistical systems, including planning, coordination, quality assurance, communication and innovation.

The seminar will also support the implementation of international and regional guidance on official statistics by providing practical examples of how user engagement principles can be

applied in diverse national contexts. It will encourage participants to align their national strategies, work programmes, and capacity development plans with approaches that take user perspectives into account and respond to the specific needs of users in the Asia-Pacific region.

Through its emphasis on peer learning and regional cooperation, the seminar will strengthen networks among NSOs and between NSOs and regional partners. It will promote continued dialogue on user engagement, including through follow-up activities, and will support the development of shared tools, training materials and guidance. In doing so, it will contribute to a broader regional effort to modernise statistical systems and to ensure that official statistics are widely used to inform policy, research and public debate.

7.4 Looking ahead: sustaining user engagement beyond the seminar

User engagement is a continuous process. Sustaining engagement beyond the seminar requires that the leadership-level action plans developed by participants are implemented, monitored and periodically updated. This includes integrating engagement into national strategies for the development of statistics, sectoral plans, annual work programmes, quality assurance processes and modernisation initiatives. It also involves ensuring that staff have the capacities and support needed to put engagement into practice.

Regional cooperation will remain essential. SIAP, in close collaboration with the United Nations Economic and Social Commission for Asia and the Pacific and other partners, will continue to support countries through training, peer learning opportunities and the development of guidance and tools on user engagement. Experiences and examples collected during the seminar can feed into future activities, including management seminars, technical workshops and e-learning courses, helping to sustain momentum and deepen expertise.

The SIAP 2025 Management Seminar provides an opportunity to reaffirm the importance of user engagement as a core element of statistical leadership and governance. By translating the concepts and approaches presented in this paper into concrete action plans and institutional practices, participating NSOs can strengthen the role of official statistics in supporting informed decision-making, accountability and sustainable development in Asia and the Pacific.

Annex 1. Illustrative Country Experiences on User Engagement

This Annex brings together a set of short country and regional examples that illustrate how National Statistical Offices and their partners have approached user engagement, consultation, leadership, innovation and regional cooperation in different contexts. The examples are not exhaustive or prescriptive; they are intended as practical reference points and background material that can be drawn upon during and after the SIAP 2025 Management Seminar for peer learning and for adapting approaches to national circumstances.

Example Box 1: Understanding and Responding to Evolving User Needs (Section 2)

The **Bureau of National Statistics of Kazakhstan** consults ministries, businesses, academia and the media through meetings, surveys and feedback tools to identify emerging demands. The results inform priorities for new indicators, improvements to dissemination, and the development of explanatory materials that help different audiences use statistics correctly.

The **Bangladesh Bureau of Statistics** conducts user satisfaction surveys with government, local authorities, civil society, and other partners to assess the accessibility, clarity, and usefulness of its products. Findings are used to refine publications, portals, and communication formats to better align with policy and programme needs. The Federal State Statistics Service of the Russian Federation uses a user satisfaction index to monitor perceptions of service quality and guide improvements in communication and support for users.

The **Lao Statistics Bureau**, as part of the national Sustainable Development Goal (SDG) coordination arrangements, consults ministries, provincial offices and development partners on indicators and metadata. Its SDG platform provides access to indicators and documentation at national and subnational levels, strengthening transparency and collaboration in monitoring progress.

Example Box 2: User Consultation and Feedback Mechanisms (Section 3)

The **Statistical Committee of Armenia** has developed a communication strategy and a Communication Function Maturity Model that frames the office's outreach and engagement. Regular user satisfaction surveys and feedback tools are used to assess performance, identify gaps, and adjust dissemination and communication practices.

In **Georgia**, a multi-year strategy emphasises accessibility, transparency and user orientation. Interactive visualisation platforms, targeted outreach and systematic feedback collection support closer dialogue with policymakers, the media, academia and civil society. These efforts are complemented by activities to strengthen data literacy so that statistics are interpreted and used appropriately.

In the **Philippines**, user consultation is institutionalised through inter-agency committees, technical working groups and the triennial National Convention on Statistics. These mechanisms bring together data producers and users from government, academia, civil society and the private sector to discuss priorities, review emerging needs and share innovations across the national statistical system.

Example Box 3: Leadership Practices – Strengthening User Engagement (Section 4)

Statistics New Zealand has promoted partnership and co-design with Māori and other communities, treating them as partners in defining needs, interpreting data and deciding how information is shared. Formal agreements and collaborative arrangements support these partnerships and help build trust in official statistics.

The **Department of Statistics Singapore** has created a Communications and Engagement Division responsible for public outreach, media relations, digital services and user support. The division collaborates closely with subject-matter units so that messages are coherent and engagement activities are coordinated across the office.

The **Samoa Bureau of Statistics** has adopted external communication and media guidelines that clarify responsibilities for preparing releases, responding to information requests and interacting with users. These procedures, endorsed by senior management, have improved coordination, consistency and timeliness in public communication.

Example Box 4: Harnessing Innovation to Enhance User Engagement (Section 5)

Bhutan's national strategy for the development of statistics includes actions to strengthen user engagement, promote data literacy and encourage wider use of statistics by government, business and civil society. In the **Maldives**, multi-stakeholder coordination groups and regular dialogues with ministries, development partners, and other users help align data production with sectoral priorities. In Tajikistan, modernisation of the national statistical system, supported by international partners, has introduced new portals, dashboards and feedback tools that improve user access and provide channels for comments and suggestions.

The **Australian Bureau of Statistics** has invested in open data platforms and interactive visualisations that allow users to explore complex datasets more easily. The Government of India has developed frameworks to assess the usability and performance of data portals and uses the findings to guide redesign and improve user experience. The **Pakistan Bureau of Statistics** promotes engagement through public communication initiatives and events that create opportunities for users to discuss data needs and share ideas. At the international level, **PARIS21** has piloted the use of artificial intelligence and related tools to support the production of narratives and visualisations and to improve access to statistics.

Example Box 5: Regional Cooperation and Peer Learning in User Engagement (Section 6)

In the **Solomon Islands**, the National Statistics Office participates in regional working groups, training programmes and communities of practice coordinated by regional organisations. These platforms help staff share experiences, access technical support and coordinate initiatives to improve data quality, dissemination and user engagement in the Pacific.

Georgia advances user engagement and capacity development through active participation in regional cooperation forums. Its national strategy for official statistics emphasises transparency, accessibility and user orientation, and Georgia shares its approaches to communication, consultation and data literacy as examples of regional good practice.

In the **Lao PDR**, collaboration with regional partners has supported improvements in Sustainable Development Goal (SDG) reporting and dissemination. Joint work on indicators, metadata, and online platforms has contributed to more harmonised reporting and expanded access to SDG data for national and international users.

Annex 2: Main References

This Annex lists key **global and regional normative frameworks**, as well as other international and analytical references, which have informed the preparation of this concept paper. These sources provide further guidance on user engagement, communication, governance, innovation and capacity development in official statistics. They can be used as background material during and after the SIAP 2025 Management Seminar.

Normative Frameworks

- **United Nations – Fundamental Principles of Official Statistics (FPOS)**
Sets out the overarching principles for official statistics endorsed by the UN General Assembly in 2014, including professional independence, relevance, impartiality, transparency, and confidentiality. Provides the fundamental normative basis for the concept paper.
https://unstats.un.org/unsd/dnss/hb/E-fundamental%20principles_A4-WEB.pdf
- **UNSD – Handbook on Management and Organization of National Statistical Systems (2025/A), Chapter 7: Users and their Needs**
Provides comprehensive guidance on user typologies, user–producer dialogue, engagement mechanisms, and user satisfaction measurement, serving as the main normative baseline for a user-centred statistical system.
https://unstats.un.org/capacity-development/handbook/chapters/Chapter7_Handbook_2025A_202505.pdf
- **UNSD – United Nations National Quality Assurance Frameworks Manual for Official Statistics (UN-NQAF Manual)**
Sets out the global quality framework for official statistics, defining relevance, accuracy, timeliness, accessibility, interpretability, and coherence, and situates user engagement as integral to assessing “fitness for purpose.”
<https://unstats.un.org/unsd/methodology/dataquality/>
- **UNECA – Guidelines for Developing an Integrated User Engagement Strategy for National Statistical Systems**
Provides a practical, phased approach to designing and implementing a user engagement strategy, including stakeholder mapping, prioritisation, consultation methods, and monitoring.
<https://www.uneca.org/guidelines-developing-integrated-user-engagement-strategy-national-statistical-systems>

- **UNECE (2025) – The Future of National Statistics Offices: A Call to Action**
Offers a forward-looking vision of how NSOs should respond to evolving user expectations for relevance, timeliness, and trust, and how governance and modernisation can support this.
<https://unece.org/sites/default/files/2025-04/The%20Future%20of%20NSOs%2C%20A%20Call%20to%20Action%20-%20May%202025.pdf>

Reference frameworks and analytical work

- **World Bank (2022) – Open Data: Challenges and Opportunities for NSOs**
Analyses how open data can empower users while highlighting the governance, infrastructure, and literacy conditions needed for effective use of official statistics.
<https://openknowledge.worldbank.org/entities/publication/b6233d5a-f147-545f-bdd7-281045933add>
- **Open Data Watch – Overcoming Data Graveyards in Official Statistics: Catalysing Uptake and Use**
Examines why official data often remain unused (“data graveyards”) and identifies good practices in dissemination, documentation, and engagement to increase data use.
<https://opendatawatch.com/publications/overcoming-data-graveyards-in-official-statistics/>
- **UK Government Statistical Service (GSS) – User Engagement Strategy for Statistics: Ensuring Official Statistics Meet Society’s Needs**
Presents an integrated user engagement strategy for the GSS, including user segmentation, consultation planning, feedback mechanisms, and monitoring of satisfaction.
<https://analysisfunction.civilservice.gov.uk/policy-store/user-engagement-strategy-for-statistics-ensuring-official-statistics-meet-societys-need/>
- **Harvard Business School Online – Improve Product and Service Design with AEIOU**
Introduces the AEIOU (Activities, Environments, Interactions, Objects, Users) framework for analysing user experiences, which can be adapted to understand how users navigate statistical products and portals.
<https://online.hbs.edu/blog/post/product-service-design>
- **Harvard Business School Online – Leading Successful Organizational Transformation**
Discusses how leadership and organisational culture shape successful change processes, including communication, staff engagement, and innovation.
<https://online.hbs.edu/blog/post/organizational-transformation>

- **Harvard Business School Online – Data Storytelling: How to Effectively Tell a Story with Data**

Explores narrative and visual techniques for communicating data clearly and persuasively, emphasising how framing and storytelling support understanding.

<https://online.hbs.edu/blog/post/data-storytelling>

- **Seale et al. (2023) – Communication and engagement of ethnic and racial minority groups in Australia during COVID-19**

Analyses the barriers that minority groups faced when accessing and trusting official information during COVID-19, with lessons for promoting equity, language, and culturally appropriate engagement.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC10314511/>

Other resources and further reading

- **UNECE (2024) – Use of Generative AI for Communication in Official Statistics**

Provides early practical guidance on applying generative AI tools in communication and dissemination workflows for official statistics, with a focus on quality and ethics.

https://unece.org/sites/default/files/2024-11/HLG2024_CapComm_AI%20for%20communication%20of%20official%20statistics.pdf

- **UNECE (2025) – Generative AI for Official Statistics: HLG-MOS Report**

Described as outlining end-to-end governance and implementation considerations for generative AI in official statistics, including public-facing use cases and safeguards.

<https://unece.org/sites/default/files/2025-09/Generative%20AI%20for%20Official%20Statistics%20HLG-MOS%20Report.pdf>

- **UNECE – Public Catalogue of Generative AI Use Cases in Official Statistics**

Online catalogue of generative AI use cases across statistical offices, including chatbots, search tools, and content-generation pilots.

<https://unece.github.io/genAI/>

- **UNECE (2025) – Generative AI in Official Statistics: Mitigating and Monitoring**

Focuses on risks, safeguards, and monitoring mechanisms for generative AI applications in statistical organisations.

https://unece.org/sites/default/files/2025-01/Gen%20AI%20For%20Official%20Statistics_Mitigating%20and%20Monitoring.pdf

- **PARIS21 (2024) – Enhancing the Availability of Quality Data for Policymaking Using AI**

Explores how artificial intelligence can support data production, integration, and use along the data value chain, with an emphasis on policymaking needs.

<https://www.paris21.org/knowledge-base/enhancing-availability-quality-data-policy-making-using-ai>

- PARIS21 Catalogue of AI Use Cases for Official Statistics**
 Online repository of AI applications submitted by statistical offices, documenting pilots and implementations across the statistical production cycle.
[URL: https://surveys.paris21.org/limesurvey/index.php/525582?lang=en](https://surveys.paris21.org/limesurvey/index.php/525582?lang=en)
- World Bank (Room Document to UN Statistical Commission, 2025) – Fostering AI-Readiness and Responsible Redistribution of Official Statistics**
 Provides recommendations on how to make official statistics discoverable and correctly attributed to AI systems widely used by the public.
https://unstats.un.org/UNSDWebsite/statcom/session_56/documents/Room_Document-WorldBank-E.pdf
- World Bank (2025) – From Open Data to AI-Ready Data: Building the Foundations for Responsible AI in Development**
 Discusses how to structure metadata, formats, and web signals so that AI tools surface authoritative data sources, linking open data practices with AI-readiness.
<https://blogs.worldbank.org/en/opendata/from-open-data-to-ai-ready-data--building-the-foundations-for-re>
- American Statistical Association (ASA) (2024) – The Nation’s Data at Risk: Meeting America’s Information Needs for the 21st Century**
 Highlights pressures on statistical systems from growing user demand and constrained resources, illustrating tensions between expectations, capacity, and the need to protect statistical infrastructure.
<https://www.amstat.org/docs/default-source/amstat-documents/the-nation%27s-data-at-risk---report.pdf?v=1024>
- Data Foundation (2024) – Statistical Agencies’ Unique Role in Building Trustworthy AI**
 Argues that statistical agencies have a special role in ensuring that AI systems rely on high-quality, transparent data, and discusses governance considerations for trust.
<https://datafoundation.org/news/blogs/485/485-Setting-the-Standard-Statistical-Agencies-Unique-Role-in-Building-Trustworthy-AI>
- Statistics Canada – Artificial Intelligence at Statistics Canada (including 2026 Census Chatbot)**
 Describes Statistics Canada’s AI initiatives, including a bilingual chatbot to support census information and enhance user service.
<https://www.statcan.gc.ca/en/trust/collecting-your-data/artificial-intelligence>
- Statistics Estonia – “Iti” Virtual Assistant (News Release, 2019)**
 Summarises Estonia’s early deployment of a public-facing virtual assistant answering statistical questions and routing users to relevant information.
<https://stat.ee/en/uudised/news-release-2019-042>

- **State Statistical Office of North Macedonia – Novel Approach to Generating and Disseminating Products and Developing a Statistical Chatbot (Conference paper, 2025)**

Outlines a new dissemination strategy and development of a chatbot to facilitate user access to statistical outputs.

https://unece.org/sites/default/files/2025-10/DissComm2025_S2_3_North%20Macedonia_Kirandjiski.pdf