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**Regional initiatives: modernization of statistical
production and services****Modernization of statistical production and services in
Asia and the Pacific****Note by the Strategic Advisory Body for the Modernization of
Statistical Production and Services in Asia and the Pacific*****Summary*

The Committee on Statistics at its third session decided to establish a high-level strategic body and an expert community to accelerate progress towards the achievement of its strategic goal (b) of “creating a more adaptive and cost-effective information management environment for national statistical offices through stronger collaboration” through advocacy, awareness-raising and capacity development.

The Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific, which was formed in 2013, provides strategic direction for national statistical offices in the region to collaborate on developing frameworks and standards for modernization. Since its establishment, the Advisory Body has identified priorities, developed a strategy and workplan, and instituted a working group of technical experts in modernization activities referred to as the Modernization Working Group on Production, Methods and Standards.

The present report outlines the work of the Advisory Body, provides an overview of other relevant global and regional developments, and discusses expected developments, regionally and globally.

The Committee is invited to review the work of Advisory Body and provide guidance and support to the proposed approaches, strategies and plans for its future work. The Committee is further invited to consider and endorse the slightly amended terms of reference for the Advisory Body.

* E/ESCAP/CST(4)/L.1.

** The present document was submitted late due to the need to include the issues raised during the latest discussions on the development agenda beyond 2015; in particular, the recommendations of the Expert Group Meeting on Statistics and Data for the Post-2015 Development Agenda and the Secretary-General’s Independent Expert Advisory Group on the Data Revolution for Sustainable Development.

Contents

	<i>Page</i>
I. Background.....	2
II. Progress report.....	3
A. Advisory body	3
B. Network of experts	7
III. Recent developments in the field of modernization	8
A. Global level	9
B. Regional level.....	12
IV. Issues for consideration	15
Annexes	
I. Terms of Reference of the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific (revision 1).....	16
II. Strategy of the Advisory Body for the period 2014-2016	19

I. Background

1. The Committee on Statistics at its second session expressed its full support for the proposed direction of “creating a more adaptive and cost-effective information management environment for national statistical offices through stronger collaboration”.¹ This goal demonstrated a strong commitment and priority accorded by Committee members to the modernization of statistical production and services.

2. At the third session of the Committee, a key topic of discussion was global and regional initiatives to modernize statistical information systems, including regional modernization initiatives and the High-Level Group for the Modernisation of Statistical Production and Services, which was established by the Conference of European Statisticians.

3. The Committee also discussed two central priorities that needed to be addressed:

(a) Raising awareness and building capacity relating to concepts, methods and standards to support modernization efforts within national statistical offices;

(b) Enhancing regional collaboration and influencing the direction of modernization activities being undertaken around the world.

4. To advance those priorities, the Committee decided to establish a high-level strategic body — the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific — and an expert community to raise awareness and build capacity, particularly related to concepts, methods and standards, to support national modernization efforts.²

¹ See E/ESCAP/CST(2)/9, recommendation 2/1.

² See E/ESCAP/CST(3)/17, decision 3/5.

II. Progress report

5. This section outlines the composition, strategy and work programme of the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific and the network of experts, and reports on their work since they were established.

A. Advisory Body

6. In pursuance of decision 3/5 of the Committee made at its third session, the terms of reference for the Advisory Body were developed in early 2013, with a call for nominations to it circulated to members of the Committee in May 2013. Seven nominations were submitted. The Bureau of the Committee on Statistics accepted all of the nominations and proposed that Mr. Brian Pink, Australian Statistician, serve as Chair of the Advisory Body. Subsequent to the retirement of Mr. Pink in January 2014, Mr. Trevor Sutton, Deputy Australian Statistician, has chaired the Advisory Body.

Responsibilities³

7. The primary objective of the Advisory Body is to drive and support changes towards the modernization of statistical production and services in the region. The key responsibilities of the Advisory Body are as follows:

(a) To develop a regional strategy to raise awareness and advocate on the importance and urgency of the modernization issue;

(b) To mobilize financial and human resources to implement the regional strategy, including identifying relevant partners and other stakeholders;

(c) To act as a regional voice on the issue of modernization, notably by representing the Asia-Pacific region in global standard-setting mechanisms and strategic bodies, such as the High-Level Group for the Modernisation of Statistical Production and Services;

(d) To provide strategic direction to and oversee the programme of work of the network of experts to be established.

Work of the Advisory Body since its establishment

8. The Advisory Body has met four times since its establishment.⁴ At its first meeting, held in Tokyo on 22 November 2013, the Advisory Body agreed on a draft programme of work and discussed the need to establish a modernization working group to assist in the implementation of that work. Members noted that the working group needed to be supported by national statistical offices from across the region and at the highest level of management in order to function efficiently. Members also discussed the ADB/ESCAP SDMX Capacity Building Initiative, and expressed its support for the project objectives (described more fully in paragraphs 48 to 52).

9. At its second meeting, which was held in Bangkok on 16 July 2014, the Advisory Body agreed on a strategy and workplan for the period 2014-2016. Members also discussed the priorities for that period and the

³ The Terms of Reference of the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific is available in annex I.

⁴ Meeting reports are available from www.unescap.org/events/strategic-advisory-body-modernization-statistical-production-and-services-asia-and-pacific.

approach for establishing a modernization working group that has concrete tasks and dedicated time to work on priority areas. They further agreed to reach out to other steering and advisory groups working under the auspices of the Committee⁵ to integrate modernization in their programmes of work and to members of the international statistical community, such as the Asian Development Bank (ADB), the Partnership in Statistics for Development in the 21st Century (PARIS21) and the United Nations Statistics Division, especially to advocate for the inclusion of modernization in National Strategies for the Development of Statistics.

10. The Advisory Body held its third and fourth meetings by videoconference on 15 September 2014 and 2 December 2014, respectively. At its third meeting, the Advisory Body members discussed and finalized a survey questionnaire to gauge the readiness of national statistical offices in Asia and the Pacific to modernize. That questionnaire was subsequently disseminated to national statistical offices in the region. In addition, they endorsed the first draft of the present report.

11. At its fourth meeting, the Advisory Body members discussed the first results of the work of the Modernization Working Group, including the preliminary results of the survey on readiness to modernize mentioned above, and case studies from Malaysia and Viet Nam on the application and use of the Generic Statistical Business Process Model (GSBPM). They decided that the Modernization Working Group should continue its work towards developing a modernization advocacy strategy and as part of that strategy, it should circulate a newsletter on a regular basis to keep stakeholders in the region informed about that area of work. At its fourth meeting, the recently published report entitled “A World that Counts: Mobilizing the Data Revolution for Sustainable Development”⁶ by the United Nations Secretary-General’s Independent Expert Advisory Group on the Data Revolution for Sustainable Development was briefly introduced and mentioned as crucial for the future work of the Advisory Body.

The Advisory Body strategy for the period 2014-2016

12. The strategy of the Advisory Body for the period 2014-2016 is to inform national statistical offices about the challenges of modernization and the opportunities to meet those challenges in order to facilitate collaboration within the region and to influence global modernization initiatives so that they address the needs of Asia and the Pacific. Hence, advocacy is a key component of the strategy.

13. Modernization for quality improvement is another central component of the strategy. This is based on the view that modernization efforts will enhance the overall quality of statistical products and in turn motivate Governments to finance transformation work and catalyse change in the work culture of national statistical offices.

⁵ Bodies under the auspices of the Committee on Statistics are: Steering Group for the Regional Programme for Economic Statistics; Regional Steering Committee for Asia and the Pacific for the Global Strategy to Improve Agricultural and Rural Statistics; Technical Advisory Group on Population and Social Statistics; and Regional Steering Group for Civil Registration and Vital Statistics in Asia and the Pacific.

⁶ The report of the United Nations Secretary-General’s Independent Expert Advisory Group on the Data Revolution for Sustainable Development is available from www.undatarevolution.org/report/.

14. Furthermore, the strategy takes into account that many countries in the region may be able to leapfrog some stages of the modernization process and build their business architecture from scratch to suit modern information needs.

15. Reflecting those broad considerations, the Advisory Body's strategy for the period 2014-2016 has three key themes:

(a) *Testing global modernization solutions in the regional context.*

A number of frameworks and standards, such as GSBPM and the Generic Statistical Information Model (GSIM), have been developed by the High-level Group projects. Countries in Asia and the Pacific can use those common models, instead of developing their own. As those standards are applied, users will gain a better understanding of how useful they are in the context of developing statistical systems;

(b) *Influencing global modernization work.* The voice of national statistical organizations with regard to developing information systems is not well represented in global modernization work. The Advisory Body will act as a regional voice on the issue of modernization, notably by representing the Asia-Pacific region in global standard-setting mechanisms and strategic bodies;

(c) *Creating modernization solutions for regional priority areas.*

The Advisory Body will develop modernization solutions for the priority concerns of the region and support the development and application of those ideas and solutions, with the view to offer the successful ones to global initiatives. The strategy appears in annex II.

The Advisory Body programme of work and priorities for the period 2014-2016

16. The main activities of Advisory Body over the period 2014-2016 will be:

(a) Coordinate strategic developments relating to the modernization of statistical production and services, and formulate and disseminate new ideas and proposals in this field;

(b) Determine in what areas networks of experts need to be established;

(c) Determine an annual list of key priorities and their time frames, and allocate them to relevant working groups, with the resources to carry them out to be drawn from members of the Committee on Statistics;

(d) Publicize its work through a newsletter or other communication tools, such as wikipedia;

(e) Actively promote the work on modernization, including relevant standards, methods and tools, among national statistical offices in the region and members of the international statistical community;

(f) Establish/open dialogue with regional steering and technical advisory groups established under the auspices of the Committee on Statistics that oversee work in other areas of statistics development.

17. The Advisory Body will seek to meet physically at least once a year, usually on the sidelines of another international meeting. Between those meetings, it will meet mainly through electronic communication and telephone or videoconferencing.

18. Among the activities in the programme of work, in the next period, the Advisory Body has agreed to focus on a small set of priorities that will

create concrete outputs. The work will be mostly carried out by the Modernization Working Group.⁷

19. The work of the Modernization Working Group will be time limited, with the priorities updated by the Advisory Body at regular intervals. The initial set of priorities of the Advisory Body are:

(a) *Advocacy strategy for modernization work.* There is limited knowledge across the region about modernization and the effort that statistical organizations need to put into this important work. The advocacy strategy will emphasize the importance of modernization and seek to influence national statistical offices in the region to accelerate implementation of standards and frameworks related to modernization, influence National Strategies for the Development of Statistics and help them to coordinate with ministries;

(b) *Big data and how it relates to official statistics.* The work will help national statistical offices in the region to better understand big data and the need to use it;

(c) *Common Statistical Production Architecture.* The High-Level Group for the Modernisation of Statistical Production and Services is implementing a project that focuses on the creation and implementation of a number of common statistical production architecture-compliant services, such as a “seasonal adjustment” service and a “confidentialized access to microdata” service. Under this priority area, work will be undertaken to test those services in the computing environments of statistical offices in the region. Services relating to electronic collection and dissemination are of particular interest.

Membership of the Advisory Body

20. The terms of reference for the Advisory Body set the membership requirements as follows:

(a) A minimum of five members, and the ESCAP Statistics Division as an ex-officio member;

(b) An appropriate balanced representation, geographically and across developed and developing countries;

(c) At least one of the regional members of the High-Level Group for the Modernisation of Statistical Production and Services is a member of the Advisory Body (to ensure close coordination with the High-Level Group).

21. In the original terms of reference, members of the Advisory Body were required to be a head of a national statistical office. The Advisory Body wishes to amend this requirement to ensure adequate representation on the Advisory Body, specifically in cases in which the head of a national statistical office is not able to be a member or is prevented from becoming a member due to specific barriers. The Advisory Body, therefore, requests the Committee to consider and endorse an amendment to the terms of reference that would enable deputy heads of national statistical offices or other high-level officials with relevant authority to be eligible for membership of the Advisory Body. The amended terms of reference are presented in annex I. They apply only to paragraph 7, which reads as follows:

⁷ The terms of reference of the Modernization Working Group are available from www.unescap.org/events/committee-statistics-fourth-session.

The SAB-AP shall comprise a minimum of five members, plus ESCAP Statistics Division as ex-officio member. Members of the SAB-AP shall be at the level of the head of national statistical office, deputy head, or other high-level official with relevant authority in the area of modernization.⁸

The remaining terms of reference, as adopted by the Bureau of the Committed on Statistics in early 2013, are unchanged.

22. The initial membership included the national statistical offices of Australia, India, Malaysia, Pakistan, the Republic of Korea, Samoa and Viet Nam. In August 2014, the national statistical offices of Indonesia and Singapore expressed their interest in joining the Advisory Body. Their membership was subsequently endorsed by the Bureau of the Committee on Statistics.

B. Network of experts

23. The Committee at its third session decided to form an informal expert community to support the sharing of communication and training materials, and regional experiences and strategies. Accordingly and as appropriate and relevant, experts from the following groups are involved in regional collaboration on the modernization of statistical production and services:

(a) A group comprising of experts that work for national statistical offices and are knowledgeable about modernization activities, standards and processes. The ESCAP secretariat organized two expert group meetings entitled “Management of Statistical Information Systems (MSIS)”, in April 2013 and in April 2014. The participants at those two meetings constitute this group of experts;

(b) Experts on statistical data and metadata exchange (SDMX), national accounts and balance of payments from the four participating countries that are part of the group of experts working in the ADB/ESCAP SDMX Capacity Building Initiative;

(c) The Advisory Body’s Modernization Working Group for Production, Methods and Standards, established in August 2014, comprising of experts from Australia, Malaysia, Pakistan and Viet Nam.

Modernization Working Group

24. The Modernization Working Group focuses on the first priority area — advocating for modernization.⁹ The initial work includes the following:

(a) Building awareness of modernization efforts in the region:

(i) The Modernization Working Group has developed a questionnaire that gauges how far a national statistical office has advanced in the drive towards modernization. That includes indications of modernization plans, as well as knowledge and use of relevant standards and frameworks, such as the Data Documentation Initiative (DDI), GSBPM, GSIM and SDMX;

⁸ The original text of paragraph 7 of the terms of reference was: “The SAB-AP shall comprise a minimum of five heads of National Statistical Offices; plus one member representing the network of experts; plus ESCAP Statistics Division as ex-officio member”.

⁹ Work on the other priority areas will commence after the advocacy strategy is finalized, or begin early if additional resources become available from member countries.

(ii) The responses to the questionnaire will be used to plan how to target modernization messages to different groups of staff and management of national statistical offices;

(b) Creating promotional materials:

The High-level Group has developed a number of materials on modernization, such as brochures and flyers, which are being adapted to the Asia-Pacific regional context;

(c) Providing examples of standards use. The Modernization Working Group is:

(i) Identifying and documenting regional examples of national statistical offices that are using standards and frameworks, such as DDI, GSBPM, GSIM and SDMX, and have reaped benefits from using them;

(ii) Gathering and studying global examples of use of standards. That includes High-Level Group projects and the applications of GSBPM, GSIM and the High-Level Group wiki;

(iii) Gathering information about people who have championed the application of standards in the region, and where national statistical offices can go for help when starting to use the standards;

(iv) Exploring linkages with other regional initiatives and programmes for the development of statistical capacity and ways of how to influence the inclusion of modernization in the National Strategy for the Development of Statistics process.

25. The Modernization Working Group met for the first time on 20 August 2014 (through a videoconference) and since then has held biweekly videoconference calls. Over a five-month period from August to December 2014, it produced a modernization questionnaire and documented case studies from Malaysia and Viet Nam on the application and use of GSBPM. The preliminary results of the questionnaire show that overall knowledge about modernization is high among senior management of national statistical offices and that some basic modernization standards and concepts are widely known among the staff. Countries indicated that resources (both financial and human) and expertise are the main barriers to modernization, whereas improvement of the quality of official statistics and standardization of processes for efficiency gains were listed as the main motivators or drivers for modernization work.

26. The Modernization Working Group will continue its work on the development of an advocacy strategy for modernization to be proposed to the Advisory Body and develop tools, such as a newsletter and wiki, to promote the work on modernization and share knowledge in the region.

III. Recent developments in the field of modernization

27. This section outlines other relevant developments and activities in the area of modernization and presents an overview of expected developments for the next two-year period, at the regional and global levels.

A. Global level

High-Level Group¹⁰

28. Many of the activities pertaining to global modernization are being undertaken under the umbrella of the High-Level Group's governance structure. The Executive Board is responsible for the strategic management of ongoing projects. It comprises senior managers from national and international statistical organizations who have the authority to commit the resources of their organizations to supporting the High-Level Group's activities. The membership also includes the chairs of the four modernization committees (discussed below) to ensure coordination and give a broader perspective to modernization activities.

29. The High-Level Group established four committees to generate ideas for projects, identify good practices and highlight issues and developments in their respective fields of competence relating to modernization. These committees are:

(a) *Organizational Framework and Evaluation.* That committee considers human resources, training, legal, licensing and similar issues. It is also responsible for evaluating the effectiveness of the High-Level Group's activities;

(b) *Production and Methods.* That committee considers the technical, methodological and architectural aspects of modernizing statistical production. It oversees the maintenance of the Common Statistical Production Architecture (CSPA);

(c) *Products and Sources.* That committee considers how to use and integrate the growing range of data sources, and provide new types of outputs and services for users of official statistics. It looks beyond the official statistics community for new data sources and new opportunities to add value by enhancing statistical outputs;

(d) *Standards.* That committee considers how to develop, enhance, integrate and support the range of standards needed for statistical modernization. It is responsible for the ongoing support and maintenance of GSBPM and GSIM.

30. The High-Level Group's bodies have been instrumental in updating and developing new standards and frameworks, such as CSPA, GSBPM and GSIM, which will enable national statistical offices to modernize their activities in a way that enables them to build and share statistical solutions. Those standards and frameworks are briefly described below. In addition, the High-Level Group is developing services that can be shared globally across national statistical offices. For 2015, the High-Level Group plans to concentrate on the further implementation of CSPA, with a focus on new services, particularly in the area of data collection. In addition, it has identified continuing the work on big data as a priority.

¹⁰ More information on the High-Level Group is available from www1.unece.org/stat/platform/display/hlgbas/High-Level+Group+for+the+Modernisation+of+Statistical+Production+and+Services.

Generic Statistical Business Process Model

31. Version 5.0 of GSBPM,¹¹ which was released in 2013, provides a common reference framework and a terminology for discussing statistical business processes.

Generic Statistical Information Model

32. Version 1.1 of GSIM,¹² which was released in 2013, provides terminology and a common conceptual model for statistical information.

Common Statistical Production Architecture

33. CSPA was developed in 2013 in response to concern among statistical organizations that their processes, methods and solutions were not easily shared, as in most cases, sharing required significant work because tools were not designed in a way to facilitate this. The objective of CSPA is to address those issues by building on existing standards, such as GSBPM and GSIM, to create an agreed set of common principles and standards designed to promote greater interoperability within and between statistical organizations. It provides the “industry architecture” for official statistics.¹³

34. In the first year of implementation, the CSPA project developed and specified the architecture and then created a practical test of its principles and applicability in a “proof of concept”. In 2014, the project was extended to create the first “production” of CSPA-compliant services and implement them in several statistical organizations. It did not aim to create the full set of services needed for all statistical production activities, but it has shown how this can be done. That resulted in the practical application of CSPA and could lead to enhancements to the architecture based on experiences encountered during the implementation of CSPA-compliant services. A review of the CSPA project for 2014 indicated that the technical implementation governance and support functions needed to be improved. As a result, the project under the High-Level Group will be expanded to cover implementation of CSPA-compliant statistical services and a technical coordination committee will be established to support national statistical offices that are developing or implementing CSPA-compliant statistical services.

Statistical Data and Metadata eXchange Global Conference 2015

35. SDMX sponsoring agencies regularly hold biennial global conferences, which bring together more than 200 high-level statisticians and experts involved in data exchange and dissemination. During those conferences, the role of SDMX in modernizing official statistics is discussed. National statistical institutes, central banks and international organizations share their growing expertise in using SDMX at various stages of their statistical business processes.

36. The fifth global conference will be held in Bangkok from 28 to 30 September 2015 and hosted by ESCAP. It will provide national statistical offices in the region with an excellent opportunity to become familiar with

¹¹ More information is available from www1.unece.org/stat/platform/display/metis/The+Generic+Statistical+Business+Process+Model.

¹² More information is available from www1.unece.org/stat/platform/display/gsim/Generic+Statistical+Information+Model.

¹³ More information is available from www1.unece.org/stat/platform/display/CSPA/Common+Statistical+Production+Architecture+Home.

recent modernization developments, and allow the sponsoring agencies to listen to the needs of countries in Asia and the Pacific. SDMX supports the global modernization aims of the statistical community, such as business process integration, interoperability, standardization and shared services. Its implementation leads to business process redesign and often to better data-sharing among national and international organizations, such as a single national data value disseminated by all national/international bodies. In some cases, SDMX is used beyond its original purpose of data/metadata exchange. For example, it is sometimes employed to disseminate data/metadata, which leads to more metadata-driven statistical business processes.

Global work on big data

37. The Statistical Commission at its forty-fifth session discussed the topic of big data and modernization of statistical systems. In a pre-session report, the results of a global assessment of the use of big data for official statistics conducted by the Statistics Division in 2013 were presented.¹⁴ It was evident during discussions that statistical systems must be modernized if national statistical offices were to embrace the use of big data.

38. The Commission expressed the need to further investigate the sources, challenges and areas of use of big data for official statistics at the global level, especially with regard to the circumstances of developing countries and the link to the development agenda beyond 2015 and the data revolution initiative. The Commission agreed to create the Global Working Group on Big Data for Official Statistics, the activities of which would complement the work carried out by the regional commissions, and manage the globally relevant issues.

39. As part of its work programme, the Global Working Group intends to make the case that national statistical systems have a comparative advantage over other entities in (a) validating big data for policy use and (b) combining big data sources with existing official statistics. The Global Working Group may also consider addressing specific issues related to the role of big data in the development agenda beyond 2015 and facilitating partnerships with other United Nations and international organizations, civil society organizations and other members of the global partnership for the emerging data revolution initiative.

40. One of the complaints regarding the Millennium Development Goals indicators was that the timeliness of data used for monitoring was poor. Big data is mostly generated in real time and could potentially provide very timely indicators.

41. The Global Working Group was launched during the International Conference on Big Data for Official Statistics, which was held in Beijing from 28 to 30 October 2014. Organized by the Statistics Division and the National Bureau of Statistics of China, the Conference was attended by 112 participants from 27 countries, 9 international organizations, private business and academia.¹⁵ It provided a platform for exchanging information on big data initiatives, including experiments that were being undertaken around the world using various big data sources (mobile phones, satellite imagery and twitter data).

¹⁴ See *Official Records of the Economic and Social Council, 2014, Supplement No. 4* (E/2014/24-E/CN.3/2014/35).

¹⁵ More information on the Conference is available from <http://unstats.un.org/unsd/trade/events/2014/Beijing/>.

42. Immediately after the Conference, on 31 October 2014, the Global Working Group held its first meeting during which the main points of discussions were priorities and developing a workplan for 2015. During the meeting, members agreed that big data in developing countries should be the Global Working Group's main focus and decided to set up eight task teams to cover various issues. The task team dealing with advocacy and communication is being led jointly by Bangladesh and the ESCAP secretariat. The interest of the Advisory Body and the wider statistical community in the Asia-Pacific region is represented through Mr. Trevor Sutton, Chair of both the Advisory Body and the Global Working Group, and the overlapping members of the two entities, namely Australia, Indonesia, Pakistan and the secretariat; in addition, Bangladesh, China and the Philippines also represent the Asia-Pacific region in the Global Working Group. Committee members are encouraged to take part in those discussions and can express their interest to participate by contacting the Chair of the Advisory Body and/or the ESCAP Statistics Division.

B. Regional level

Modernization of statistical production and services in the context of the development agenda beyond 2015 and the data revolution

43. Participants at an expert group meeting entitled "Data and statistics for the post-2015 development agenda: implications for regional collaboration on statistics in Asia and the Pacific",¹⁶ which was held in Bangkok on 9 and 10 December 2014 in preparation for the fourth session of the Committee, agreed that the modernization of statistical production and services remains relevant and was central to successful monitoring and implementation of the emerging development agenda beyond 2015. The experts recommended that national statistical offices continue to prioritize the modernization of their business processes, including through the application of GSPBM and further uptake of information communications technology, with a view to enhancing the use of administrative and new data sources, and geospatial information. The expert group meeting emphasized that for that transformation to be successful, national statistical offices should integrate modernization into development plans, such as the National Strategy for the Development of Statistics.

44. The years 2015 and 2016 will be crucial for international statistical development with the adoption of the development agenda beyond 2015. The area of modernization of statistical production and services has a cross-cutting role in the development of statistical capacity as it contributes to the improvement of internal processes, makes products and services easier and less resource intensive to produce, utilizes vast amounts of data and helps accelerate organizational changes to facilitate the reuse and sharing of methods, components and processes. As such, modernization is key to organizational transformation, to move from data providers to information providers and to ensure the continued relevance of national statistical offices. This is very important in supporting goal 17 of the proposed sustainable development goals.¹⁷

¹⁶ Documents related to the expert group meeting are available from www.unescap.org/events/statistics-and-data-post-2015-development-agenda-implications-regional-collaboration-asia-and.

¹⁷ See <http://sustainabledevelopment.un.org/focussdgs.html>.

45. The Secretary-General's High-level Panel of Eminent Persons on the Post-2015 Development Agenda¹⁸ in its report entitled "A new global partnership: eradicate poverty and transform economies through sustainable development" called for "a new data revolution" for sustainable development with the aim to ensure that the statistical information needed to eliminate poverty and to monitor development progress is available to the right people at the right time and in the right format, and to leave no one behind. Subsequently, the Secretary-General created the Independent Expert Advisory Group on the Data Revolution for Sustainable Development. In that Group's report entitled "A World that Counts", it referred to the data revolution as "the opportunity to improve the data that is essential for decision-making, accountability and solving development challenges".

Expert group meetings on management of statistical information systems

46. Two expert groups meetings in the area of modernization were organized, in April 2013 and April 2014, on the management of statistical information systems (MSIS).¹⁹ The meetings have been organized annually since 2000 by the Economic Commission for Europe, Eurostat and the Organisation for Economic Co-operation and Development to create awareness of research on modernization of statistical production and services and share experiences of related developments in national statistical systems and international organizations. ESCAP joined the organizing committee for the 2013 meeting, which was held in two locations (Bangkok and Paris from 23 to 25 April), with joint sessions held during morning hours in Paris and afternoon hours in Bangkok, using a web link. The same modality was replicated for the meeting in 2014, which was jointly held in Dublin, hosted by the Central Statistics Office of Ireland, and Manila, hosted by the ADB, from 14 to 16 April. At both meetings, participants recognized the importance and need for high-level support to encourage regional collaboration on modernization of statistical production and services. They pointed to the need for the Advisory Body to lend the weight and credibility of its members and the institutions they represent to the work. Thus, the expert group called on the heads of national statistical offices in the region to more actively engage in the work of the Advisory Body and to actively advocate for investment in the key priority areas identified by international organizations, national statistical offices and other statistical organizations in the national statistical systems. Additionally, both groups of experts agreed to organize work in smaller, focused technical working groups on clearly identified priority areas. Those working groups would need to be formalized and have the full support of the Advisory Body.

47. However, the two expert group meetings expressed different views on how to lead and organize the work of the working groups. At the meeting in 2013, the participants recommended that working groups be formed on the basis of expressed common interest and subject to identification of a "champion" that could provide technical direction for the work of the group and secretarial support for the group's activities. At the meeting in 2014, it was suggested that international organizations should coordinate and

¹⁸ The Secretary-Generals High-Level Panel of Eminent Persons on the Post-2015 Development Agenda, "A new global partnership: eradicate poverty and transform economies through sustainable development" (New York, 2013). Available from www.un.org/en/development/desa/policy/untaskteam_undf/HLP%20P2015%20Report.pdf.

¹⁹ The report of the first expert group meeting is available from www.unescap.org/events/management-statistical-information-systems-msis-2013. The report of second expert group meeting is available from www.unescap.org/events/joint-meeting-management-statistical-information-systems-msis-2014.

facilitate the establishment and work of those technical working groups, as they have close links to national statistical offices in the region and a better overview of regional efforts in this area. This discrepancy was brought to the attention of the Advisory Body and taken into account in the decisions made regarding its strategy and workplan, including the establishment of the Modernization Working Group.

ADB/ESCAP SDMX Capacity Building Initiative

48. Many international organizations, such as ADB, the International Monetary Fund (IMF) and the Statistics Division, collect economic data from national statistical offices, central banks and finance and other line ministries. The data collection process is often complex and inefficient due to: multiplicity of collection channels; lack of compliance with international standards for naming, classification and metadata; and use of questionnaire-based techniques (usually Microsoft Excel). It is also often time-consuming and places significant burden on national organizations, as the same dataset is often reported in different formats to different international organizations. The questionnaire-based system often results in a loss of metadata along the data collection and subsequent processing trail.

49. To address issues pertaining to the collection and exchange of data, the international statistical community has developed the SDMX standard to automate data exchanges between data producers and data users. SDMX offers a standard way to describe data and metadata as part of an exchange and allows information systems from separate organizations to “talk to each other”. It is currently used by a number of advanced statistical systems and has proven to significantly improve the quality and effectiveness of data exchange. Within the Asia-Pacific region, only a handful of countries use SDMX.

50. The ADB/ESCAP SDMX project aims to promote the use of the SDMX standard among national statistical systems in the region and build regional capacities in applying it to improve efficiency of data exchange. It is a direct outcome of the first expert group meeting on the management of statistical information systems during which participants proposed that the use of SDMX be encouraged. The project focuses on the implementation of standards, guidelines and tools to support automated statistical data exchange between national statistical services and international organizations.

51. The necessary tools for the project will be adapted from already available SDMX tools and will include web services, national SDMX data repository tools and/or mapping tools to original data sources. The scope of the project is the statistical indicators collected by ADB for the preparation of the statistical publication entitled “Key indicators for Asia and the Pacific” and related data products. When possible, globally accepted SDMX data structure definitions for balance of payments and national accounts will be used to ensure that the data can also be communicated using SDMX to other international organizations.

52. Australia, Malaysia, New Zealand and Thailand are participating countries in the project (with the latter two playing the roles of technical advisers), as they already have SDMX-enabled systems in place. Depending on the centralization of the national statistical services, other organizations, apart from the national statistical office, may participate in the project.

IV. Issues for consideration

53. The Committee on Statistics at its fourth session is invited to:
- (a) Provide guidance on and support the current priority areas and the future work by:
 - (i) Reaffirming the importance of regional collaboration on modernization of statistical production and services;
 - (ii) Encouraging members to advocate for the modernization of statistical production and services at the national and regional levels, as well as integrate modernization into their national statistics development plans, such as the National Strategy for the Development of Statistics;
 - (iii) Appealing to international organizations working on statistical capacity-building to include modernization issues in their activities;
 - (iv) Encouraging members to nominate technical experts to participate in the work of the Modernization Working Group;
 - (b) Considering the revision of the Terms of Reference of the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific (paragraph 7), as contained in annex I, for endorsement.

Annex I

Terms of Reference of the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific (revision 1)^a

I. Background

1. The creation of a more adaptive and cost-effective information management environment, the key results of the modernization of statistical production and services, was established by the Committee on Statistics at its second session as one of the overarching strategic goals to be achieved by 2020.

2. Experts' discussions organized by the Economic and Social Commission for Asia and the Pacific (ESCAP) since 2010 have pointed to the importance and urgency for national statistical institutions to modernize their information systems to address the evolving field of statistics and maintain relevance across developed and developing countries.

3. Considering the ambition, scope, complexity and long-term aspects of programmes to modernize statistical production and services, experts' discussions have also noted the vital importance of regional cooperation, including the development of common frameworks and standards and knowledge-sharing mechanisms, to accelerate the modernization of statistical information systems.

4. Building on these discussions, the ESCAP Committee on Statistics on its third session in December 2012 considered and endorsed the establishment of a high-level strategic body and of an experts' network to raise awareness and build capacity related to concepts, methods and standards to support national modernization efforts.

5. In order to reflect the organizational transformation of national statistical systems, supported by but not driven by improvement in information technology, the high-level strategic body shall be referred to as the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific (SAB-AP).

II. Key responsibilities

6. The primary objective of SAB-AP shall be to drive and support changes towards the modernization of statistical production and services in the Asia-Pacific region. As such, the strategic body shall be responsible for:

(a) Developing a regional strategy to raise awareness and advocate on the importance and urgency of the modernization issue;

(b) Mobilizing financial and human resources to implement the regional strategy, including identifying relevant partners and other stakeholders;

(c) Acting as a regional voice on the issue of modernization notably by representing the Asia-Pacific region in global standard-setting mechanisms and strategic bodies, such as the High-Level Group for the Modernisation of Statistical Production and Services (HLG);

^a The terms of reference are reproduced here without formal editing.

(d) Providing strategic directions to and overseeing the programme of work of the network of experts to be established.

III. Composition

7. SAB-AP shall comprise a minimum of five members, plus ESCAP Statistics Division as ex-officio member. Members of SAB-AP shall be at the level of the head of national statistical office, deputy head, or other high-level official with relevant authority in the area of modernization.

8. The national statistical offices shall represent ESCAP members and associate members, taking into account the need for balanced representation, geographically and across developed and developing economies.

9. The size of SAB-AP shall be decided by the Bureau of the Committee on Statistics and may be changed as needed to ensure that the group continues to effectively and efficiently perform its functions. The Bureau shall appoint one of the members as the Chair of SAB-AP.

IV. Selection of members

10. The Bureau of the Committee on Statistics shall, with support from the ESCAP secretariat, decide on the composition of SAB-AP on the basis of the need for balanced representation and the need to ensure efficient and effective functioning.

11. In order to ensure close coordination with the global HLG, SAB-AP shall include at least one of the regional members of the global HLG.

12. The SAB-AP members shall be appointed for a period of two years. All members shall be eligible for re-appointment.

13. If an appointed SAB-AP member vacates a position, the remaining members shall decide and nominate the most appropriate replacement.

14. Members of SAB-AP shall commit to devote the time necessary for adequate discharge of their duties. Members of SAB-AP will not be considered staff members of United Nations; hence, will not be entitled to the privileges and immunities accorded to staff members of the United Nations.

V. Functioning

15. Subject to availability of resources, SAB-AB shall establish a yearly programme of work setting priority areas and related activities to be implemented with the support of the experts' network.

16. SAB-AP shall meet in person or through video- or teleconference at least one time per year to review progress on the programme of work and review priorities.

17. In-between physical meetings, SAB-AP shall review most issues by means of electronic discussion and exchange of e-mails. Other experts may participate as observers in the meetings of SAB-AP.

VI. Reporting

18. SAB-AP shall submit an annual report to the Bureau of the Committee on Statistics on its work on the development and implementation

of regional strategies supporting changes towards the modernization of statistical production and services. Further, as per request by the Bureau, SAB-AP shall submit a written or oral report for the information of the Committee on Statistics at its formal sessions.

VII. Chair

19. The Chair of SAB-AP shall guide the work of the strategic body. The Chair will serve for a period of two years after which he/she will be eligible for re-appointment.

VIII. Secretariat

20. The office of the Chair shall support secretarial services to SAB-AP in carrying out its functions as described above.

IX. Review of the Terms of Reference

21. SAB-AP shall, in consultation with the secretariat, review its Terms of Reference every two years to ensure that it has the necessary mandate to effectively and efficiently perform its functions. The revisions shall be subject to the approval of the Committee on Statistics.

X. Sunset clause

22. Unless the Committee on Statistics decides otherwise, SAB-AP shall expire by the end of 2020.

Annex II

Strategy of the Advisory Body for the period 2014-2016

Background

1. The main function of statistical organizations is to assist national stakeholders, such as Governments and business, in informed decision-making. The national statistical organizations work to provide a coherent base of information with accurate measurement of change over time in key economic, social, demographic and environmental indicators.
2. The official statistics industry is part of a more extensive information industry. Within this wider information industry, the pace of creation of new information products and new ways of combining and using information is increasing rapidly. Alternative sources of information allow new data producers to produce and update information in real time and make it available with fewer constraints and with greater detail than official statistics provided through national statistical organizations.
3. It is necessary for these statistical organizations to stay relevant to the modern world. Statistical organizations are confronted with accelerating change in society and the way that data are produced and used within the information industry. As such, the ways in which statistical organizations operate to provide official statistics needs to change.
4. Statistical organizations have to be transformed from being traditional data producers, characterized by domain-specific silos, legacy information systems and the production process centred around paper forms and publications, to becoming a modern “information service provider”, characterized by Internet data capture, expanding data sources and innovative ways of communicating with users.

Addressing the challenge

5. Members of the official statistics industry have recognized that they should work together to better exploit the opportunities and deal with the threats that accompany a data deluge.
6. For example, in 2010, the Conference of European Statisticians established the High-Level Group for the Modernisation of Statistical Production and Services. The High-Level Group is comprised mainly of countries with developed statistical systems in terms of information systems. Australia and the Republic of Korea are the members from the Asia-Pacific region. New Zealand participates in the High-Level Group’s Executive Board and in the technical working groups.
7. The High-Level Group has created important momentum to work on modernization at the global level. It has focused in recent years on developing common processes, architecture and standards that are needed to underpin modernization work. Members of the High-Level Group stated their vision as follows:

“We see a future where the community of statistical organizations work together collaboratively. We will be able to share and reuse common processes and methods, together with the IT components which allow them to be put into effect, within one organization and/or between organizations. We will reduce the duplication of effort in

regard to development and maintenance and support the sharing of “leading practice” solutions, potentially on a worldwide basis”.^a

A vision for modernization work in the Asia-Pacific region

8. The need to modernize is well recognized in the Asia-Pacific region. The creation of a more adaptive and cost-effective information management environment, the key results of the modernization of statistical production and services, was established by the Committee on Statistics at its second session as one of the overarching strategic goals to be achieved by 2020.

9. In December 2012, the Committee on Statistics at its third session considered and endorsed the establishment of the Strategic Advisory Body for the Modernization of Statistical Production and Services in Asia and the Pacific. The Advisory Body is a small group of high-level managers from national statistical offices in the region. It aspires to the same vision as the High-Level Group. The primary objective of the Advisory Body is to drive and support changes towards the modernization of statistical production and services in the Asia-Pacific region.

10. The Advisory Body will raise awareness and advocate on the importance and urgency of the modernization issue in the region. Collaboration at a regional level is of vital importance, especially considering the ambition, scope, complexity and long-term aspects of programmes to modernize statistical production and services. There are at least three themes in the work of the Advisory Body. These are outlined below:

(a) *Testing global modernization solutions in the regional context.* A number of frameworks and standards, such as the Generic Statistical Business Process Model (GSBPM) and the Generic Statistical Information Model (GSIM), have been developed by the High-level Group projects. Countries in Asia and the Pacific can use those common models, instead of developing their own. As those standards are applied, users will gain a better understanding of how useful they are in the context of developing statistical systems;

(b) *Influencing global modernization work.* The voice of national statistical organizations with regard to developing information systems is not well represented in the global modernization work. The Advisory Board will act as a regional voice on the issue of modernization, notably by representing the Asia-Pacific region in global standard-setting mechanisms and strategic bodies;

(c) *Creating modernization solutions for regional priority areas.* The Advisory Body will develop modernization solutions for the priority concerns of the region and support the development and application of those ideas, with the view to offer the successful ones to global initiatives.

11. The challenges facing statistical organizations are too large for individual statistical organizations to tackle on their own. In order for this vision to be successful, producers of official statistics can and should work together as an “industry”, to address those shared challenges and make the most of new opportunities.

12. The Advisory Body will need to be active in mobilizing financial and human resources to achieve its goals. A modernization working group on production, methods and standards will be created to implement the strategy and priorities of the Advisory Body. It is important that the experts receive support from their organizations to engage in regional collaboration and to maintain commitment to modernization work in the region.

^a www1.unece.org/stat/platform/pages/viewpage.action?pageId=99492302.