

Developing a global programme for the implementation of the 2008 SNA and supporting statistics

By UNSD

I Introduction

1. The Implementation Programme for the System of National Accounts 2008 and supporting statistics represents a global statistical initiative, which was mandated by the Statistical Commission at its fortieth session following the adoption of the System of National Accounts 2008 (2008 SNA) as the international standard for the compilation and dissemination of national accounts data. It has the dual objective in assisting countries in developing the statistical and institutional capacity to (a) make the conceptual change over to the 2008 SNA and (b) improve the scope, detail and quality of the national accounts and supporting economic statistics.

2. With the 2008 SNA being flexible to accommodate all countries and economies, regardless of their level of statistical development, each country has to review with its users the relevant changes for the change over to the 2008 SNA that are applicable to the country and consider its adoption. At the same time, user consultation should revisit the scope, detail and quality of the accounts and supporting economic statistics by taking a view on which socio-economic and financial policies have to be informed by the structural and short-term economic statistics, including annual and quarterly national accounts.

3. The United Nations Statistics Division (UNSD) is working closely with the United Nations regional commissions and other regional partners to pursue the implementation of the 2008 SNA. For this purpose the UNSD and the regional commissions (RC) organized a series of seminars. Four of these have taken place already in May 2010 (Middle Eastern region); June 2010 (Caribbean region); November 2010 (Latin American region, in collaboration with the International Monetary Fund); and in April 2011 (African region, in collaboration with the African Development Bank and African Union Commission). During the second half 2011 additional seminars were held in October 2011 (South and South East Asian and Oceania countries in collaboration with UNESCAP) and in November 2011 (Eastern Europe, Caucasus Central Asia and South East Europe countries in collaboration with UNECE).

4. The purpose of these seminars is to facilitate the development of a global implementation programme for the 2008 SNA and supporting economic statistics with the objective of developing comparable economic statistics in those regions that have not done so yet and to support those regions that have already started with their own regional programmes, ensuring that these programmes are aligned with the global implementation programme as adopted by the United Nations Statistical Commission (UNSC).

5. This note describes an approach for preparing a national implementation programme for the 2008 SNA and supporting statistics. The approach allows for setting up a national

programme that is aligned with the regional and the global implementation programmes for the 2008 SNA and supporting statistics. Following the introduction is a summary of the global implementation programme for the 2008 SNA. Section III describes the elements of a statement of strategy, followed by a description of a Statistical System Information fact sheet in Section IV. Section V discusses the assessment of the adequacy of the statistical system for compiling national accounts and Section VI provides an overview of an outline for setting goals and actions to reach these goals. Section VII briefly describes the development of an action plan. Concluding remarks are provided in Section VIII.

II The 2008 SNA implementation programme

6. The efficiency and sustainability of the implementation of the 2008 SNA rest on the agreed principles of the implementation strategy, namely: (a) strategic planning, (b) coordination, monitoring and reporting; and (c) improving statistical systems. The strategy takes as a starting point the different levels of implementation of the SNA in various countries. It acknowledges the need for coordinated action, not only at the international level but also at regional and sub-regional levels and emphasizes the need for close cooperation with regional commissions and sub-regional organisations.

7. The principles of the implementation strategy are operationalized in the implementation programme for the 2008 SNA, which comprises four elements, namely: (a) use of National Strategies for the Development of Statistics (NSDS) as the strategic planning framework, (b) the programme information structure built around the statistical production process, scope and compliance for the national accounts and supporting economic statistics, (c) the modalities of statistical capacity building through training and technical cooperation, publication of manuals and handbooks, research and advocacy, and (d) the stages of implementation leading to the change over to the 2008 SNA.

8. The NSDS is the most widely used tool for statistical planning in developing countries. Countries are encouraged to use the NSDS for the implementation of the 2008 SNA and many already have or are updating their NSDS for this purpose. This note elaborates on using a statement of strategy as a strategic planning framework for the development of an implementation programme for the 2008 SNA and supporting statistics.

9. A programme information structure aims to facilitate the coordination, monitoring and reporting on the SNA implementation in this multi-stakeholder environment. The Intersecretariat Working Group on National Accounts (ISWGNA) already reports to the UNSC about the scope of national accounts compilation and the conceptual compliance with the 1993 SNA in terms of milestones and a Minimum Required Data Set (MRDS) based on the United Nations National Accounts Questionnaire (UN-NAQ). At its forty-second session in 2011 the UNSC adopted an update of the milestone and data set measures to assess the scope and compliance with the 2008 SNA¹ and initiated a review to accommodate a broader scope of economic statistics and short term economic statistics, including quarterly national accounts, for early warning of exposures

¹ ISWGNA report to the 2011 UNSC available at <http://unstats.un.org/unsd/statcom/doc11/2011-6-NationalAccounts-E.pdf>

and risks². The ISWGNA organizations also apply other generally accepted frameworks in performing or facilitating data quality assessments for national accounts and supporting data sets. The sources of methodological and institutional descriptions used to perform these assessments include the International Monetary Fund's General Data Dissemination Standard (GDDS) and Special Data Dissemination Standard (SDDS) metadata, information gleaned in the discovery process during quality assessment reviews, including self assessments, peer reviews, as well as IMF data modules of the Reports on Observance of Standards and Codes (ROSC), and periodic international surveys.

10. The recent analytical study on the barriers to the implementation of the System of National Accounts included in the report of the Friends of the Chair on the barriers to the implementation of the System of National Accounts 1993³ reveals the lack of availability of basic data sources as one of the two major obstacles hindering SNA implementation. To make the necessary improvements in data sources, an integrated economic statistics approach can be followed. This approach supports the statistical reconciliation of the various basic data resources with the macroeconomic accounts such as the national accounts. Integrated economic statistics rely on the application of statistical integration frameworks and techniques for the compilation of consistent and coherent macroeconomic and supporting basic statistics. It comprises the SNA as conceptual organizing framework; adequate institutional arrangements; and an integrated statistical production process. Further details on the main components of an integrated approach to economic statistics are provided in the **Annex** summarizing the core ideas of the recently developed *Guidelines on Integrated Economic Statistics*. The Guidelines aims to serve the stated objective of the global implementation programme of the SNA through assisting countries in developing the statistical and institutional capacity to improve the scope, detail and quality of the national accounts and supporting statistics.

11. In order to meet the challenges of national accounts development along with the supporting statistics, the UNSD and other members of the ISWGNA initiated dialogue with the regional commissions and other development partners to consider programmes for four modalities: (a) training and technical cooperation, (b) manuals and handbooks, (c) applied research and d) advocacy. The initial focus on these four modalities will be applied flexibly.

12. Three distinct stages are identified for the changeover to the 2008 SNA through a multi-year programme, irrespective of the level of statistical development namely:

- (a) Stage I. Review of a strategic framework and detailing of national and regional implementation programmes;
- (b) Stage II. Adaptation of classification frameworks, business registers and frames, surveys, administrative data sources and information technology infrastructure; and
- (c) Stage III. Application of adapted frameworks and source data, backcasting and changeover to 2008 SNA.

² Report on Short term Economic Indicators to the 2011 UNSC available at <http://unstats.un.org/unsd/statcom/doc11/2011-11-Short-termEcoIndicators-E.pdf>

³ Report of the Friends of the Chair on the barriers to the implementation of the System of National Accounts 1993 to the 2011 UNSC available at <http://unstats.un.org/unsd/statcom/doc12/2012-5-FOC-SNA-E.pdf>

III National statement of strategy

13. Strategic planning is a key principle in mobilizing political and financial support for investment in statistics for which strategic planning frameworks could be used to connect national development objectives with a programme of work for statistical capacity-building. Strategic planning can identify the current strengths and weaknesses of statistical capacity to produce key economic indicators and basic source data, and in consulting users. This approach could also lay out a schedule of tasks to mitigate weaknesses.

14. Countries are encouraged to develop their implementation programmes for the 2008 SNA and supporting economic statistics within the framework of national strategies for the development of statistics (NSDS). A statement of strategy, taking into account the national and regional policy needs, is an important step to establish a road map for developing the required scope, detail and quality of national accounts needed for assessing economic progress. For this purpose it is proposed that countries establish a statement of strategy for the implementation of the 2008 SNA and supporting statistics at the national level and to incorporate this statement of strategy in the review of their NSDS. The statement of strategy aims to establish the set of actions to accomplish statistical and institutional goals for the sustainable improvement of the economic statistics programmes, while ensuring adherence to best practices in official statistics.

15. In developing the statement of strategy, consultations are needed, preferably in a national seminar, with all stakeholders, policy planners and other users including the academia and business community. Such a discussion is expected to help the national statistical office to prioritize the problem areas and ultimately write a plan for the improvement of the supporting economic statistics with a view to compile national accounts within the framework of the 2008 SNA.

16. The basic elements of a statement of strategy include a mandate, a mission statement, values, high level goals, specific goals and required activities. Table 1 provides an outline for a statement of strategy. For the purpose of an implementation programme for the 2008 SNA and supporting statistics, a statement of strategy could, for example, be: *The development of an economic statistics programme for compiling national accounts with the required scope and detail to meet data needs of policy makers in a global socio-economic environment.* The statement of strategy represents the overall objective for the successful implementation of the 2008 SNA to enable the evaluation of economic performance and the national and regional economic policy objectives.

17. The **mandate** for the statement of strategy is determined by national and regional policy objectives and underpinned by the regulatory and institutional framework through a statistical act and international statistical standards such as, the United Nations principles of official statistics, 2008 SNA, BPM6, GFSM, ISICrev4, etc.

18. The **mission statement** describes the purpose, users, outputs, markets, philosophy and basic technology used to realize the strategy. In other words, what needs to be accomplished, for example, *The efficient and timely dissemination of high quality national accounts and supporting economic statistics.*

19. The set of *values* needs to reflect the values and principles portrayed by the UN Fundamental Principles of Official Statistics to produce useful high-quality data that will have the confidence of users of statistics. Values include, for example, statistical professionalism, independence and integrity, excellent service to customers, respect and understanding for data suppliers, value for money, etc.

20. *High-level goals* represent the overall accomplishments to be achieved. These goals aim to address important issues, which are identified during the assessment phase (described below). The goals should be creative and forward-looking by being specific, measurable, relevant and time-bound. High-level goals could include improvement in the scope, quality and timeliness of economic statistics, minimizing the burden on respondents, increasing the use of administrative data for statistical purposes, achieving greater efficiencies using best practices, raising public awareness and use of national accounts, etc.

21. The *specific goals* describe the ultimate results that need to be accomplished for fulfilling the vision described in the statement of strategy. The specific goals for the 2008 SNA implementation programme could be: *To compile national accounts according to milestone two of the SNA implementation, comprising the minimum required data set and to develop a national central data hub for short term economic statistics to facilitate the early detection of changes in economic activity as reflected by the national accounts.*

22. To reach the specific goals require particular activities. To determine these *required activities* an assessment of the national statistical system need to be carried out to determine the adequacy of the national statistical production process to support implementation of the 2008 SNA.

IV Statistical system information

23. To facilitate the assessment process and the development of the statement of strategy, UNSD proposes to use a Statistical System Information fact sheet. The fact sheet, as presented in Table 2 allows for collating information available at the national level and at various international organizations on the national statistics system, bringing information together relevant for the development of an economic statistics programme.

24. The Statistical System Information fact sheet for economic statistics provides information on a country's statistical system available at the country level, at each of the international organizations of the Intersecretariat Working Group on National Accounts (ISWGNA) and Paris21. The country level information reflects on the availability of a statistical law, a strategic framework for statistics (NSDS or Statistical Master Plan); relevant documents on development plans; current statistical projects or programmes such as the 2008 SNA Implementation programme, World Bank programmes, such as STATCAP, Trust Funds for Statistical Capacity Building (TFSCB) and those of the International Bank for Reconstruction and Development (IBRD) and International Development Association (IDA); data dissemination platforms such as, websites and publications; the statistical standards in use for national accounts, balance of payments and government finance statistics; and the national accounts and price index base years. The information available from the international organizations include the Development of

National Statistical Systems information and Millennium Development Goals (MDG) reports available at the UNSD website; the Data Quality Assessment Framework (DQAF) and Reports on the Observance of Standards and Codes (ROSC) and the Special and General Data Dissemination Standards (GDDS/SDDS) of the International Monetary Fund (IMF); Poverty Reduction Strategy Papers (PRSP) and Country Assistance Strategies (CAS) papers by the World Bank; and the country data on economic statistics disseminated by these organizations.

V Assessment of the statistical system

25. To help countries to carry out a self assessment of their national statistical system to evaluate the adequacy of the national statistical production process supporting national accounts compilation, the UNSD developed a Diagnostic Framework for National Accounts and Supporting Economic Statistics (DF-NA&ES)⁴. The Diagnostic Framework uses taxonomies based on the CES Classification of International Statistical Activities.

26. The Classification of International Statistical Activities⁵ comprises a number of statistical domains providing a structured presentation of statistical activities. The statistical activities are classified in groups aimed at collecting, producing and disseminating data, developing standards, harmonization and implementation approaches in official statistics. It organizes the statistical activities in five broad types of statistical domains. Domains 1-3 constitute subject area classifications dealing with the outputs of the statistical process, namely, demographic and social statistics; economic statistics; and environment and multi-domain statistics. Domains 4 and 5 cover substantive issues that are more process and organization oriented and also deals with the managerial aspects of official statistics. The DF-NA&ES cross-classify the statistical activities of domain 2 and selected activities from domain 1 and 3 with that of domain 4 and 5. This allows for an assessment of the economic activities in terms of process, organization and managerial aspects of official statistics.

27. The tool is intended to facilitate a self assessment of the statistical prerequisites outlined in stages I and II of the global 2008 SNA implementation programme, which could be used for developing the statement of strategy for improving the availability and quality of the basic economic statistics required for the compilation of national accounts according to the 2008 SNA recommendations.

VI Consolidation of statistical requirements, assessment and actions

28. An important step in developing the statement of strategy is to determine the goals for the implementation of the 2008 SNA and requirements to reach those goals. For this purpose UNSD proposes to use an outline for setting goals and actions to reach these goals. The outline, as presented in Table 3, consists of six elements: the data items to be compiled, representing the scope and detail of the national accounts that a country wish to compile; the frequency of the data items, in nominal and volume measures; the requirements for compliance to the 2008 SNA and

⁴ The DF-NA&ES questionnaire can be obtained from the UNSD web site at: http://unstats.un.org/unsd/nationalaccount/docs/WG4_20DiagnosticTool.pdf

⁵ Conference of European Statisticians document ECE/CES/BUR/2009/OCT/19 available at <http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/bur/2009/mtg1/19.e.pdf>

other statistical standards; the required data sources for the proposed data items; the current data sources and compilation methods; and the actions required to mitigate the gaps identified in the assessment relative to identified goals and needs.

29. The decision on the scope, detail and frequency, in nominal and volume measures, of the national accounts, representing the proposed goals, is firstly determined by the national and regional policy needs and secondly by the requirements for assessing the scope and detail of the implementation of 2008 SNA adopted by the United Nations Statistical Commission in 2011 and the short term economic indicators of the Ottawa data template for the early detection of changes in economic activity (see footnotes 1 and 2).

30. The data sets for assessing the scope and detail of the national accounts comprise a minimum required data set (MRDS), a recommended set and a desired set. The MRDS include quarterly accounts for the nominal and volume measure of GDP by industry or by expenditure components and the quarterly compilation of the integrated accounts until net lending for the total economy and the rest of the world. The MRDS also include the compilation of annual institutional sector accounts until net lending for the corporate, government, households and non-profit institutions serving households sectors, while the quarterly compilation of these sectors is recommended. The annual compilation of the sectoral financial accounts and sectoral balance sheets and other changes in assets accounts is recommended, while the compilation of their quarterly accounts is desirable.

31. The conceptual compliance to the 2008 SNA and other relevant statistical standards are reflected in the conceptual compliance questionnaire for the 2008 SNA⁶ and the framework for the self assessment of the status of national accounts and supporting economic statistics. The compliance to the 2008 SNA and other relevant statistical standards and the required data sources to compile the data items, together with the proposed goals described above, represent the statistical requirements for the implementation of the 2008 SNA and supporting statistics.

32. The current data sources and compilation methods for the national accounts and short term economic statistics can be obtained from the results of the self assessment of the statistical production process for supporting the compilation of the national accounts that was carried out through the diagnostic tool.

33. By mapping the statistical requirements with the outcome of the self assessment, it is possible to identify the actions required for the implementation of the 2008 SNA and supporting statistics. Examples of the type of topics that may need to be addressed include: the *modernization of the national regulatory and institutional framework* by strengthening the functioning of the national statistical system (NSS), statistical regulation, management practices, personnel practices and information and communication technology; the *upgrading of statistical infrastructure* to accommodate issues, such as 2008 SNA compliance, classifications, registers and frames; and the *upgrading or development of statistical operations*, such as monthly price statistics; monthly and quarterly production and turnover surveys; economic activity surveys (structural business statistics and short term business statistics); household income and expenditure surveys, informal sector surveys, employment surveys and administrative data.

⁶ <http://unstats.un.org/unsd/nationalaccount/docs/guidelines.pdf>

34. Table 3 provides two examples. Firstly, for the data item final household consumption expenditure. To comply with the 2008 SNA, this item needs to take account of issues, such as the allocation of FISIM; the estimation of imputed rents; goods that are produced by households for own final consumption and the classification of the data items according to COICOP. The required source information for the estimation of final household consumption include household income and expenditure surveys, surveys of retail trade sales by type of expenditure items; housing stock; and price indices by type of expenditure items. The second example is the index for industrial production (IIP). The standard for compiling this data item is reflected in the *International Recommendations for the Index of Industrial Production, 2010*;⁷ and the underlying data are obtained through economic activity surveys and producer price index surveys.

VII Action Plan

35. Following the identification of the required actions for the development of an economic statistics programme for compiling the required scope and detail of the national accounts, an action plan needs to be prepared. The action plan indicates the interventions to be carried out with a timetable to mitigate data gaps. The action plan also provides an information structure for monitoring and evaluating the implementation of the SNA. The action plan therefore, needs to be specific, measurable, relevant and be executed in a particular time scale. Each of the required actions needs to include key features and key deliverables, for example, *the publication of the quarterly GDP release within 70 days after the end of the quarter*.

VIII Conclusions

36. This note described an approach for preparing a national implementation programme for the 2008 SNA and supporting statistics, which is aligned with the regional and the global implementation programmes for the 2008 SNA and supporting statistics. When preparing the implementation programme it is necessary to take into consideration the national and regional policy needs to determine the scope and detail of the national accounts required to inform policy makers. These goals are also guided by the requirements set by the Statistical Commission for assessing the scope and detail of the national accounts. The chosen scope and detail of the national accounts also determine the data sources needed for timely and accurate estimates of the national accounts aggregates. By mapping the statistical requirements – where you want to go, and the outcome of the assessment of the statistical system – where you are, it is possible to determine the required actions – how to get there. These required actions are translated into an implementation programme for the 2008 SNA and supporting statistics, providing key features and deliverables that are specific, measurable, relevant and can be carried out within a specific time frame. Countries are encouraged to develop their implementation programmes for the 2008 SNA and supporting economic statistics within the framework of national strategies for the development of statistics.

⁷ See http://unstats.un.org/unsd/industry/iip_review.asp

Table 1. Outline for a statement of strategy

Mandate		
<p>Policy needs Regional and national policy objectives</p>	<p>Legal Mandate Statistics Act</p>	<p>International Standards UN Fundamental Principles of Official Statistics; Data Quality Assessment Framework (DQAF); 2008 SNA, BMP6, GFSM, ISIC Rev.4</p>
Mission statement		
<p>The efficient and timely dissemination of high quality national accounts and supporting economic statistics</p>		
Values		
<ul style="list-style-type: none"> • Statistical professionalism • Independence and integrity • Excellent service to our customers • Respect and understanding for our data suppliers • Value for money 		
High-level goals		
<ul style="list-style-type: none"> • Improvement in the scope, quality and timeliness of economic statistics • Minimising the burden on respondents • Increasing the use of administrative data for statistical purposes • Achieving greater efficiencies using best practices • Raising public awareness and use of national accounts 		
Specific goals		
<ul style="list-style-type: none"> • Compile national accounts according to milestone two of the SNA implementation, comprising the minimum required data set • Develop a national central data hub for short term economic statistics to facilitate the early detection of changes in economic activity 		
Required activities		
<p>Modernisation of the national regulatory and institutional framework by strengthening</p> <ul style="list-style-type: none"> • The functioning of the NSS • Statistical regulation • Management practises • Personnel • Information and Communication Technology 	<p>The upgrading of statistical infrastructure</p> <ul style="list-style-type: none"> • 2008 SNA compliance • Classifications, • Registers and frames 	<p>The upgrading or development of statistical operations</p> <ul style="list-style-type: none"> • Monthly Price statistics • Monthly and quarterly production and turnover surveys • Economic activity surveys (structural business statistics and short term business statistics) • Household income and expenditure surveys • Informal sector surveys • Employment surveys • Administrative data

Table. 2 Statistical System Information fact sheet

Statistical System Information			
Country name			
Country	Statistical agency	Address:	Email Web
	Legal Framework	Statistical Law	
	Strategic Framework	NSDS/Statistical Master Plan	
	Relevant documents	Development plan	
	Projects/Programmes	2008 SNA Implementation programme (ISWGNA)	
		STATCAP (World Bank)	
		IBRD/IDA (World Bank)	
		TFSCB (World Bank)	
	Data	CSO website	
	Statistical Standards	National accounts methodology	
		National accounts base year	
		Balance of payments manual in use	
		Govt finance accounting concept	
		CPI base year	
UNSD	Relevant documents	Development of National Statistical Systems	
		MDG report	
	Data	Country profile	
		National Accounts	
		UN-NAQ Latest submission	
		UN-NAQ MRDS	
		HFI data	
IMF	Relevant documents	Country report	
		DQAF/ROSC	
		GDSDS/SDDS	
	Data	World economic outlook	
World Bank	Relevant documents	PRSP	
		CAS	
	Data	Country data	
Eurostat	Relevant documents	Strategy paper	
	Data		
Paris 21	Relevant documents	National Strategies for the development of statistics	
		NSDS	

Table 3. Consolidation of statistical requirements, assessment and actions

Data item	Frequency Monthly, Quarterly, Annual; in nominal and volume measures	2008 SNA or other statistical standards	Required sources for nominal and volume measures	Principal data sources and compilation methods for nominal and volume measures used by the country	Actions required Actions required to mitigate the gaps identified in the assessment relative to identified goals and needs.
(a)	(b)	(c)	(d)	(e)	(f)
National accounts aggregates to comply to Milestone 2 - MRDS					
<i>For example: House hold final consumption expenditure</i>		FISIM allocated to users; Imputed rents; Goods that are produced by households for own final consumption COICOP.	Household income and expenditure surveys; Retail trade sales by type of expenditure items; Housing stock. Price indices; Volume series by type of expenditure items	From DF-NA&ES	<i>For example, Introduce a monthly retail trade survey</i>
Set of short term indicators					
<i>For example: Index of industrial production</i>		International Recommendations for the Index of Industrial Production, 2010	Economic activity surveys by industry, producer price index surveys	From DF-NA&ES	<i>For example, Introduce a monthly industrial production survey to compliment the quarterly economic activity survey</i>

ANNEX

MAIN COMPONENTS OF AN INTEGRATED APPROACH TO ECONOMIC STATISTICS⁸

Main components and scope of integrated economic statistics

1. Integration of economic statistics is about statistical reconciliation of the various basic data resources such as those related to production, income, consumption and employment with the macroeconomic accounts such as national accounts. The main components of integrated economic statistics include: (a) the System of National Accounts as conceptual organizing framework for economic statistics, (b) the institutional arrangements and management culture as enabling environment for integration and (c) the statistical production process as an integrated production chain from the collection of basic data to dissemination of statistics. These components are interlinked and mutually reinforcing structures for setting up integrated statistical systems. The implementation of integrated economic statistics relies on the application of statistical integration frameworks and techniques for the compilation of consistent and coherent basic and macroeconomic statistics. The general framework for integrated economic statistics is based on the fundamentals of the statistical infrastructure of a national statistical system and is applicable to statistical systems at different stages of statistical development and with centralized or decentralized models of operation.

2. The scope of integrated economic statistics is based on the statistical domains of the *Classification of International Statistical Activities*⁹ providing a structured presentation of a broad type of statistical activities and subject areas. The domains considered for the integration of economic statistics are treated as interrelated statistics in a consistent and coherent statistical information system. The scope covers the economic source data used in the national accounts, comprising subject-matter areas dealing with the outputs of the statistical process, for example labour, income and consumption statistics (Domain 1: Demographic and social statistics), business, sectoral, finance, and price statistics (Domain 2: Economic statistics), extending to domain areas such as statistics of the environment (Domain 3: Environment and multi-domain statistics). The scope of integrated economic statistics also covers activities that focus on the various processes that lead to statistical outputs, comprising substantive cross-functional issues that are more process and organization-oriented and deal with the strategic, institutional, governance and managerial aspects of official statistics, for example general survey methodology, statistical coordination, capacity-building, management of human and technological resources and relationship with data producers and users (Domain 4: Methodology of data collection, processing, dissemination and analysis, and Domain 5: Strategic and managerial issues of official statistics).

System of National Accounts as conceptual organizing framework

3. The starting point for integrated economic statistics is the use of the internationally accepted standard for macroeconomic accounts, the System of National Accounts (preferably its

⁸ Based on the forthcoming United Nations publication *Guidelines on Integrated Economic Statistics*, Sales No. E.12.XVII.7, document symbol ST/ESA/STAT/SER.F/108

⁹ Conference of European Statisticians document ECE/CES/BUR/2009/OCT/19 available at <http://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/bur/2009/mtg1/19.e.pdf>

latest edition, the 2008 SNA) as the conceptual organizing framework. Thus first the SNA serves for ensuring the consistency of the concepts, definitions and classifications used in different, but related fields of statistics and across the various datasets. Second, it serves as an accounting framework for ensuring the numerical consistency of data drawn from different sources, such as business and household surveys, merchandise trade, tax and other administrative data. The SNA double-entry framework also provides a powerful tool for integration, identifying gaps and inconsistencies and harmonizing concepts.

4. The use of the 2008 SNA as the conceptual framework implies that integrated economic statistics are consistent and coherent with other internationally accepted standards and international recommendations like the Balance of Payments Manual, Sixth Edition (BPM6) and other specialized manuals ranging from international classifications, the measurement of industry statistics (e.g. industry, distributive trade, and construction statistics) and prices to the measurement of foreign direct investment. Building upon international standards manuals renders policy-relevant and integrated micro- and macro-data that are consistent and coherent within countries, over time, and across countries.

5. Using the 2008 SNA as the organizing statistical framework allows for statistical reconciliation through the confrontation of source data covering basic statistics from primary and secondary sources, short term and structural statistics, national and international statistics. Using national accounts concepts and methods produces a coherent and consistent description of the economic activity at different levels of aggregation. Through statistical reconciliation, the national accounts provide comprehensive economic information based on accurate, consistent and timely statistics based on a wide variety of data on economic activities collected from economic surveys, administrative sources and private sector data.

6. The national accounts support macroeconomic and sectoral policies including those related to employment, inflation, international trade, and finance by supporting the understanding and forecasting of the determinants of growth and productivity of the economy as it provides a consistent and coherent data set for output, prices, inputs of material and services, energy use and labour and capital as factors of production.

7. In addition to producing consistent and coherent short term and annual statistics for macroeconomic aggregates for the real sector, the national accounts framework also provides macroeconomic aggregates relating to the financial, government, non-financial, and household sectors of the economy, and their relationship with the external sector. Integrated statistics enable the observation of key variables assessing policy change in the structure of the economy, examining its impact on the determinants of growth (labour, capital, energy, materials and natural resources), on specific goods and services producing industries, consumption and accumulation, the effects across regions of the country and on size classes of enterprises and ownership. Integrated economic statistics based on national accounts framework are also useful in financial stability analysis.

8. In the integrated statistical production process national accountants establish partnerships with other key producers of economic and environmental statistics and accounts, introduce common concepts and definitions, and develop arrangements for data exchanges between the statistical offices and other government agencies for producing statistics. Data reconciliation and

integration support the harmonization of economic and related statistics, facilitates the aggregation and comparison among disparate data sets, and promotes the compilation of coherent macroeconomic statistics such as national accounts, balance of payments statistics and environmental-economic accounts.

Institutional arrangements

9. Institutional arrangements encompass the components of: (a) legislative, operational, strategic planning and process management framework, (b) coordination and governance among data producers, users and providers, and (c) human and financial resources. Each component contributes to a system-wide integration for the statistical system.

10. Institutional arrangements are important in the context of integrated economic statistics because in every statistical system some important statistics are produced outside the national statistical agencies by other government departments or quasi-government organizations. The national accounts will use data from numerous sources therefore, improving the coherence of input statistics can contribute significantly to the quality of national accounts. As the use of administrative data increases, the national statistical agency will become more dependent on data from outside sources and arrangements are needed to ensure that administrative data are collected in a way that is consistent with the needs of statisticians and are timely available.

11. The institutional, organizational and legal conditions of the various countries can be different. These various conditions may be reflected in different legislative frameworks and codes of practice. Strategic planning helps to establish in the national statistical system formalized institutional arrangements to address the coherence of economic statistics across the entire national statistical system, delegate responsibility from collection to data exchange, to compilation and dissemination for an efficient process management of the statistical programme. Process management is used as a tool for gradual improvement to the sequence of production processes and focuses on optimizing each process in the production sequence to ensure that the quality of the final product meets the requirement of users for coherent and accurate economic data and better integrated economic accounts.

12. The coordination and governance functions and responsibilities of the lead statistical agency in the country can be carried out more efficiently if this role is supported by institutional arrangements such as advisory committees, relationship meetings, memorandums of understanding, service level agreements and through technical cooperation. These mechanisms of structured communication, coordination and governance arrangements between all suppliers of data and statistics producers at the national level provide cohesion across the statistical system for the production of integrated economic statistics.

13. High-level management support and commitment is a crucial condition for adopting integration as an objective for the statistical system and for setting up a flexible and adaptable programme for integrated economic statistics. As part of building a strong system of management culture of values, norms and shared beliefs to support integration, senior management should focus on labour relations, human resources issues, recruitment of professionals, provision of training to all classes of staff and the development of training material since integration will change the roles and responsibilities of staff involved in the production of economic statistics.

14. Due to their different institutional arrangements countries with centralized and decentralized statistical systems may face different challenges and need to develop different approaches and modalities for statistical integration. While integration can be successfully achieved in countries with both centralized and decentralized systems, certain conditions may help better the implementation of integration. A centralized national statistical service is usually better equipped to plan the integration of economic statistics and apply consistent designs to all statistical inputs as it can more easily adopt and implement uniform standards, definitions, classifications, and set up and maintain the production process framework. On the other hand, countries with decentralized system may find it easier achieving coherence in the compilation stage because they have greater control over those processes. The institution with decentralized system may have stronger, better arranged institutional contacts in place with its data suppliers as it maintains relationships designed to influence, coordinate and harmonize the outputs of the various autonomous departments. In either system, coordination among the institutions is needed to overcome inconsistencies in terminology, definitions and classifications and there is need to detect and to eliminate a lack of coherence between economic data.

Statistical production process

15. The statistical production process includes the use of recommended methods for data collection, processing and dissemination through the components of: (a) standards and methods to adopt common concepts, definitions, classifications and metadata and common methods of data processing and editing and common data quality; (b) business registers and frames; (c) data sources including surveys and use of administrative data; d) integration of statistics and accounts and (e) dissemination and communication including data exchange.

16. In all phases of the integrated statistical production process it is crucial to apply harmonized terminology, uniform concepts, definitions, and classifications for which the System of National Accounts functions as umbrella framework and are based on internationally accepted standards so that the various data collections are comparable and can be related to each other. Inconsistent terminology is a major source of such inaccuracies when databases and publications may contain different definitions for the same concept which cause misinterpretations.

17. Data editing and linkage are integral parts of the statistical production process and related methodological, organizational and legal issues have to be resolved. Data editing is a resource intensive process, but it has a far-reaching impact on data quality as it affects data accuracy, interpretability, relevance and coherence. The coherence of sub-annual and annual statistics has key importance for planners and policymakers and other users of data. Documentation of the editing process and transparency are indispensable to ensure that the resulting data will be widely accepted and understood by users. Qualitative information generated through the data processing phase will assist in identifying flaws and areas of improvement at each stage of the statistical production process including at the level of integration of the component data in national accounts and metadata should be made available for internal and external users to facilitate their interpretation of economic statistics.

18. A comprehensive and up-to-date business register has a central role in achieving integration of economic statistics in terms of providing a central sampling frame for all business surveys and is essential for the full co-ordination of source data that use the same basic information about business units. The central frame, consisting of a business register and, where

applicable, in combination with area frames, represents the backbone of the collection processes of source data that interface with businesses through direct profiling, surveys, feedbacks and use of administrative records. A unified statistical register provides common universe for sampling and consistent classification of businesses to promote consistency on collected data across surveys. As a result, timeliness in producing statistics can be improved and respondent burden reduced.

19. For designing integrated data collections, it is an important objective to achieve consistency with statistics of the different industries and sectors, therefore, standardization of surveys and questions across the questionnaires of different industries contributes to consistency and facilitates the integrated statistical production process. Integration should encompass survey design, sample frame, and questionnaire design. Instead of separate specific purpose surveys, a coordinated modular approach combining annual continuous data collection instruments with infra-annual collections need to be implemented. Consultation with business respondents before survey and questionnaire design and updates is essential.

20. Increased reliance on administrative data requires tools for adapting administrative data for statistical purposes and for integrating administrative source data their concepts need to be matched with statistical standards. Administrative data are used to supplement and reinforce traditional statistical sources for more efficient data collections, verifying already compiled data, and filling gaps of missing data in statistical surveys, to reduce the burden of the respondents and the cost of data collection. Agreements need to be reached for the use of administrative records and various government data files on data sharing and access by the statistical office, and adequate methodology developed to avoid duplication of data collections and for utmost care with a view to the confidentiality of the administrative data sources.

21. Integration of statistics and accounts pertain to the stage in the production process where statistical integration frameworks are applied for reconciliation purposes. Such frameworks include the institutional sector accounts and input-output accounts of System of National Accounts which allow for the confrontation and reconciliation of component data through accounting identities. The integrated set of statistics and accounts that monitor the performance and position of the entire economy bring together various sets of economic statistics and use data from a broad range of sources compiled in an integrated statistical production process to ensure the coherence and consistency of statistical outputs.

22. Dissemination enhances accessibility of statistical information and constitutes an indispensable stage of the integrated statistical production process that involves building, managing and promoting customer relationships with a broad circle of data users and the media. Integrated statistics and accounts, such as national accounts and balance of payments, business, sectoral and price statistics are the final products of the economic statistics system. Data collected within the economic statistics system to produce a wide range of statistics that measure the structure and performance of different parts of the economy, including industries, institutional sectors, transactions and prices are disseminated separately and will often have a unique set of users, for which a tailored communication has to be developed. Integration may facilitate dissemination providing user-friendly presentations of data, explanations of concepts, ensure consistent format across publications, electronic sources and websites.