

International statistical data flows and data collection by UNSD

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This note is a follow-up to an earlier note provided to the third meeting of the IAEG-SDGs, entitled “Development of a global reporting mechanism” and aims to provide information on the background and purpose of existing international data flows, as well as the role of UNSD in those efforts.

Overall organization of the international statistical system

The international statistical systems of which Member States and the United Nations Statistics Division are part, consists of statistical offices of specialized agencies, fund, programmes, United Nations regional commissions and other regional and sub-regional entities, with each entity having its own membership, constituency and specific mandates.

From its beginning, the ultimate purpose of the international statistical system is to support and facilitate the availability of internationally comparable national data in the different statistical domains, to calculate global and regional aggregates, and to make such data available in line with the fundamental principles of official statistics.¹ This requires international agreement on concepts and definitions, and on methods and best practices for data compilation at the national and international levels. The statistical development work needed to reach such agreement is conducted with the participation of national experts from countries, which meet under the auspices of the respective specialized international agency or consortium of specialized, regional, and sub-regional agencies and entities with expertise in their respective statistical domains. As an outcome of this process, new or updated international statistical standards are regularly adopted by countries at the United Nations Statistical Commission and other relevant fora.

Based on the agreement on standards on data compilation national statistical systems submit data to the entities designated for global data collection in specific statistical domains, which allows to assess quality and comparability and to make these data available to users. Regional and sub-regional entities are frequently involved in the international data compilation and in many statistical areas agreements for data sharing among regional and international agencies exist to avoid duplication of data collection. At the national level, national statistical offices (NSOs) often coordinate and facilitate the submission of national data from the national statistical system (NSS) to the international statistical system, in line with the existing institutional arrangements in countries. In some cases, data are reported directly by the relevant parts of the statistical systems (generally various line ministries) to the international system. Besides their data, countries also provide metadata that allow the appropriate interpretation and use of their data.

The international and regional organizations that receive national data are tasked to ensure the quality and comparability of the national data, and usually provide technical assistance to countries for their compilation according to international standards. International and regional

¹ See <http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx>.

agencies may adjust national data to make them internationally comparable or estimate missing data to allow for the calculation of regional or global aggregates. In those cases, quality standards should be followed and countries should be fully involved in the estimation process and informed about the adjustments and calculation methods (see ECOSOC resolution 2006/6). The country data made available by international or regional organizations may also undergo a final review process in cooperation with the national data providers. In this context, it should be noted, that it is a frequent practice that estimates of country data required for the calculation of global and regional aggregates are either not being published at all, or are specifically identified in case those are made available.²

All international agencies produce publications and maintain databases and other dissemination platforms that provide access to their data. Some agencies also disseminate data compiled by other international specialized agencies. For instance, both the Statistical Yearbook issued by UNSD since 1948 and the UNdata portal maintained by UNSD since 2008 contain a broad range of internationally available statistics on economic, social and environmental conditions at the national, regional and world levels.

Compilation and dissemination of SDG data at the global level

The UNSD work programme on development indicators, including previous work on MDGs and now on global SDG Indicators, is oriented to the consolidation and re-dissemination of official data compiled by specialized agencies through internationally-agreed mechanisms. The responsibility for data quality rests with the international agency that provides the data for the respective MDG/SDG indicator to UNSD and with the country that provides the data to the agency. UNSD can only implement a limited set of controls for statistical quality assurance, and normally refers back to the respective agency if any issue arises. The measures taken by UNSD entail, among other things, the review of the available metadata, particularly on the source of the data, in order to verify that the data have been compiled according to internationally agreed concepts and definitions, and that national data are obtained from official sources in line with the objective of national ownership of data, as applicable.

In collecting data for the global SDG indicators, UNSD does not replicate the work of specialized agencies in compiling, adjusting and estimating national data, nor does UNSD calculate regional and global aggregates across the multiple domains covered by global SDG indicators. Moreover, issues that concern discrepancies between national data made available both by countries and by international or regional entities are in general to be first addressed within specialized or regional fora. Such discussions are necessary to improve the international comparability of data, and to document the reasons for any differences. In this context it should be noted that the Chief Statisticians of the UN System agreed to develop a generic quality assurance framework that addresses such aspects of the statistical work and aims to ensure that appropriate quality assurance procedures are being followed.

² Please see available metadata for the SDG indicators, available at <http://unstats.un.org/sdgs/metadata/>. The recent survey conducted by the IAEG-SDGs on statistical data flows provides additional information on existing practices.

UNSD has the responsibility to make available the international country data series on each of the indicators alongside the regional and global aggregates. The data are presented in the SDG Indicator global database, which fulfils the need for full transparency and allow data users, including the Member States³ to easily access all data on SDGs in one single place, together with the respective metadata

Possible future data exchange: national data platforms and the use of SDMX

National statistical offices are developing their own indicator platform for the dissemination of their national SDG data, which is expected to include not only indicators as agreed at the global level, but also additional indicators as developed at the national, regional and sub-regional levels.

The SDMX working group of the IAEG-SDGs has been tasked to develop global Data Structure Definitions and global Metadata Structure Definitions for the SDG indicators. UNSD will implement the SDMX standards for the SDG indicators for its global SDG database. Once countries adopt SDMX for the dissemination of their data on the global indicators, national data and metadata will be easily exchanged, and made available alongside the data and metadata provided for their country by international organizations on the SDG database, as their data formats would match. This will allow producers and users to easily identify and analyse any discrepancies, and to understand the underlying reasons for such differences.⁴ It is expected that the implementation of SDMX will hereby greatly contribute to the improvement of the international comparability of data.

³ In his updates on the process of the development of the indicator framework to Member States at the General Assembly during 2015 the chair of the UN Statistical Commission, John Pullinger, repeatedly stated the need for, and the importance of the establishment of a global database for the global SDG indicators, similar to the database for the MDG indicators. He elaborated that such database, maintained by the Statistics Division in the UN Secretariat, would greatly facilitate the implementation of the global indicator framework including by ensuring the consistency of indicators methodologies across countries and regions and by fostering the necessary statistical capacity building programmes. At the same time, the global data set will facilitate the implementation of the national and regional indicators as the backbone for national and regional SDG reporting, and will allow the global reporting on progress across all goals and targets in an integrated way.

⁴ The UNSD-DFID project "Improving the collation, availability and dissemination of national development indicators, including MDGs" demonstrated the importance of comparing national data and metadata with the "official" MDG indicators, and of analysing and explaining their differences.