Activities related to sustainable development and the 2030 Agenda for Sustainable Development

Note by the Secretariat

Summary

The present paper contains the report prepared by the Task Team on the 2030 Sustainable Development Goal Indicators on the activities related to sustainable development and the 2030 Agenda for Sustainable Development.

At its fifth session, held in New York from 5 to 7 August 2015, the Committee of Experts adopted its decision 5/101, on activities related to sustainable development and the post-2015 development agenda, in which it noted that the explicit mention of earth observation and geospatial information in the finalized text for the 2030 Agenda for Sustainable Development provided a considerable opportunity for Member States since objective, comprehensive and authoritative data and information will be needed in a timely manner to support sustainable development policy and decision-making at all levels. In order to raise the profile of geospatial information as an enabler for sustainable development, the Committee of Experts committed to working closely with the statistical community, at both the national and global levels, by providing inputs into the processes to develop the global indicator framework under the auspices of the Inter-agency and Expert Group on Sustainable Development Goal Indicators. The Committee of Experts supported the nomination of a limited number of Member State geospatial experts to the Inter-Agency and Expert Group and agreed to the proposal to set up a small task team to assist in developing the inputs into the global indicator framework.
The report of the Task Team on 2030 Sustainable Development Goal Indicators describes the formation of the Task Team, delineates its terms of reference and provides an overview of the activities the Task Team has engaged in to advance the understanding and the role of geospatial information and earth observations in contributing to the global indicator framework. It also details the progressive understanding and acceptance of geospatial information as a key integrating enabler for determining ‘geographic location’ within the global indicators for the statistical community. This culminated at the forty-seventh session of the Statistical Commission, held from 8 to 11 March 2016, at which the Inter-Agency and Expert Group noted in its report that the integration of geospatial information and statistical data would be key for the development of a number of the global indicators. As a means to address these issues, a working group on geospatial information, reporting to the Inter-Agency and Expert Group, was established at the third meeting of the Inter-Agency and Expert Group, held in Mexico City from 30 March-1 April 2016.
I. Introduction

1. Since the establishment of the Committee of Experts on Global Geospatial Information Management (UN-GGIM) by the Economic and Social Council (ECOSOC) in July 2011, the Committee has made considerable efforts to enhance the visibility and awareness to policy and decision makers, as well as the diplomatic community, of the critical role geospatial information is able to play in evidence-based decision-making in the context of the emerging sustainable development goals (SDGs) and post-2015 development agenda.

2. As the peak inter-governmental mechanism to foster and encourage a geographic approach to sustainable development, the Committee of Experts has endeavoured to demonstrate that in light of the many environmental, development and humanitarian challenges faced by the world today, geography and location matter, particularly in measuring and monitoring progress towards achievement of the sustainable development goals. Geospatial information is able to provide science and time-based monitoring solutions to address these challenges, driven by data and with the discipline of geography as context. All of the issues impacting sustainable development can be analysed, mapped, discussed and/or modelled within a geographic context. Whether collecting and analysing satellite images or developing geopolitical policy, geography can provide the integrative framework necessary for global collaboration and consensus decision-making.

3. The pursuit of these efforts were realised in September 2015 with the adoption of ‘Transforming our World: The 2030 Agenda for Sustainable Development’ by the United Nations General Assembly. With considerable emphasis on measuring and monitoring with good policy, science, technology and especially data, the 2030 Agenda for Sustainable Development specifically demands the need for new data acquisition and integration approaches, and captures specific references to the need for high quality, timely, reliable and disaggregated data, including earth observation and geospatial information in the area of follow up and review.

4. At its fifth session, held in New York from 5 to 7 August 2015, the Committee of Experts noted that this reference in the finalized text of the 2030 Agenda for Sustainable Development provided a considerable opportunity for Member States to raise the profile of geospatial information as an enabler for sustainable development, particularly with the need for objective, comprehensive and authoritative data and information in a timely manner, to support policy and decision making at all levels. Recognizing that many of the SDGs have a geospatial dimension, the Committee expressed its commitment to work closely with the statistical community, both at national and global levels, by providing inputs into the processes to develop the global indicator framework under the auspices of the Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs). The Committee supported the nomination of a limited number of Member State geospatial experts to the IAEG-SDGs in order to provide expert inputs into the development of the indicator framework. In this connection, Denmark, through the Danish Geodata Agency, was nominated by several Member States to represent the Committee as a geospatial expert to the IAEG-SDGs. Denmark, which accepted the nomination, has been actively engaged in the processes leading to the development of the indicator framework.

5. This report provides information on the efforts carried out by the Secretariat and the Committee to contribute to the new era of data needs to
ensure that geospatial information is incorporated in the implementation of the 2030 Agenda for Sustainable Development. The Committee of Experts is invited to take note of the report and to express its views on the way forward for the international community, under the coordination of the United Nations, to work with all stakeholders to ensure geospatial information is a recognised and enduring capability in the 2030 Agenda for Sustainable Development. Points for discussion and decision by the Committee are set out in paragraph 25 of the present report.

II. Geospatial information and the 2030 Agenda for Sustainable Development

6. In the post-2015 processes and discussions that led to the adoption of the 2030 Agenda for Sustainable Development, many references were made to geospatial information as an evidence base for supporting and tracking progress towards sustainable development. There was an increasing awareness and recognition of the critical role played by geographic information. Finding solutions to tackle the challenges of hunger, poverty, disease, urban development, deforestation, land management, transportation, environment degradation, disaster risk management, to name a few, necessitates appropriate data and information to support decision makers in policy-making for sustainable development. The use of integrated data sources, including location-based information, allow for better decision-making in finding solutions to confronting many of these challenges. These concerns were elaborated in the post-2015 discussions, including the landmark Sendai Framework for Disaster Risk Reduction 2015-2030 that was endorsed by the United Nations General Assembly in June 2015, and which recognized the importance of developing, updating and disseminating location-based disaster risk information, including risk maps, to decision makers by using geospatial technology in understanding risk at global, national and local levels.

7. In adopting the 2030 Agenda for Sustainable Development, Member States committed to a new and universal development agenda for all countries and stakeholders to use as a blueprint for action to guide the way they collectively manage and transform the social, economic and environmental dimensions of humanity and our planet over the next fifteen years. Adhering to the principle to ‘leave no-one behind’ the 2030 Agenda is anchored by 17 aspirational and universal SDGs, 169 actionable targets and a global indicator framework.

8. The 2030 Agenda captures specific references to the need for high quality, timely, reliable and disaggregated data, including earth observation and geospatial information in the area of follow up and review: ‘We will support developing countries, particularly African countries, LDCs, SIDS and LLDCs, in strengthening the capacity of national statistical offices and data systems to ensure access to high quality, timely, reliable and disaggregated data. We will promote transparent and accountable scaling-up of appropriate public-private

cooperation to exploit the contribution to be made by a wide range of data, including earth observation and geospatial information, while ensuring national ownership in supporting and tracking progress’.

9. This data need has a goal, target and date associated with it, as described in Goal 17.18 in the area of data, monitoring and accountability, where there is a need, by 2020, to ‘enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase, significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts.’ In this regard, the adoption of the 2030 Agenda provides the global policy mandate to exploit the contribution to be made by geospatial information to support the SDGs. Further, data, as the basis for evidence-based decision-making and accountability, has been recognised as being critical to the implementation of the 2030 Agenda.

10. In adopting the 2030 Agenda, the General Assembly called for the development and implementation of a global indicator framework for the follow-up and review of progress made in implementing the 17 SDGs and 169 targets. In terms of a robust and annual follow-up and review mechanism, it was anticipated that it would be the global indicator framework where the data acquisition, integration and disaggregation will be needed. The indicators could provide the quantitative means by which national governments can consistently monitor achievement on, and report progress towards, each of the 169 targets. In this regard, in 2015, as instructed by the General Assembly, the United Nations Statistical Commission established the Inter-agency Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs) to develop the global indicator framework.

11. In order for geospatial information to support official statistics in monitoring the SDGs, at its fifth session the Committee of Experts committed to working closely with the statistical community, at both the national and global levels, by providing inputs into the processes to develop the global indicator framework under the auspices of the IAEG-SDGs. The Committee also engaged in strong advocacy efforts to demonstrate the power of linking location information with other socio-economic, environmental and thematic data to support analysis and decision-making.

III. Geospatial information and the Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs)

12. The IAEG-SDGs, established following a decision by the United Nations Statistical Commission at its 46th session in March 2015, was tasked with developing an indicator framework and a list of indicators for the monitoring of the goals and targets of the post-2015 development agenda at the global level, taking into account existing efforts by different groups of countries and organizations, including regional and international agencies, regional commissions, academia, civil society and other relevant international organisations. It was called on to provide a proposal for the global indicator framework for consideration by the Statistical Commission at its 47th session in March 2016. Recognizing the interlinkages across targets and data disaggregation, and the importance of geographic location in the development
of the indicator framework, the Committee of Experts, nominated Denmark to represent UN-GGIM in the deliberations of the IAEG-SDGs, and agreed to establish a small task team of Member States and other relevant geospatial experts to assist Denmark in developing the geospatial data inputs into the global indicator framework, building on existing work and ongoing working mechanisms.

13. The Committee of Experts established the Task Team on the 2030 Sustainable Development Goal Indicators, comprised of members from each of the Committee’s regional UN-GGIM groupings and ably led and chaired by Denmark, to assist the IAEG-SDGs in establishing a coherent framework of indicators and examining how geospatial data could assist in monitoring the SDGs. The Task Team is comprised of high-level experts from national governments (Australia, Belgium, Brazil, Burkina Faso, China, Côte d’Ivoire, Denmark, Egypt, Ethiopia, Mexico, State of Palestine, Togo, and the United States) as well as from Esri and the Global Spatial Data Infrastructure Association (GSDI). More specifically, the work of the Task Team has focussed on identifying specific geospatial inputs to the further definition of the indicators, including methods applied and data sources, as well as identifying tangible results that could be conveyed to the IAEG-SDGs in a practical manner for the purpose of developing metadata for the indicators.

14. As Task Team Chair, Denmark participated in the second meeting of the IAEG-SDGs held in Bangkok, from 26 to 28 October 2015 and provided an invited presentation on the ‘Integration of geospatial information for SDG monitoring’ demonstrating with specific examples how geospatial information and analyses can significantly enhance the effectiveness of the SDG indicators in monitoring and guiding sustainable development from global to local scales.

15. An important result of the second meeting of the IAEG-SDGs was the broad consensus reached on the majority of the proposed indicators, and on the steps ahead for the finalization of the proposal. The proposal on the global indicator framework for the goals and targets of the 2030 Agenda for Sustainable Development was presented to, and subsequently endorsed by, the Statistical Commission, at its 47th session held from 8 to 11 March 2016. In its report to the 47th Session of the Statistical Commission, the IAEG-SDGs recognized that the integration of geospatial information and statistical data will be key for the production of a number of indicators.

16. The global indicator framework, consisting of 230 indicators as a practical starting point, was agreed by the Statistical Commission at its 47th session. The global indicator framework will be the primary conduit to guide and inform Member States, based on individual national circumstances, on how they measure, monitor and report on the SDGs and related targets in the years to come. Recognizing that the development of a robust and high-quality indicator framework is a technical process that will need to continue over time, including by making use of expertise in other related expert processes, the Statistical Commission requested the IAEG-SDGs to provide its proposals and a plan for reviews of the indicator framework to the Statistical Commission at its 48th session.

17. As a means to leverage expertise in related processes, and in order to address a number of substantive technical issues, at its third meeting held in Mexico City, Mexico, from 30 March to 1 April 2016, the IAEG-SDGs outlined its work plan and next steps for: 1) finalizing the tier system for the global

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indicators; 2) establishing a number of working groups under the auspices of the IAEG-SDGs (Statistical Data and Metadata eXchange (SDMX), Data Disaggregation, Geospatial Information, and Interlinkages); and 3) establishing procedures for the refinement of the indicators and review of the indicator framework.

18. Acknowledging that, at its 47th session in March 2016, the IAEG-SDGs noted that the integration of geospatial information and statistical data will be key for the production of a number of the indicators, the newly established Working Group on Geospatial Information is seen as the means to address these issues by providing expertise and advice to the IAEG-SDGs and the larger statistical community as to how geospatial information, Earth observations and other new data sources can reliably and consistently contribute to the global indicators. While the Terms of Reference for the Working Group on Geospatial Information have been finalized and agreed by the IAEG-SDGs, the composition and modalities of the Working Group are presently being decided, with the aim to initiate the first meeting of the Working Group during this sixth session of the Committee of Experts.

IV. Statistical-Geospatial Integration Forum

19. On the margins of the 47th session of the Statistical Commission, the Committee of Experts and the Group on Earth Observations (GEO) organized a Statistical-Geospatial Integration Forum on ‘Geospatial Information and Earth Observations: Supporting Official Statistics in Monitoring the SDGs’ on 7 March 2016. Recognizing the importance of ‘geographic location’ in a new era of data needs, many national statistical offices now understand that geospatial information, Earth observations and other Big Data are able to provide new and consistent data sources and methodologies to integrate multiple ‘location-based’ variables to support and inform official statistics and the sustainable development goal indicators.

20. In his opening remarks, Ambassador Ib Petersen of Denmark, emphasized that “geographic information systems, together with interdisciplinary and holistic approaches to analysing location-based social, economic and environmental data, can reveal a deeper understanding of how specific communities can embark on sustainable development trajectories.” He also stressed the importance of capacity building to ensure that all countries and regions could make use of the new data provided by geospatial information systems and Big Data. During the Forum, a series of presentations were made by Denmark, Australia, Mexico, South Africa, USA, the Philippines, GEO, and the World Health Organisation (WHO). These presentations provided valuable input as to how geospatial data could support and enhance the statistical system to better monitor the state of the Earth. With the aim of showing a practical approach to the challenge of integrating geospatial into the SDG monitoring process, the Task Team Chair presented a draft template for consideration and subsequent use in the further indicator development process.

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21. The Forum was attended by approximately 230 participants from the global statistical community. A major outcome of the Forum was the agreement that geospatial information and Earth observations are able to contribute to the SDGs, either as a direct indicator; as geospatial inputs to support statistical data; to enrich and validate national statistical data inputs; to communicate and visualize the geographic dimensions and context of the indicators where appropriate; and to provide granularity and disaggregation of the indicators where appropriate.

V. Future directions

22. Looking ahead, the Statistical-Geospatial Integration Forum proposed steps for the provision of potential geospatial data inputs as metadata components for the global indicator framework. The geospatial and Earth observation communities from Member States and related organizations, facilitated by the Committee of Experts and GEO inter-governmental processes, will develop and populate a template that geospatial experts would work through for each of the agreed and relevant indicators. In the short term, emphasis would be placed on providing a tangible means to look at and review alternative data sources to provide geospatial inputs into the metadata for the agreed global indicators; and to seek the support of the IAEG-SDGs in the process of defining the metadata for the indicators, by providing detailed suggestions for the use of geospatial and Earth observations data and methods.

23. It is anticipated that the establishment of the Working Group on Geospatial Information under the auspices of the IAEG-SDGs will be the main platform going forward for contribution by the Committee of Experts. With agreement reached on the global indicator framework, the Task Team, whose objective was developing the geospatial data inputs into the global indicator framework, has fulfilled its aims and objectives and will be disbanded. The Committee of Experts will therefore focus its efforts towards the Working Group on Geospatial Information. As envisioned in its Terms of Reference (see Annex 1), the Working Group will build on existing work and ongoing working mechanisms among stakeholders, and will consult regarding the current status of methodologies and geospatial data collection and input tools as a starting point. The Working Group intends to develop an initial indicator analysis of the geospatial inputs and metadata needs to be presented to the IAEG-SDGs for consideration.

24. As a European contribution to the global process on developing a framework for monitoring indicators, UN-GGIM: Europe will, through a newly established Working Group on Data Integration, ensure a two-way interaction with the IAEG-SDG Working Group on Geospatial Information. On the one hand the Working Group on Data Integration will ensure that the Working Group on Geospatial Information has access to existing work and ongoing working mechanisms in Europe related to monitoring indicators. On the other hand, the Working Group on Data Integration will develop geospatial methodologies and approaches for monitoring, based on the specifications on indicators from the IAEG-SDGs and its Working Group on Geospatial Information, making them available to the European authorities responsible for monitoring the SDG’s.
VI. Points for discussion

25. The Committee is invited to:

(a) Take note of the report by the Task Team on the 2030 Sustainable Development Goal Indicators and express its view on the work of the Task Team and proposal for it to be disbanded, having fulfilled its aims and objectives;

(b) Express its view on the way forward in focussing its activities related to sustainable development and the 2030 Agenda for Sustainable Development through the efforts of the IAEG-SDGs Working Group on Geospatial Information;

(c) Consider encouraging the regional committees of UN-GGIM to create working groups, similar to the European Working Group on Data Integration, to promote the regional cooperation between the geospatial and statistical communities, and better integration of processes for monitoring the global indicators;

(d) Continue efforts to demonstrate the power of geospatial information and Earth observation data for defining the ways in which these information systems can contribute to monitoring the SDGs and indicators; and for members of the IAEG-SDGs Working Group on Geospatial Information to report progress and achievements to the Committee at its next session.
ANNEX 1:

Inter-Agency and Expert Group on the Sustainable Development Goal Indicators

WORKING GROUP ON GEOSPATIAL INFORMATION

Terms of Reference – 15 April 2016

I. Background

In September 2015, Member States adopted the 2030 Agenda for Sustainable Development and tasked the United Nations Statistical Commission, as a functional commission of ECOSOC, to develop the global indicator framework. The overarching principle of the 2030 Agenda for Sustainable Development is that no one should be left behind. “Data which is high-quality, accessible, timely, reliable and disaggregated by income, sex, age, race, ethnicity, migration status, disability and geographic location and other characteristics relevant in national contexts” is called for (A/RES/70/1). To support implementation at all levels, the 2030 Agenda included the need to exploit the contribution to be made by a wide range of data, including Earth observations and geospatial information.

In March 2015 at its forty-sixth session, the United Nations Statistical Commission created an Inter-agency and Expert Group on Sustainable Development Goal Indicators (IAEG-SDGs), which is composed of representatives from a regionally-balanced group of Member States and includes regional and international agencies as well as other key stakeholders, such as civil society, academia and the private sector, as observers. The IAEG-SDGs was tasked with providing a proposal for a global indicator framework (and associated global and universal indicators) for the follow up and review of the 2030 Agenda to be considered by the Statistical Commission at its forty-seventh session in March 2016. At the forty-seventh session of the Commission, the Global indicator framework was agreed upon by Member States.

Although the development of the Global indicator framework has primarily been based on a statistical data input-output approach, the need for ‘geographic location’ in a new era of data needs is well recognized. Many national statistical offices now understand that geospatial information, Earth observations and other Big Data are able to provide new and consistent data sources and methodologies to integrate multiple ‘location-based’ variables to support and inform official statistics and the indicators for the SDGs. Geography and location provides an important link to enable a richer picture of our countries, and what is happening in and across them. It enables data from diverse sources to be brought together to unleash their combined power in analysis and decision making.

To meet the ambitions and demands of the 2030 Agenda, it is necessary for the Global indicator framework to adequately and systematically address the issues of alternative data sources and methodologies, including geospatial information and Earth observations in the context of geographic location. Thus, at its forty-seventh session in March 2016, the IAEG-SDGs noted that the integration of geospatial information and statistical data will be key for the production of a number of the indicators. As a means to address these issues the creation of a Working Group on Geospatial Information, reporting to the IAEG-SDGs, is required.
II. Objectives and Tasks

The primary objective of the Working Group is to ensure, from a statistical and geographic location perspective, that the key principle of the 2030 Agenda to leave no one behind is reflected in the Global indicator framework. Tasks will include to:

1. Provide expertise and advice to the IAEG-SDGs and the larger statistical community as to how geospatial information, Earth observations and other new data sources can reliably and consistently contribute to the indicators.

2. Review options and provide guidance to the IAEG-SDGs, as to the role of NSOs in considering geospatial information and earth observations, as well as other Big Data, as a means to contribute to and validate datasets as part of official statistics for SDG indicators.

3. Review the agreed indicators and metadata through a ‘geographic location’ lens and identify existing geospatial data gaps, methodological and measurements issues.

4. Consider how geospatial information can contribute to the indicators and metadata: 1) as a direct indicator in itself; 2) to support and augment statistical data; 3) to improve the production process of statistical data; 4) to validate national statistical data inputs; 5) to communicate and visualize the geographic dimensions and context of the indicators where appropriate; and 6) to provide granularity and disaggregation of the indicators where appropriate.

5. Provide national and regional level experiences and best practices in geospatial data production to measure leaving no one behind.

6. Propose strategies for undertaking methodological work on specific areas for improving disaggregation by geographic location concepts for national and sub-national reporting, including to the HLG and to the Statistical Commission.

It is envisioned that the Working Group will build on existing work and ongoing working mechanisms among stakeholders, and will consult widely regarding the current status of methodologies and geospatial data collection and input tools as a starting point.

An initial indicator analysis of geospatial inputs and metadata needs will be developed in the coming months and presented to the IAEG-SDGs for consideration. The analysis will include both areas for which geospatial and Earth observations data and methodologies exist, and those that need further development. The Working Group will identify what exists and where further work needs to be focused.

III. Governance

The Working Group on Geospatial Information will work under the auspices of the IAEG-SDGs and will report regularly to the group. The IAEG-SDGs will review the work of the Working Group and may revise these terms of reference based on the work this group has completed and any new items that the IAEG-SDGs would like the group to consider.

IV. Membership

The Working Group will be chaired (or co-chaired) by a member(s) of the IAEG-SDGs and consist of IAEG/HLG members and international organizations who have considerable experience in the
work of the group. To ensure broad expertise and effectiveness, experts from the wider geospatial and earth observations communities should be drawn into the group, namely from the UN Committee of Experts on Global Geospatial Information Management (UN-GGIM), the Global Working Group on Big Data for Official Statistics, the Expert Group on the Integration of Statistical and Geospatial Information (EG-ISGI), and the Group on Earth Observations (GEO). A number of countries not presently members of the IAEG-SDGs or the HLG can be invited to join the group as appropriate, noting that Working Group members should have technical expertise and practical experience in applying geospatial methodologies and tools within a monitoring context.

The United Nations Statistics Division will be the secretariat of the Working Group.

V. Organization of Work

The Working Group will work through electronic exchanges and periodic meetings. Where feasible, the meetings will be conducted in conjunction with the annual meetings of the IAEG-SDGs. Other meetings will be convened on the basis of need and with specific tasks to be accomplished.

The Working Group will benefit from other expert group meetings held by the United Nations Statistics Division in collaboration with partners.

The Working Group will conduct its work in an open, inclusive and transparent manner, and will invite experts, as appropriate, from academic, civil society, and the private sector to contribute their expertise and experiences on geospatial information and related data methods.

VI. Expected duration

The Working Group will identify its main milestones and conduct its activities starting April 2016 and until completion of its tasks. Regular review of the work of the Group will be undertaken by the IAEG-SDGs and the HLG. The Working Group will provide a time frame for their completion.

VII. Proposed activities

The Working Group will decide on its detailed work plan and organization of work, its communication and coordination with other groups and countries, and its methods of work, also taking advantage of the preparatory efforts and progress made by UN-GGIM, EG-ISGI, GEO, the GWG on Big Data and other various related groups, in the development of geospatial information and Earth observations data inputs into the Global indicator framework.

The Working Group may consider preparing papers, including status reports of their work, to the Statistical Commission and UN-GGIM.