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Activities related to sustainable development and the post-2015 development agenda

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Note by the Secretariat

Summary

The present paper contains the report of the Secretariat on activities related to sustainable development and the post-2015 development agenda.

At its third session, held in July 2013, the Committee of Experts expressed its appreciation for the active efforts of the Secretariat to reach out to decision makers on the importance of the use of reliable geospatial information for sustainable development, and to encourage national geospatial information authorities to actively contribute to sustainable development discussions and activities. Acknowledging that efforts to raise awareness of the role of geospatial information must continue, the Committee, by decision 3/111, requested the Secretariat to continue to keep it informed about the efforts and initiatives of the United Nations system related to sustainable development. The report provides updated information on activities carried out in the context of using reliable geospatial information for risk assessment and disaster risk reduction instruments, and on major activities related to the post-2015 development agenda, including the sustainable development goals currently being established by the United Nations.

* E/C.20/2014/1

I. Introduction

1. Geospatial information services and platforms, including those which are space derived, have become critical technologies to support national development, economic growth, improved decision-making and enhanced policy formulation, and to contribute to addressing global challenges, such as the monitoring of goals and targets relating to sustainable development. In recognition of the growing importance of geospatial information globally, in July 2011 the Economic and Social Council (ECOSOC) established the Committee of Experts on Global Geospatial Information Management as the leading intergovernmental mechanism for making joint decisions and setting directions with regard to the production and use of geospatial information within national, regional and global policy frameworks. The Committee of Experts addresses global challenges regarding the use of geospatial information in the development agenda and serves as a guide for global policymaking in the field of geospatial information management. In this regard, the Committee of Experts has the mandate and responsibility to foster a geographical approach to identify, measure and monitor the goals of the post-2015 development agenda.

2. At its second session, held in New York in August 2012, the Committee of Experts welcomed the outcomes of the United Nations Conference on Sustainable Development (Rio+20) and the recognition by the Conference of the role of "reliable geospatial information" in sustainable development, particularly in the areas of national disaster risk reduction strategies and plans (including comprehensive hazard and risk assessments), and for sustainable development, policymaking, programming and project operations. The Committee requested the Secretariat to reach out to all entities involved in sustainable development and the monitoring of the outcomes of Rio+20, to explain the role of UN-GGIM and the efforts it is undertaking. The Committee also called on the national geospatial information authorities to: (i) actively contribute to sustainable development discussion and activities, and provide coordination related to geospatial information, in the national context; (ii) continue to improve tools and processes; and (iii) provide mechanisms and processes aimed towards capacity development related to geospatial information in a sustainable context (decision 2/102, E/2012/46).

3. At its third session, held in July 2013, the Committee of Experts expressed its appreciation for the active efforts of the Secretariat to reach out to decision makers on the importance of the use of reliable geospatial information for sustainable development, and to encourage national geospatial information authorities to actively contribute to sustainable development discussions and activities. Acknowledging that efforts to raise awareness of the role of geospatial information must continue, the Committee requested the Secretariat to continue to keep it informed about the efforts and initiatives of the United Nations system related to sustainable development.

4. Recognizing the substantial contribution that geospatial information is able to make to measuring and monitoring sustainable development targets and indicators, the Secretariat has made a concerted and targeted effort to reach out to as many events and initiatives of the United Nations system related to sustainable development as possible. This report describes those efforts and complements and provides additional information to the report of the Global Map for Sustainable Development Working Group (E./C.20/2014/6/Add.1 of this session) for the Committee's consideration. This includes the need for a clear understanding of the needs and requirements of the sustainable development user community, and

collaborating with the UN Open Working Group on Sustainable Development Goals (Decision 3/103 of the third session).

5. This report provides, in chronological order, updated information on efforts carried out by the Secretariat in the context of using reliable geospatial information for risk assessment and disaster risk reduction instruments, and on major activities related to the post-2015 development agenda, including the sustainable development goals currently being established by the United Nations. The Committee is requested to take note of the report and express its views on the way forward in addressing the activities related to sustainable development and the post-2015 development agenda. Points for discussion and decision are provided in paragraph 39.

II. Pacific Small Island Developing States Symposium

6. The Pacific Small Island Developing States (SIDS) Symposium, with the theme 'Policies and Practices for Responsible Governance' was held in Suva, Fiji, from 18-20 September 2013. Attended by almost 100 delegates from the South Pacific Islands, the event was organized in partnership by the International Federation of Surveyors (FIG), the regional committee of United Nations Global Geospatial Information Management for Asia and the Pacific (UN-GGIM-AP), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Human Settlements Programme (UN-Habitat) Global Land Tool Network (GLTN), the Fiji Ministry of Lands and Mineral Resources, and the Fiji Institute of Surveyors.

7. The two-day symposium comprised two plenaries, four technical sessions, four workshops, and two open forums, one of which included an open forum on UN-GGIM facilitated by the UN-GGIM Secretariat and UN-GGIM-AP. The discussion focused on the forthcoming Third International Conference on Small Island Developing States which will be held from 1 to 4 September 2014 in Apia, Samoa. It was recognized that the SIDS, due to their unique geography, economy, and population base, remain a special case, and that the vulnerabilities of SIDS will continue to grow unless urgent steps are taken to address common environmental, social and economic challenges. The large range of impacts from climate change and potentially more frequent and intense natural disasters continue to constitute unprecedented threats for SIDS. In this regard, the importance of good land governance, especially in relation to climate change and natural disasters; access to land, coastal and marine resources; and secure land tenure and administration, were recognized.

8. The Suva Statement on Spatially Responsible Governance (see full Statement at Annex I) contained key statements that, *inter alia*: recognized that UN-GGIM provides an inter-governmental consultative mechanism on place, locality and geography and plays a leading role in setting the agenda for the development of global geospatial information, infrastructure and its management; recognized that all activities have a geographical and temporal context, and where communities and governments make decisions and organize their affairs through the effective and efficient use of geospatial data, information and services; agreed that information on geography, custodianship and ownership is foundational for informed decision-making, resilience and sustainability. It is therefore essential that such foundational data and information has authority, currency and is comprehensive, freely available, accessible and usable; confirmed the importance of and the need for strengthening and modernizing the geodetic reference framework, and

national spatial information infrastructure for the sharing and delivery of reliable geospatial information towards improved geospatial information management for social, environmental and economic developments.

III. Chengdu Forum on UN-GGIM

9. The Chengdu Forum on UN-GGIM, with the theme "Development and Applications in Urban Hazard Mapping" was convened by the Secretariat and the National Administration of Surveying, Mapping and Geoinformation (NASG) of China in Chengdu, China, from 15-17 October 2013. It's concept was derived from the Rio+20 outcome document entitled "The future we want" which urged Governments and organizations to commit to disaster risk reduction in order to enhance the resilience of cities and communities to disasters, according to their own circumstances and capacities (Para 187). The regional importance of the topic and need was emphasised by the Asian Development Bank in its August 2012 report on Key Indicators for Asia and Pacific. The report noted that "Asia is home to almost half of the global urban population and is urbanizing at a pace faster than any other region, resulting in an unprecedented growth in urban residents and increased number of densely populated megacities". It stresses the need to turn booming Asian cities into environmentally sustainable and inclusive growth centers. It points out in particular the growing vulnerability to natural disasters, and the need for information and appropriate mitigation strategies.

10. The aim of the Chengdu Forum was to discuss and demonstrate the importance of the provision of consistent, accurate and reliable geospatial information, which is able to be integrated and disseminated on appropriate platforms, to support urban hazard and disaster mapping. More than 180 experts from 40 countries met to share experiences and methodologies in the production, management, analysis, modeling and dissemination capacity of hazard related geospatial information. Importantly, and for the first time, a large number of disaster managers and emergency management experts attended and presented their 'real world' perspectives and use of geospatial information. All noted that many decision makers and disaster managers still do not understand the value and role of geospatial information, and that there is a need to strengthen the relationships between the National Disaster Management Agencies and the National Geospatial Information Authorities, so that this understanding is increased.

11. The conclusions of the Chengdu Forum are provided in full at Annex II, with additional commentary provided in the report of the Global Map for Sustainable Development Working Group (E./C.20/2014/6/Add.1 of this session).

IV. Open Working Group on Sustainable Development Goals

12. One of the main outcomes of the United Nations Conference on Sustainable Development (Rio+20), held in Rio de Janeiro in June 2012, was the agreement by Member States to launch a process to develop a set of sustainable development goals (SDGs). Rio+20 did not elaborate specific goals but stated that the SDGs should be limited in number, aspirational and easy to communicate. The goals should address, in a balanced way, all three dimensions of sustainable development and be coherent with and integrated into the UN development agenda beyond 2015. A 30-member Open Working Group (OWG) on Sustainable Development Goals of the General Assembly was established in January 2013 and is tasked with preparing a proposal on

the SDGs for consideration by the Assembly during its 68th session in September 2014. The Member States have decided to use an innovative, constituency-based system of representation that is new to limited membership bodies of the General Assembly. This means that most of the seats in the Open Working Group are shared by several countries on a rotational basis.

13. As described in more detail in the report of the Global Map for Sustainable Development Working Group (E./C.20/2014/6/Add.1 of this session), during the seventh session of the Open Working Group the Secretariat of UN-GGIM convened a side event on 'The Role of Geospatial Information in Measuring and Monitoring the Sustainable Development Goals: Disaster risk reduction, sustainable development, and global urbanization'. The aim of the side event was to introduce Open Working Group members to the importance of reliable geospatial information and its role in measuring and monitoring the SDGs, particularly with regard to geography, and to allow time for an interactive dialogue. The side event included presentations from Member States that clearly demonstrate the critical role that geospatial information is able to play in measuring and monitoring the post-2015 development agenda with a particular focus on disaster risk reduction, sustainable development, and urbanization.

14. The two key messages delivered to participants were: geospatial information services and platforms have become key contributors to improved decision making and policy formulation, and have enhanced the capability for governments, international organizations and researchers to analyze, monitor and report on sustainable development and other global concerns; and the Sustainable Development Goals will depend on human and physical geography data and geospatial information to measure and monitor change and progress. There will be a need to create a network of global data and information that is supported by the tools and technology to create maps and detect and monitor change over time in a consistent and standardized manner.

15. At the conclusion of its 12th session (16-20 June 2014), the Open Working Group shared a carefully refined version of the Zero Draft on Sustainable Development for the post-2015 Development Agenda.[1] The Zero Draft calls for holistic and integrated approaches to sustainable development, and outlines 17 proposed SDGs, accompanied by action orientated targets, to be attained by 2030. Goal 17: 'Strengthen the means of implementation and the global partnership for sustainable development', under the sub-item 'Data, monitoring and accountability' contains the following paragraph: "by 2020, increase significantly the availability of high-quality and timely data disaggregated by income, gender, age, race, ethnicity, disability, geographic location and other characteristics relevant in national contexts, with capacity building support to developing countries, especially least developed countries (LDCs)". This is the first reference to geography in the SDG process. It will be important for Member States to ensure that this wording not only remains in the document, but is expanded upon. The Secretariat will continue to monitor progress of the Zero Draft and Open Working Group process as it enters its final phase of work.

[1] http://sustainabledevelopment.un.org/content/documents/4044zerodraft.pdf

V. World Bank Land and Poverty Conference

16. In 2014, the theme of the Annual World Bank Land and Poverty Conference was "Integrating Land Governance into the Post-2015 Agenda: Harnessing Synergies for Implementation and Monitoring Impact". Convened in Washington DC from 24-27 March 2014, and focusing on building a shared understanding of best practices in land governance, a co-chair of the Committee of Experts was invited to prepare and deliver a paper on the "United Nations Committee of Experts on Global Geospatial Information Management: Its Role in Land Governance". The paper argued and demonstrated that poverty can be alleviated by appropriate land governance and secure land tenure. However, this relies on a suitable land administration system to record and manage land rights, ownership and use. For land administration to be truly successful it must be underpinned by an authoritative geospatial framework which is regularly maintained, provided to a high level of specified accuracy, and from a trusted source. This requires not just the availability of data, but high level support and robust legal, policy and technical frameworks to be in place together with the development and training of those with the skills to create, use and understand geospatial information. The paper described how UN-GGIM provides a mechanism to bring together all countries at a high level to raise these issues up through national agendas. In addition it emphasized that UN-GGIM provides a forum where, regardless of their current capacity in geospatial information, Member States can work together to share best practices, work towards the development of global frameworks and standards, and address some of the challenges that exist in this important area.

VI. Coordination of space-related activities

17. In April 2014, the UN-GGIM Secretariat was invited by the United Nations Office for Outer Space Affairs to provide relevant inputs into the Secretary General's Report on "Coordination of space-related activities within the United Nations system: directions and anticipated results for the period 2014-2015 – addressing the post-2015 development agenda" (final report A/AC.105/1063). Under the umbrella of the use of space-derived information in addressing the post-2015 development agenda, and in the case of space-derived information and general coordination efforts on space activities, the Secretariat provided the following paragraphs (18-21) for inclusion:

18. Geospatial information services and platforms, including those which are space derived, have become critical technologies to supporting national development, economic growth, improved decision-making and enhanced policy formulation, and to contributing to addressing global challenges, such as the monitoring of goals and targets relating to sustainable development. In recognition of the growing importance of geospatial information globally, in July 2011 the Economic and Social Council established the Committee of Experts on Global Geospatial Information Management as the leading intergovernmental mechanism for making joint decisions and setting directions with regard to the production and use of geospatial information within national and global policy frameworks.

19. The Secretariat of the Committee of Experts is shared by the Statistics Division of the Department of Economic and Social Affairs and the Cartographic Section of the Department of Field Support. Represented by the heads of national geospatial information agencies in member States, international and non-governmental organizations, the private sector and other stakeholders, the Committee addresses global challenges regarding the

use of geospatial information in the development agenda and serves as a guide for global policymaking in the field of geospatial information. In this regard, the Committee has the mandate and responsibility to foster a geographical approach to the goals of the post-2015 development agenda, and has been active in this area.

20. The work programme of the Committee of Experts includes the development of a global map for sustainable development. At its second session, held in August 2012, the Committee noted the importance of reliable geospatial information for national disaster risk reduction strategies and plans and for sustainable development, policymaking, programming and project operations, as set out in the outcome document of the United Nations Conference on Sustainable Development. In recognizing the need to provide the information base to inform the sustainable development agenda, a working group was established to consider how reliable geospatial information could contribute more holistically to measuring and monitoring change and progress. At its third session, held in July 2013, the Committee also recognized that there would be a need to create a network of global data and information supported by the tools and technology to create maps and detect and monitor change over time in a consistent and standardized manner, and that the sustainable development user community should be more engaged.

21. A side event convened by the Committee of Experts during the seventh meeting of the Open Working Group on Sustainable Development Goals demonstrated the role of geospatial information in measuring and monitoring goals relating to sustainable development. In addition, the Third High Level Forum on Global Geospatial Information Management, on the theme of the contribution of geospatial information to the post-2015 development agenda, will be convened from 22 to 24 October 2014 in Beijing. The Forum will pay particular attention to the critical role of geospatial information science, technology and innovation as tools that can integrate the three pillars (social, economic and environmental) of sustainable development and as important geographic elements of the post-2015 development agenda.

22. The UN-GGIM Secretariat attended the 34th session of the United Nations Inter-Agency Meeting on Outer Space Activities (UN-Space) in New York 13-14 May 2014. Convened by the United Nations Office for Outer Space Affairs, the session was organized in conjunction with the 14th meeting of the United Nations Geographical Information Working Group (UNGIWG), held on 14-16 May 2014. The UNGIWG meeting and related outcomes are detailed in the report of UNGIWG (E./C.20/2014/12/Add.1 of this session). In both the session and meeting, the participants of the United Nations entities recognized the importance of continued coordination and collaboration with UN-GGIM.

VII. ECOSOC Integration Segment: Sustainable Urbanization

23. The Outcome Document of the Rio+20 Conference gave ECOSOC the mandate to play a key role in the integration of the three pillars of sustainable development; that is, economic, social and environmental. This key role of the Council was also recognized in the establishment of the High-Level Political Forum (HLPF) on Sustainable Development. To promote the integration of the three dimensions of sustainable development both within the United Nations system and beyond, the General Assembly decided that

an Integration Segment will be held annually. The main functions of the segment are to: consolidate all the inputs of Member States, the subsidiary bodies of the Council, the United Nations system and other relevant stakeholders; promote the balanced integration of the three dimensions of sustainable development; bring together the key messages from the Council system on the main theme of ECOSOC; and develop action-oriented recommendations for follow-up.

24. The 2014 Integration Segment of ECOSOC, with the theme “Sustainable Urbanization” was convened at UN Headquarters in New York from 27-29 May 2014. Given the multiple dimensions of urbanization, such as demographic, governance, economic, social, and environmental and the related challenges, sustainable urbanization can only be achieved by addressing and incorporating all the economic, social and environmental dimensions of sustainable development and their inter-linkages.

25. Organized by the UN Department of Economic and Social Affairs (DESA) in collaboration with UN-Habitat, the Integration Segment was brought together to establish a common understanding on the role of urbanization in sustainable development. In this context, each of the ECOSOC functional commissions and other subsidiary bodies, of which UN-GGIM is one, were invited to provide a two page input that capture "action-orientated recommendations on how urbanization can be used as a tool for the integration of the three dimensions of sustainable development". As time was very short, the UN-GGIM Secretariat prepared and provided the input on behalf of the Committee of Experts. This contribution was included in the documentation of the Integrated Segment[2] as an input from the United Nations system, and is presented fully in Annex III to this report.

VIII. Prototype Global Sustainable Development Report

26. Created at the Rio+20 Conference, the High-level Political Forum on Sustainable Development (HLPF) is the main United Nations platform dealing with sustainable development. It provides political leadership and guidance; follows up and review progress in implementing sustainable development commitments and addresses new and emerging sustainable development challenges; and enhances the integration of economic, social and environmental dimensions of sustainable development.

27. The Outcome Document of the Rio+20 Conference called for a Global Sustainable Development Report, in order to bring together dispersed information and existing assessments and to strengthen the science-policy interface at the High-level Political Forum. The 2012 Secretary General’s High-level Panel on Global Sustainability had a similar proposal. Following Rio+20, the UN Secretary-General tasked the Division for Sustainable Development of the Department of Economic and Social Affairs (DESA) to undertake “in-depth analysis and evaluation of trends and scientific analysis in the implementation of sustainable development, including lessons learned, best practices and new challenges, and cross-sectoral analysis of sustainable development issues”.

28. It was decided to produce a “prototype” report that could illustrate a range of potential content, alternative approaches and various ways of participation. The Prototype Global Sustainable Development Report[3] was

[2] http://www.un.org/en/ecosoc/integration/2014/documentation.shtml.
[3] http://sustainabledevelopment.un.org/index.php?menu=1621

released on 1 July 2014 and, as a first step of a dialogue, is now open for inputs and suggestions. It is intended to be useful in supporting Member States' deliberations on the scope and methodology of future editions of the Global Sustainable Development Report. The report should ideally inform the agenda and deliberations of the HLPF, the General Assembly and ECOSOC on sustainable development.

29. The prototype report is a UN system effort with participation of social and natural scientists and seeks to facilitate dialogue between scientists and decision-makers. It focuses on global sustainable development in terms of issues, impacts, institutions and technology. It maps sustainable development assessments and related processes and highlights emerging issues identified by scientists; assesses sustainable development progress; tells the "stories" of future pathways toward sustainable development based on the literature and discusses investment and technology needs; assesses various approaches to measuring sustainable development progress; identifies lessons learnt from national, regional and global case studies of the climate-land-energy-water-development nexus; presents illustrative science digests for decision-makers; and suggests a number of issues for consideration.

30. Chapter 5: Measuring progress, Section 5.3: Monitoring development from space and beyond: filling data gaps in the poorest countries with "big data" approaches, contains eight pages (pages 74-82) dedicated to discussing how remote sensing and other "big data" approaches have great potential for assessing long-term sustainable development progress and able to complement and improve official statistics. It is suggested that these would enable estimation of a proposed aggregate sustainable development index at various spatial and temporal scales.

31. In the context of this report and its objectives, these approaches have been identified as being important contributions to the sustainable development process. In this regard, an opportunity exists for the Committee of Experts to further enhance these contributions and emphasise the critical role and importance of geospatial information to support sustainable development. The Committee could suggest that remote sensed data is only part of the equation and solution, and is not the end in itself. Remote sensed (and other imagery) data is primarily an input to the decision-making process, and must be combined with other "location" information to provide value-added information and knowledge for evidence-based decision-making. Further, remote sensed data cannot inform statistics alone, or vice versa, without geospatial information providing the connecting bridge between the two.

32. For example, remote sensed data does not in itself measure climate change. Consider critical areas such as polar ice melts, areas of sea level rise, or inundation in Small Island Developing States. Remote sensed data provides valuable indicators and inputs as to what is happening, but needs to be underpinned by other important contextual and analytical data (often national data) such as coastlines, drainage networks, bathymetry, elevation, transport, infrastructure, land cover and other environmental data. Only then can one determine impact and mitigation, and therefore measures of monitoring. Further, a satellite image may identify flood areas, but not flood risk. In order to determine flood risk, much more comprehensive data is needed. Information about hazards (such as historical floods in this case), exposure (people, buildings, infrastructure, population, commercial activity,

etc.) and the associated vulnerability. This is all built from fundamental geospatial data.

33. The Prototype Global Sustainable Development Report represents the first step in an important cross-sectoral dialogue on sustainable development issues. Therefore, the Committee of Experts, with assistance from the UN-GGIM Secretariat, may wish to consider providing inputs to the Division for Sustainable Development as this report evolves. Member States are encouraged to consider contributing to this process, either individually or with the Secretariat, as a means to raise the awareness of geospatial information and increase interactions with the global sustainable development community.

VIX. Third High Level Forum on GGIM

34. Hosted by the National Administration of Surveying, Mapping and Geoinformation (NASG) of China, the Third High Level Forum on Global Geospatial Information Management (GGIM) will be convened in Beijing, China from 22-24 October 2014. The High Level Forum is being staged in pursuance of the mandate from ECOSOC to convene global forums to promote comprehensive dialogue on global geospatial information management with all relevant governments, non-governmental organizations and the private sector.

35. In 2014, the High Level Forum offers the opportunity for the global geospatial information community to pay particular attention to the critical roles of geospatial information science, technology and innovation, as tools that are able to integrate the three pillars (economic, social, environmental) of sustainable development, and as important geographic elements of the post-2015 development agenda. Therefore, the overarching theme of the Third High Level Forum is "Sustainable Development with Geospatial Information".

36. Bringing all stakeholders together, the Third High Level Forum will address the role of geospatial information in the post-2015 development agenda, and current critical sustainable development matters such as: mitigating and managing climate change and disasters; sustainable cities and human settlements; science, technology, and innovation to measure and monitor progress; and working together across borders and regions. A Ministerial Segment will be convened in order for high level decision makers to share and exchange views with delegates on the very important role of geospatial information in national and sustainable development.

X. Summary

37. Much has been achieved in promoting the use of reliable geospatial information for sustainable development over the past year. However, despite these continued and valuable efforts, the level of understanding and rate of uptake, particularly at the policy and decision-making level, remains less than optimal. Although the message from the Secretariat has been consistent and simple "you cannot measure and monitor sustainable development over time in a consistent manner without geography, place, and location", many do not understand its value and importance within the context of the sustainable development agenda. Unlike statistics, or even big data for example, it surprisingly remains an unknown and complicated concept. The production and use of geospatial information within national, regional and global policy frameworks needs to be mainstreamed in order to enhance the capability for

governments, international organizations and researchers to analyse, model, monitor and report on sustainable development, disasters, climate change, and other global concerns.

38. The Committee of Experts, as a global intergovernmental mechanism, and as the peak body to provide authoritative inputs into the geography of sustainable development, may wish to consider establishing a group of experts to contribute more robustly to the sustainable development process with the support of the Committee Bureau. This may include: closely monitoring the ongoing debate on the development agenda; contributing to an active dialogue with United Nations bodies and the policy sphere in order to ensure that a greater contribution of geospatial information is incorporated in preparations for the post-2015 development agenda; and keeping the Committee of Experts informed of progress.

XI. Points for discussion

39. The Committee is invited to:

(a) Take note of the report and express its views on the way forward in addressing the activities related to sustainable development and the post-2015 development agenda;

(b) Provide guidance on the most appropriate means to engage with the UN High-level Political Forum on Sustainable Development and enhance the role of geospatial information in the Prototype Global Sustainable Development Report;

(c) Consider establishing a group of experts to support the Bureau in contributing to the ongoing debate on the sustainable development agenda in order to ensure that a greater contribution of geospatial information is incorporated in preparations for the post-2015 development agenda.

ANNEX I

We, the participants of the **Fédération Internationale des Géomètres (FIG) Pacific Small Island Developing States Symposium** with the theme "Policies and Practices for Responsible Governance" held at the Novotel Lami Bay Conference Centre, Suva, Fiji on 18th – 20th September 2013, having met in the context to share knowledge, promote understanding and to enhance cooperation for the responsible governance of tenure of land, fisheries and forest, of geospatial infrastructure and information, hereby issue this

Suva Statement on Spatially Responsible Governance

Recognizing Small Island Developing States in the Pacific are unique in their situation and with particular vulnerabilities, remain a special case for sustainable development;

Recognize that Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests outline the principles and practices that governments can refer to when making laws and administering land, fisheries and forest rights, particularly in the administration of tenure and specifically in areas such as the recording of tenure rights, valuation, taxation, spatial planning as well as issues and responses that is required in the recognition and protection of access and rights;

Recognize that the United Nations initiative on Global Geospatial Information Management provides an inter-governmental consultative mechanism on place, locality and geography and plays a leading role in setting the agenda for the development of global geospatial information, infrastructure and its management;

Recognize that key partners of the Global Land Tool Network supported by the Secretariat in UN-Habitat are actively developing pro-poor gender sensitive and scalable land tools in support of the Continuum of Land Rights and alternative forms of secure tenure that include the administering of customary rights;

Recognize that all activities have a geographical and temporal context, and where communities and governments make decisions and organize their affairs through the effective and efficient use of geospatial data, information and services;

Agree that information on geography, custodianship and ownership is foundational for informed decision-making, resilience and sustainability. It is therefore essential that such foundational data and information has authority, currency and is comprehensive, freely available, accessible and usable;

Agree that weak governance hinders sustainable use of the environment, hinders economic growth, can condemn people to hunger and poverty and the loss of lives through violent conflicts;

Agree that responsible governance of tenure systems, of geospatial infrastructure and information management, of human resources and capacities can help reduce undernourishment and hunger, poverty and create opportunities to support social and economic development;

Agree that rights to land as lying on a continuum where tenure can take a variety of

forms and may overlap with one another, and the more appropriate form depends on the particular situation and where customary rights, for example, may be preferred in certain situations;

Resolve to fully support the implementation of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests; the initiative of the United Nations to implement global mechanisms to foster geospatial information management and the development of pro-poor gender sensitive scalable land tools in support of the Continuum of Land Rights and alternative forms of secure tenure including customary tenures;

Confirm the role of national professional organizations, individual professionals and the importance for continuing professional development for responsible inputs and contributions towards the preparedness of the surveying profession to respond and address the challenges in the region including coastal zones management, marine and climate related issues;

Confirm the importance of and the need for strengthening and modernizing the geodetic reference framework, and national spatial information infrastructure for the sharing and delivery of reliable geospatial information towards improved geospatial information management for social, environmental and economic development;

Confirm the importance of legislation, institutions, common standards and frameworks to improve coordination and ensure interoperability, improved governance of tenure of land, fisheries and forests as well as secure tenure rights for all;

Confirm the need for partnership, to share and collaborate to reduce duplication in these efforts; and

Confirm the need for capacity and professional development including the strengthening of teaching and training institutions.

Suva, Fiji
20th September 2013

ANNEX II

Chengdu Forum on UN-GGIM
Global Map for Sustainable Development:
Development and Applications in Urban Hazard Mapping
15 – 17 October 2013, Chengdu, China

Conclusions on Urban Hazard Mapping for Sustainable Development

The Chengdu Forum on United Nations Global Geospatial Information Management, with the theme "Development and Applications in Urban Hazard Mapping" was held in Chengdu, China, from 15-17 October 2013. More than 180 experts from 40 countries met to share experiences and methodologies in the production, management, analysis, modeling and dissemination capacity of hazard related geospatial information. The following reflects the main conclusions of the participants.

Context:

1. The United Nations initiative on Global Geospatial Information Management (UN-GGIM) provides an inter-governmental mechanism to make joint decisions and set directions on the production and use of geospatial information within national and global policy frameworks, and plays a leading role in setting the agenda for the development of global geospatial information, infrastructure and its management.

2. The United Nations Conference on Sustainable Development (Rio+20) outcome document "The future we want" recognized the importance of comprehensive hazard and risk assessments and knowledge and information sharing, including reliable geospatial information, and urged Governments and organizations to commit to disaster risk reduction in order to enhance the resilience of cities and communities to disasters.

3. The Doha Declaration (6 February 2013) affirmed the importance of having a stable, credible, and reliable national geospatial information infrastructure in each country built on internationally recognized standards that will integrate, manage, and deliver geospatial information for timely, evidence-based and authoritative decision making and policy formulation on location-based development issues, including disasters and humanitarian needs.

4. The Asia-Pacific region, home to almost half of the global urban population, is urbanizing faster than any other region, resulting in an unprecedented growth in densely populated megacities, and an increasing vulnerability to natural disasters.

5. Geospatial information has a vital role to play in all phases of hazard and disaster risk management and reduction, and it extends the ability for nations to not only map their

geography and topography, but also those areas that are vulnerable to natural hazards, particularly in urban environments.

Conclusions:

1. Consider establishing a Working Group to enhance the capacity of countries in disaster preparedness, mitigation, response and recovery taking full advantage of geospatial technologies and expertise.
2. As global geospatial information experts, consider how we contribute to the post-2015 sustainable development agenda, particularly in the areas of: disaster risk reduction and mitigation; sustainable development; and the global trend towards urbanization.
3. Many decision makers and disaster managers still do not understand the value and role of geospatial information. There is a need to strengthen the relationships between the National Disaster Management Agencies and the National Geospatial Information Authorities so that this understanding is increased.
4. Coordinate our strategies to provide leadership and raise the awareness of our governments so they understand the importance of geospatial information in disaster preparedness, mitigation, response and recovery, sustainable development and safeguarding life.
5. In order to better understand the role of standards and metadata when using geospatial information in disaster phases, we need to include standardization and related terminologies across countries to ensure interoperability and consistent data models.
6. Establish cooperative mechanisms so that the international community is able to make use of global resources and expertise to combat hazards and assist disaster prone countries. The cooperation should cover risk management, early warning, damage assessment, rescue, analysis and recovery.
7. Disasters require a data driven and a geospatial approach – risk, hazard, exposure, vulnerability, communities, infrastructure at risk, etc. It is also a statistical approach – populations, addresses, postcodes, census boundaries, villages, etc. This requires integrated population and economic data being made available to understand exposure and vulnerability.
8. The growing requirements for combining authoritative information, including its access and coordination, with response information from the crowd and citizens, particularly as it applies in rapid response situations, need to be addressed and met.
9. Geospatial information contributes to building resilience and disaster preparedness. It is an education and communication tool that brings the science and the hazards together. A defined set of hazard and risk geospatial data themes are needed to communicate, understand and map the hazards.
10. Existing institutional and policy barriers to data sharing fall away in response to disasters. At other times there are data silos and security concerns. These concerns need to be balanced with the need to make more data available. Mature SDI's can meet the need to making more data available.

11. There are challenges in providing timely, reliable and accurate information in all phases of disasters. Typically geospatial information is only called for during the response phase. This is too late and reflects a lack of information preparedness for effective response.

12. Urban hazard and disaster mapping should be a key input into the development of a Global Map for Sustainable Development (GM4SD) by UN-GGIM.

13. Increase training, communication, participation in simulation exercises, and exchange of information, including expertise and best practices through conferences, exchange of visits, joint research and other means to enhance our capacity.

17 October 2013

ANNEX III

ECOSOC Integrated Segment: Sustainable Urbanization

Inputs from the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM)

Background

Geospatial information technologies support national development, economic growth, improved decision making, enhanced policy formulation and contribute to overcoming many global challenges. Their uses range from personal navigation tools to informing large-scale humanitarian or disaster responses. Governments, industry and society now recognise and understand that 'location' is a vital component for effective decision making.

In recognition of the growing importance of geospatial information globally, in July 2011 the United Nations Economic and Social Council (ECOSOC) established the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) as the peak inter-governmental mechanism to make joint decisions and set directions on the production and use of geospatial information within national and global policy frameworks.

Represented by the Member States, with international and non-governmental organizations, the private sector and other stakeholders as observers, UN-GGIM addresses global challenges regarding the use of geospatial information in the development agenda and serves as a guide for global policy making in the field of geospatial information. In this regard, UN-GGIM has the mandate and responsibility to foster a geographic approach to the goals of the post-2015 development agenda, and has been active in this area.

In several UN-GGIM forums experts have emphasized several common global challenges including: sustainable geodetic networks; mitigating and managing disasters; population growth and food security; urban planning and sustainable development; and privacy and confidentiality in the face of growing public demands for data access. Ministers have stressed the importance of working together across borders and sharing experiences and advancements in geospatial information management, in order to address these critical issues and to enhance comparability across countries.

The Rio+20 outcome document 'The future we want' specifically recognized the importance of "reliable geospatial information" in the areas of national disaster risk reduction strategies and plans (including comprehensive hazard and risk assessments), and for sustainable development, policymaking, programming and project operations. A key part of UN-GGIM's program has been the role of geospatial information in urban hazard mapping and disaster risk reduction, particularly in the context of sustainable development and global urbanization.

Addressing sustainable urbanization in an integrated and focused way

The rates of rapid urbanization that are overwhelming land management and administration systems, especially in the developing world, are arguably one of the greatest challenges for the twenty first century. There is general consensus that a solution for addressing these challenges can be founded on sustainable cities, yet an essential foundation for planning and implementation of strategies for sustainable cities that is overlooked is an effective Land Information System. Land Information Systems have been successful in the developed world and have contributed significantly to sustainable land management practices. However, similar successes have not yet been achieved in the developing world where the absence of reliable geospatial information impedes initiatives to establish and sustain even the most basic land information systems. This scenario is evidenced by the lack of progress in registration of land ownership units, where less than 30% is properly registered globally. The need for homogeneous and reliable geospatial information for sustainable urbanization cannot be over-emphasised considering: property values (including their associated economic production) that mandate accurate demarcation/boundary re-establishment; the subterranean utilities infrastructure which have to be accurately located during developments; lack of security of land tenure in developing countries; response to environmental challenges based on accurate data such as height when pre-empting flood risks; and various data sources from different agencies which have to coincide precisely.

Within any country, and in particular to address the growing needs for sustainable urbanization, measuring development and progress will depend on the availability of and access to national fundamental data themes and information that reliably depict features on, above, or below the Earth. These core reference geographies, upon which all other information is based, may include: a geodetic control network; topography; elevation; water; transport; vegetation; human settlement; administrative boundaries; land ownership and use; and other socioeconomic and environmental data. Concerted efforts should be made to bring the developing countries to a base level of capability and capacity with respect to these framework data themes.

By way of example, consider the geodetic control network. Positioning services around the world rely on the guaranteed availability of and access to a high quality global coordinate system: the Global Geodetic Reference Frame (GGRF). The GGRF enables geospatial information to be utilised in applications such as land systems and ownership, engineering construction, precision agriculture, intelligent transport, navigation, geodynamics, and other geoscientific studies, including climate change and sea level monitoring. The GGRF is underpinned by an infrastructure that consists of globally distributed observatories and satellite tracking stations, and is operated by an internationally organized effort of data centres and analysis teams within governments and the scientific community. Although vitally important to society, this global cooperation relies almost entirely on a ‘best efforts’ principle.

An African initiative to unify the geodetic reference frames of Africa is being implemented under the African Geodetic Reference Frame (AFREF). The aim is to make the national and regional reference networks fully consistent and homogeneous with the GGRF. While this continental collaboration utilises the economies of scale, thereby sharing technical capacity and capital

investments, there is still limited understanding, limited data sharing, and lack of political buy-in. This translates to a lack of development.

In response to this transitional shortfall, at the political level, UN-GGIM is presently formulating a draft resolution to be considered by the General Assembly at the appropriate time in the near future. At the practical level, UN-HABITAT is developing the Global Land Tool Network (GLTN), an innovative pro-poor land tool to support progressive approaches that incrementally improve land tenure security. Within the GLTN, the Social Tenure Domain Model (STDM) addresses the lag in comprehensive registration coverage, and exclusion of disadvantaged groups from benefitting from land, especially in developing countries, by providing information of person to land relationship regardless of legal status, while not insisting on geospatial precision (as it is not yet achievable).

Within the sustainable development process, UN-GGIM is advocating that one cannot measure and monitor sustainable development without access to fundamental and consistent geospatial information – geography. In these critical domains the importance of having a reliable national geospatial information infrastructure in each country, built on internationally recognized standards that will integrate, manage, and deliver geospatial information for timely, evidence based and authoritative decision making and policy formulation on location-based development issues, cannot be under-estimated.

UN-GGIM notes that, while the sustainable development goals (SDGs) will be negotiated at the political level, they will rely heavily on the availability of human and physical geography data, much of it likely to be new data, to measure and monitor change and progress. A number of practical targets and indicators will eventually be required. Not all targets will be equal and will require different means of measure. Indicators will need to be linked to the targets and be well defined (accurate, reliable and understandable), measurable over time, cost effective and clearly and easily communicated. There will be a need to create a network of global data and information that is supported by the best science, tools, and technology to analyse and model data, create maps and detect and monitor change over time in a consistent and standardized manner. Much of this will have an urban dimension, and much of this will be geospatial information.