## **Economic and Social Council**

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#### Committee of Experts on Global Geospatial Information Management Fifth session New York, 5-7 August 2015 Item 9 of the provisional agenda\* Application of geospatial information related to land administration and management

#### Application of geospatial information related to land administration and management

#### Note by the Secretariat

#### Summary

The present paper contains the report on issues related to the administration and management of land, prepared by the Secretariat in collaboration with a group of land tenure/land management experts from United Nations entities and international geospatial organizations.

At its fourth session, held in New York from 6 to 8 August 2014, the Committee of Experts acknowledged that there was an urgent need for land administration to become a predominant theme in its work. The Committee then approved the addition of the agenda item entitled "Application of geospatial information related to land administration and management", to be addressed by the Secretariat during its intercessional period through the preparation of an issues paper for discussion at its fifth session, in August 2015. The information in the report is supported by a background discussion paper prepared by the Secretariat in collaboration with the United Nations Human Settlements Programme (UN-Habitat), the International Federation of Surveyors (FIG), the Food and Agriculture Organization of the United Nations (FAO) and other international organizations. In the report, the process by which the discussion paper was prepared is also described and the major issues and possible areas of focus to be considered for action by the Committee of Experts are highlighted.

\* E/C.20/2015/1.

## I. Introduction

1. At its fourth session, held in August 2014, the Committee of Experts approved the addition of a new work item "Application of geospatial information related to land administration and management" for the provisional agenda of the fifth session. The initial request to advance this work item was tendered by the United Kingdom and further supported by Bangladesh, France, the Netherlands, the United States of America and Norway.

2. The request from the Committee of Experts to address land administration issues within the geospatial sphere, and in support of sustainable development, is not new. The United Nations Statistics Division (UNSD), through its Regional Cartographic Conferences for Asia-Pacific and for the Americas, in collaboration with international bodies such as the International Federation of Surveyors (FIG) and other United Nations bodies have been addressing cadastral, land information and land tenure issues for over thirty five years. The following table highlights some of the major calls for action to address land administration and management issues.

Year	<b>Event/Organisations</b>	Action/Decision
1997	8th Regional Cartographic Conference for Asia-Pacific	Creation of an advisory panel on cadastral surveying and mapping
1980	9th Regional Cartographic Conference for Asia-Pacific	Resolutions on capacity development for cadastral mapping, cadastral survey systems and national LIS
Oct 1999	Bathurst Workshop on Land Tenure and Cadastral Infrastructures for Sustainable Development	The Bathurst Declaration
April 2011	Governing Council of the United Nations Human Settlement Program	Resolution on "Sustainable urbanization through equitable access to land, housing, basic services and infrastructure"
Feb 2012	Permanent Committee on GIS Infrastructure for Asia and the Pacific, GSDI <sup>1</sup> & FIG	The Kuala Lumpur Declaration on Spatially Enabled Government and Society.
May 2012	United Nations Committee on World Food Security	The Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests
Dec 2012	International Organization for Standardization	The Land Administration Domain Model (LADM) as a standard was published (ISO 19152:2012)
Mar	International Federation of	Fit-For-Purpose Land

<sup>&</sup>lt;sup>1</sup> GSDI- Global Spatial Data Infrastructure Association

2014	Surveyors and World Bank	Administration
Oct 2014	Third High Level Forum on United Nations Global Geospatial Information Management	The Beijing Declaration on Sustainable Development with Geospatial Information

3. The Committee of Experts is invited to take note of the report and background discussion paper, and to express its views on the way forward in guiding the activities related to the application of geospatial information related to land administration and management. Points for discussion and decision are provided in paragraph 18.

# II. The Importance of Land Administration and Management

4. Land is the single greatest resource in most countries. When considering the challenges faced by humanity today, such as climate change, adequate and equitable housing, food security, disaster risk reduction, peace and security and, ultimately, sustainable development, access to land, security of tenure and land management has significant implications to citizens globally. Land administration provides an important infrastructure for an efficient economy, which means that it touches all aspects of people's lives, including their income generation activities, and is fundamental for economic growth, and poverty reduction.

5. Place, or location, is a key facilitator in decision-making, and land administration is essentially concerned with people-to-land relationships and is thus place-based and people-centric. This people-to-land relationship has a fundamental role in geospatial enablement, where good land governance can facilitate governments being able to respond to national and global agendas and achieve sustainable development. Land administration is inherently geographical and good geospatial information is needed to manage geographic elements in a digital world.

## **III. Background Discussion Paper**

6. Geospatial/land information and its management are fundamental to successful land administration and its associated benefits to the economies and overall sustainable development of Member States. The challenge is to define the extent of which the Committee of Experts participates in this large area of work, particularly given the many challenges to be addressed and the mix of organisations that are currently successfully working in the field. The objective therefore is to identify the area(s) of focus for the Committee of Experts, given its overall mandate and strengths, also taking into consideration the need to avoid duplication of effort.

7. Given the request from the Committee of Experts to consider the topic and report back at this fifth session, the Secretariat prepared a discussion paper detailing the current issues impacting land administration and management, its status at national and global levels, and the specific issues to be addressed by the Committee of Experts. In furtherance of this request, and recognising the many organisations and Member States who have been working in land administration for a considerable period, and thus the existence of many experts on the subject; a

collaborative approach was adopted to prepare the discussion paper. An initial draft was prepared by the Secretariat with input and comments provided by a number of Member States, international organisations and academia. These included: The Netherlands; Norway; Sweden; the United Kingdom; UN-Habitat, Global Land Tenure Network; UN Food and Agriculture Organisation, Land Tenure and Management Unit; UN Environment Programme; the International Federation of Surveyors; and the University of the West Indies, Faculty of Engineering, Department of Geomatics Engineering and Land Management.

8. The discussion paper has been prepared to provide the Committee of Experts with information to support the discussions and decisions on the way forward in the application of geospatial information related to land administration and management. The paper is divided into eight sections with three annexes. It begins with a background that sets the context for the work of the Committee of Experts on land administration and management. The first sections provide definitions of land governance, land administration and land management. The problem statement follows, placing in context the importance of land amid global issues of increasing urban populations, food security through to the rights of women. A snapshot is then given of the initiatives that have been taken to address land governance issues at the global level. This is then followed by an examination of the current issues impacting land administration and management. These issues have been grouped under sub-headings of governance, data management, institutional and technology adoption and sustainability; with governance issues being most significant.

9. The second half of the paper focuses on the argument for the Committee of Experts to begin addressing land administration and management. Further, the fundamental role of land information in support of sustainable development is highlighted. Given the current work being progressed on the post-2015 development agenda, and the fact that land is an integral factor in most of the goals and targets, this is seen as particularly important.

10. The final section of the paper sought to identify the strengths of the Committee of Experts in addressing the topic and, most importantly, highlights potential areas of focus for the future. This includes advocating greater global awareness for the need to collect and maintain accurate, assured and authoritative land information, and generating synergies among land governance initiatives and public sector reform. The section concludes with an incomplete matrix that lists some areas of work in land administration and governance being addressed by international bodies. In the annexes a reference list of papers on the subject is provided for further information.

11. It must be emphasised that the background discussion paper is the start of the discussion and future work of the Committee of Experts, and therefore should not be considered to be a complete and comprehensive review of the global status of land administration and management. The area of work is enormous and expansive, and in preparing the background paper it proved quite challenging to keep a balanced view, given the competing areas of interest of the various stakeholders. This should be kept in mind when reading the background paper, in addition to the fact that land administration and management issues vary globally depending on geography, economy, culture, governance and legislative arrangements across Member States. It should also be noted that contribution to support the preparation of the background paper was sought mainly from Member

States and international bodies; the non-government community, civil society and private interests were not asked for input at this initial stage.

12. The Secretariat seeks to begin the process of addressing the agenda item by identifying the major land issues and why, after many years of investments, projects and programmes, 70% of the people-land relationships, particularly in developing countries, are not documented. This is juxtaposed against the developed world where land is in most instances 100% documented. However, the challenge here is in gaining the needed commitment and resources to maintain and modernise land administration systems. The Committee is therefore tasked to identify and consider its role and agree on the areas of work that should be pursued in the next few years.

### **IV.** Next Steps and Recommendations

13. Land and property often account for between one-half to three-quarters of national wealth. From this perspective, clarifying land ownership and occupation, resolving land disputes, and the distribution and value of land resources, as well as designing appropriate laws, regulations and institutions, are very important for growth, poverty reduction, and sustainable development. As climate change, food price volatility, and other factors place increasing pressure on scarce natural resources, countries are facing the need to accelerate efforts to modernize land administration systems to secure land rights; ensure that they have accurate data on land resources, occupation and ownership; and that this information is organized in ways that can be easily updated to support development planning and decision making.<sup>2</sup>

14. Land administration is increasingly being recognised as important for good governance and thus significant time, investments and thought have been expended to improve systems, institutions and management practices. However, challenges remain across the world, leading to calls for the re-examination of land administration policies, legislation, methodologies, practices, systems and capacity building programs. This demand, fuelled by new disruptive paradigms such as integrated land management, Fit-For-Purpose, participatory land management, and the land administration domain model, in combination with rapid changes in technology – 3D cadastres, the Cloud, Web2.0, and the current focus on the post-2015 development agenda, makes the call for the Committee of Experts to focus on land administration and management a timely and necessary opportunity. The onus is on the Committee of Experts to use its strengths and intergovernmental position to provide the appropriate policy framework, advocate for greater global awareness for the need to collect and maintain accurate, assured and authoritative land information, enthuse good land governance, define and support existing or new approaches to improve the people-to-land relationship, and encourage the adoption of appropriate enabling technologies, standards and best practices.

15. The Committee is invited to note the commonalities and interdependence of the land administration and management issues with other items of work of the Committee, such as the global geodetic reference frame, the implementation and adoption of standards, legal and policy frameworks, institutional arrangements and global fundamental data themes. Accurate, assured and authoritative cadastral data provides the framework/base data sets which supports the multi-variate

<sup>&</sup>lt;sup>2</sup> http://www.worldbank.org/en/results/2013/04/15/land-policy-results-profile

analysis across other data sets – social, thematic, economic – needed to make planning and other development decisions. Data integration cannot be achieved without a functioning geodetic reference frame and standards. This suggests that the synergies that exist among the agenda items support the relevance of this work to the Committee.

16. The Committee is requested to consider the operational options for moving the topic forward given existing Secretariat and other resources available. Possible options are to: 1) partner with existing global programs such as the GLTN partner network; or 2) create a global multi-stakeholder expert or working group reporting to the Committee. These suggestions do not negate the need for the Committee of Experts to collaborate and work closely with other global land stakeholders, as this must be encouraged.

17. The Secretariat is considering bringing together a wide cross section of stakeholders in the land administration/governance arena at the next UN-GGIM High Level Forum in 2016 in Africa, to further elaborate on this initial work. Should the Committee of Experts agree at this session on the creation of an Expert or Working Group on Geospatial Information for Integrated Land Administration and Management, it is expected that during the High Level Forum the group will be formally established and convene its first meeting.

#### V. Points for discussion

18. The Committee is invited to:

(a) Take note of the report and background discussion paper prepared by the Secretariat and contributing organizations;

(b) Express its views on the way forward in guiding the activities related to the application of geospatial information related to land administration and management;

(c) Consider establishing an expert group to undertake the work needed to advance the activities related to the application of geospatial information to land administration and management;

(d) Encourage the continued involvement and contribution from Member States and related international organisations, and other civil society interests as appropriate;

(e) Consider the suggested main areas of focus in land administration and management and identify the areas to work on in the immediate future; and

(f) Approve and support the staging of the next UN-GGIM High Level Forum to be held in 2016 in Addis Ababa, Africa, focused on land administration and management.