# **Economic and Social Council**

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Committee of Experts on Global Geospatial Information Management Seventh session New York, 2-4 August 2017 Item 11 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 of the Expert Group on Land Administration and Management on the application of geospatial information to land administration and management for the consideration by the Committee of Experts on Global Geospatial Information Management.

At its sixth session, held in New York from 3 to 5 August 2016, the Committee of Experts adopted decision 6/108, in which it agreed that a major function of the Expert Group was to address sustainable governance, data management and the adoption of institutional frameworks and technology in relation to land administration and management systems, as well as their linkages to the relevant aspects of the Sustainable Development Goals. The Committee of Experts encouraged the Expert Group to address the issue of fit-for-purpose land and geospatial information required to support effective and efficient land administration and management in order to address the need to secure land and property rights for all. In endorsing the terms of reference of the Expert Group, the Committee of Experts encouraged it to engage and consult broadly when finalizing its work programme and requested that the Expert Group report on its progress to the Committee of Experts at its next session. In its report, the Expert Group provides information on the considerations and outcomes of its meeting convened in Delft, the Netherlands, on 14 and 15 March 2017, in which it recognized the need to improve political awareness among and guidance to Member States. The Expert Group also presents its work programme for the 2017-2018 biennium for endorsement by the Committee of Experts. The Expert Group indicates in its report that the work programme is focused on developing a global framework for land administration that captures key elements or principles essential for establishing a universal, efficient, effective and sustainable land administration system that will provide security of tenure and will allow for documenting, recording and recognizing the many people-to-land relationships in all their forms.

<sup>\*</sup> E/C.20/2017/1

# I. Introduction

1. At its sixth session, held in New York from 3 to 5 August 2016, the Committee of Experts in its decision 6/108 requested the Expert Group on Land Administration and Management to make progress on its activities, including considering capacity development and the adoption of appropriate technologies, process and standards, and encouraged Member States and the regional committees to participate in these activities to ensure broad geographic participation.

2. The Committee of Experts also encouraged the Expert Group to address the issue of fitfor-purpose land and geospatial information required to support effective and efficient land administration and management to address the need to secure land and property rights for all. It was also agreed that a major function of the Expert Group was to address governance, data management, adoption of institutional frameworks and technology, and sustainability related to the implementation of efficient and effective land administration and management systems.

3. In this present report the Expert Group indicates that the work programme that was developed focuses on a global framework for land administration that captures key elements or principles essential for establishing a universal, efficient, effective and sustainable land administration system that will provide security of tenure, and will allow for documenting, recording and recognizing the many people-to-land relationships in all their forms.

4. This present report seeks to update the Committee of the Expert Group's activities and progress since the sixth session, including its present composition, the Expert Group meeting in Delft in March 2017 and its work programme for the 2017-2018 biennium. The Committee of Experts is invited to take note of the report and express its views on the Expert Group's progress and activities. Points for discussion and decision are provided in paragraph 22.

# II. Membership of the Expert Group

5. The expert Group was established after the Committee of Experts adopted decision 5/105 at its fifth session, acknowledging the importance and need for geospatial information as an essential base for an effective and efficient land information system to support the administration of land policy frameworks, security of tenure, land and property rights, customary rights, sustainable development and overall environmental, economic and social well-being. The Expert Group is co-chaired by The Netherlands and Lesotho.

6. Following its establishment, the Expert Group noted considerable interest from additional Member States as well as other stakeholders whom are observers to the Committee of Experts, but who were not members of the Expert Group. At the sixth session of the Committee of Experts, a number of Member States expressed their willingness to participate in the work of the Expert Group. In September 2016, together with the co-Chairs of the Expert Group, the Secretariat reached out to the members of the Expert Group, as well as those that had expressed interest in the work of the Expert Group at the sixth session, to affirm their respective willingness and ability to contribute to the Expert Group and its workings, and to consolidate the membership.

7. The membership of the Expert Group now consists of expert representatives from 18 Member States, 4 from the UN System and 6 from relevant organizations of the Committee of Experts' stakeholder community. The present members of the Expert Group are provided in Annex I to this present report.

# III. Expert Group meeting, Delft, The Netherlands, March 2017

8. The Expert Group convened a physical meeting, hosted by the Government of the Netherlands, through Kadaster International of the Netherlands, in Delft, 14-15 March 2017.<sup>1</sup> Attended by 20 expert representatives and 3 observers from 11 Member States, 3 from the UN System and 3 others representing international organizations, there were a total of 37 presentations, 30 of which were prepared and delivered by members of the Expert Group.

9. With the Expert Group meeting being convened at the Faculty of Architecture and the Built Environment, Delft University of Technology, the Dean of the Faculty was invited to deliver the welcome address. The Dean observed that there are geospatial challenges within the built environment that are already very difficult to address and, with the focus on land administration and management, the Expert Group have a "wicked problem" to tackle. He noted that, when considering the entire range of cities and human settlements, knowing 'where' one is over time, research and informed policy formulation will make the world a better place. He echoed a saying that "we have one generation to get it right", and the next 20 years of research and policy formulation will determine whether we succeed. Data needs to be meaningful, relevant to the current and future questions being asked, and data needs to be available.

10. The meeting was anchored by one of the overarching principles of the 2030 Agenda for Sustainable Development 'to leave no one behind' and our need to respond to the aspirations of all people seeking a world free of want and fear. The meeting acknowledged the importance for land administration systems to ensure there is knowledge of 'where people (subject) and things (object) are and their relationship to each other' leveraging geospatial information management as a technological and critical enabler for all countries.

11. The 2030 Agenda for Sustainable Development calls for new data acquisition and integration approaches. With particular reference to the Sustainable Development Goals (SDGs) and SDG Indicators 1.4.2; 5.a.1 and 5.b.2, and in order to record and recognize people-to-land relationship in all its forms and in a timely manner, the Group recognised:

(a) The absence of reliable tenure related data in many jurisdictions;

(b) The need for more flexible data acquisition methodologies to accelerate efforts to document and record people-to-land relationships in all its forms;

(c) The need for appropriate consideration of precision, particularly in relation to the cadastre; and

(d) The importance of enabling policy that promotes an environment that provides for: i) a culture of sharing and collaboration; ii) avoidance of duplication (particularly in mapping, map once for a multiplicity of purposes and use); iii) application of internationally agreed standards; iv) culture of maintenance; and v) capability and capacity development;

12. The Expert Group also considered and deliberated on a number of land administration standards and processes, including: the ISO 19152-Land Administration Domain Model'; the Social Tenure Domain Model (a specialization of ISO 19152); the activities of the Open Geospatial Consortium (OGC) Land Administration Domain Working Group; and ISO Technical Committee 211 (ISO-TC211). The Expert Group also considered a proposed

Delft meeting of the Expert Group on Land Administration and Management: http://ggim.un.org/Delft\_Meeting.html

initiative on a national tenure atlas. The Expert group expressed support for the upcoming ISO-TC211 and OGC review of ISO 19152 – Land Administration Domain Model and took note that a national tenure atlas may be able to provide and visualise the state-of-play of tenure security at all levels.

13. The Expert Group agreed to develop and advocate a global framework for land administration that captures key elements or principles essential for establishing a universal, efficient, effective and sustainable land administration system that will provide security of tenure and will allow for documenting, recording and recognizing the many people-to-land relationships in all their forms in the belief that this framework would accelerate the proportion of global population's relationship to land that will be documented, recorded and recognized, currently estimated at only 25%-30%. The Expert Group concurred that the land-based indicators of the global indicator framework will assist Member States, in the measuring and monitoring of progress at all levels, improvements in tenure security and land and property rights.

14. The Expert Group agreed that their current action plan will need to be revised to reflect the outcomes of the meeting in Delft and that the revised work programme be submitted to the Committee of Experts at its seventh session for its endorsement.

15. The outcomes of the Expert Group meeting were presented to the Open Geospatial Consortium (OGC) Technical Committee Meeting held in Delft from 18-23 March 2017, as well as at the World Bank Land and Poverty Conference 2017 convened in Washington DC, also from 18-23 March 2017. Additionally, the World Bank Conference had special sessions on land administration and management which members of the Expert Group and Secretariat participated in.

# IV. Work programme for the 2017-2018 biennium

16. The terms of reference of the Expert Group were endorsed by the Committee of Experts at its sixth session in August 2016, tasking the Expert Group to play a leading role at the policy level and encourage the wider use of geospatial information, tools and systems to improve the recording and recognition of people-to-land relationship in all its forms.

17. The Expert Group at its Delft meeting agreed to the following tasks:

(a) Establish a liaison group to support the upcoming ISO-TC211 and OGC revision of ISO 19152 – Land Administration Domain Model with the aim to improve awareness and understanding, and enhance advocacy and knowledge sharing;

(b) Develop a global framework for land administration that captures key elements or principles essential for a universal, efficient, effective and sustainable land administration system that will provide tenure security for all; and

(c) Together with the global framework, provide guidance for appropriate methodological approaches and standards that will accelerate the proportion of global population's relationship to land that will be documented, recorded and recognized. This guidance includes legal, institutional and geospatial elements and improve access to basic datasets and image libraries.

18. For the 2017/2018 biennium, the Expert Group will focus on the series of activities as stated in the work programme that is before the Committee of Experts for its endorsement. The work programme is provided in Annex II to this present report.

19. At this seventh session, the Expert Group will convene a side event that will begin its consideration on key elements or principles essential for establishing a universal, efficient, effective and sustainable land administration system that will provide security of tenure and will allow for documenting, recording and recognizing the many people-to-land relationships in all their forms.

# V. Conclusion and the way forward

20. The Expert Group in its consideration of a global framework for land administration aimed at establishing a universal, efficient, effective and sustainable land administration system could consider key elements within the now widely accepted fit-for-purpose land administration approach. These elements are flexibility, inclusiveness, participatory, affordable, reliable, attainable and upgradeable.

21. The Expert Group is to consider facilitating sharing information, experience and knowledge including challenges and benefits at the national level on the implementation of fit-for-purpose land administration approach, digital land records and registers, cadastres, modernising of land administration systems, and to share good practices and success stories that demonstrate in a practical sense efficient and effective land administration and management.

# VI. Points for discussion

22. The Committee of Experts is invited to:

(a) Take note of the report of the Expert Group on Land Administration and Management and the updates provided; and

(b) Express its views on the work programme of the Expert Group for the 2017-2018 biennium, and provide guidance on activities requiring further discussion and attention.

### <u>ANNEX I</u>

#### **Expert Group on Land Administration and Management**

#### Members

- 1) Belgium
- 2) Burkina Faso
- 3) Canada
- 4) Chile
- 5) China
- 6) Finland
- Guyana
  Lesotho
- 9) Mexico
- 10) The Netherlands
- 11) Norway
- 12) Republic of Korea
- 13) Singapore
- 14) Spain
- 15) Sri Lanka
- 16) Suriname
- 17) Sweden
- 18) United Kingdom
- 19) International Hydrographic Organization
- 20) Food and Agriculture Organization of the United Nations
- 21) United Nations Economic Commission for Europe (Working Party on Land Administration)
- 22) United Nations Human Settlement Programme (Land and Global Land Tool Network Unit)
- 23) World Bank Group
- 24) UN-GGIM: Geospatial Societies (Global Spatial Data Infrastructure Association)
- 25) UN-GGIM: Geospatial Societies (International Federation of Surveyors)
- 26) UN-GGIM: Private Sector Network (Open Geospatial Consortium)
- 27) UN-GGIM: Private Sector Network (Environmental Systems Research Institute, Inc.)
- 28) UN-GGIM: Private Sector Network (Hexagon Geosystems)

#### <u>ANNEX II</u>

#### **Expert Group on Land Administration and Management**

#### Work programme for 2017/2018 Biennium: Activities

The Terms of Reference called for the Expert Group to play a leading role at the policy level and encourage the wider use of geospatial information, tools and systems to improve the recordation and recognition of people-to-land relationship in all its forms. For this 2017/2018 period, the work program of the Expert Group will thus focus on a series of activities as follows –

1) Organise a side event during the Seventh Session of UN-GGIM to deliberate with Member States, and experts from the UN System and international organisations on key universal elements essential for sustainable land administration that can efficiently and effectively document, record and recognise people-to-land relationship in all its forms, thus accelerating efforts to provide security of tenure, land and property rights in a timely manner.

2) Organise an open meeting during the Seventh Session to inform and consult Member States, UN System and observers on the Expert Group's work program for 2017/2018.

3) Contribute to the Fifth High Level Forum on United Nations Global Geospatial Information Management in Mexico City, as appropriate.

4) The co-Chairs to track the ongoing discussions on the proposal for national tenure security atlas - the details, scope, content and more importantly, the intent and utility of this atlas and to keep the Expert Group informed on the progress of the discussion.

5) Establish a Task Team comprising members with domain knowledge to act as the liaison group to ISO TC-211/OGC initiative for the revision of ISO-19152 (Land Administration Domain Model). (As a clarification, the Task Team is not about standard setting, rather as a liaison between the Expert Group and the ISO TC-211/OGC initiative with the aim to improve awareness and understanding of the Expert Group and by extension, the Committee of Experts on this initiative to revise ISO-19152.) The Task Team can advocate, share knowledge and when necessary, mobilise support for the revision.

6) The Expert Group will review and assess the outcomes of the Seventh Session of the Committee of Experts and, if appropriate, begin consideration of key universal elements essential for sustainable land administration systems that can efficiently and effectively document, record and recognise people-to-land relationship in all its forms. The Expert Group will consider any development of a global framework for sustainable land administration together with key land-sector stakeholders including UN-Habitat/GLTN, FAO and the World Bank. 7) Consider issues, gaps and appropriate fit-for-purpose methodological national or sub-national approaches to accelerate efforts in documenting (including survey and mapping), recording and recognition of people-to-land relationship in all its form. This may include guidance on legal, institutional and geospatial elements and to address the issue of access to basic datasets.

8) Subject to available resources, organise a physical meeting of the Expert Group with clear objectives and desired outcomes over two to three days in the second quarter of 2018, preferably in concurrence with a related global geospatial event.

9) Report to the UN-GGIM Bureau and the Committee of Experts on a timely basis.

(June 2017)