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Committee of Experts on Global Geospatial Information Management Eighth session New York, 1-3 August 2018 Item 8 of the provisional agenda* Legal and policy frameworks, including issues related to authoritative data

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Note by the Secretariat

Summary

The present paper contains the report of the Working Group on Legal and Policy Frameworks for Geospatial Information Management for consideration by the Committee of Experts on Global Geospatial Information Management.

At its seventh session, held in New York from 2 to 4 August 2017, the Committee of Experts adopted decision 7/106, in which it endorsed the establishment of the Working Group on Legal and Policy Frameworks for Geospatial Information Management, its terms of reference and its initial composition. The Committee requested the Working Group to develop mechanisms for Member States to build capacity to address legal and policy matters and noted the comments made during the session about analyzing complex issues regarding geospatial information, including definitions of open data, personal data, data privacy, data protection, data licensing and the security and misuse of data. In this report, the Working Group provides information on its progress in establishing its modalities and developing a workplan for the biennium 2018–2019 to systematically address the complex legal and policy issues in geospatial information management. The Working Group also provides information on its activities in building capacity and awareness, including introducing and communicating practical approaches to considering legal and policy issues that have an impact on the availability, accessibility and application of geospatial information. A use case is presented to methodologically consider and begin to understand some of the complex legal and policy issues in geospatial information management, including those related to authoritative data.

^{*} E/C.20/2018/1

I. Introduction

1. Geospatial information is fundamental to support evidence-based policies, decisions and actions, and to achieve the goals of the global development agendas, including the 2030 Agenda for Sustainable Development. However, issues and challenges regarding the quality, availability, and accessibility of geospatial information are common, and experienced across many countries at various levels. Appropriate legal and policy frameworks on geospatial information can assist Member States to solve these issues and problems. Furthermore, legal and policy frameworks can proactively support the strengthening of geospatial information management so that policies, decisions and actions lead to the desired public good in a more effective and efficient way.

2. The need to address legal and policy issues impacting geospatial information management has become more critical, as the use of new and emerging technologies, for example, on data management, could lead to new situations and risks to privacy and security concerns.

3. At its seventh session in August 2017, the Committee of Experts endorsed the establishment of the Working Group on Legal and Policy Frameworks for Geospatial Information Management, inclusive of its terms of reference and initial composition. The Working Group was requested to evaluate complex issues regarding geospatial information, including definitions of open data, personal data, data privacy, data protection, data licensing and the security and misuse of data, and to develop mechanisms for Member States to improve capacity to address legal and policy matters on geospatial information.

4. This present report provides the Committee of Experts with an update on the progress made since the seventh session, and describes efforts to formulate a work plan that will systematically address the complex legal and policy issues in geospatial information management, and related activities. The Committee of Experts is invited to take note of the report of the Working Group, express its views on the activities and progress made, and provide further guidance. Points for discussion and decision are provided in paragraph 32.

II. Membership of the Working Group

5. At its seventh session, the Committee of Experts endorsed the establishment of the Working Group that initially comprised representatives from six Member States; Australia, China, Finland, Malaysia, Mexico and Sweden, two international organizations (Centre for Spatial Law and Policy and International Bar Association), and two UN-GGIM: Private Sector Network entities (Deloitte and PrecisionHawk). At the seventh session, a further three Member States expressed interest and were contacted, Austria subsequently confirmed their readiness to participate in and contribute to the Working Group. The Working Group also agreed to two other organizations to participate as observers (the Cooperative Research Centre for Spatial Information in Australia, and EuroGeographics).

6. The Working Group, chaired by Sweden, presently comprises representatives from seven Member States (Australia, Austria, China, Finland, Malaysia, Mexico and Sweden) and six other organizations, two of whom are observers. In this regard, the Working Group considers it beneficial to have broad expertise and contributions, including from the wider legal and information technology communities, and seeks the assistance of the Committee of Experts to widen the geographic and expert representation of the Working Group.

III. Work plan and activities

7. The development of an infrastructure for geospatial information management may involve a number of development processes. The 'business development process' is considered the key process where technical and other components are being developed to meet a specific need. This process is usually controlled by a legal and policy framework. However, the legal and policy framework sometimes imposes unnecessary obstacles, slowing down the development of a desired infrastructure for geospatial information management. Conversely, the lack of legal and policy frameworks often has the same negative effect. For example, the use of new technology in data management could create new situations and risks to personal privacy or national security, hence, approaching from a legal and policy aspect would be beneficial. As such a 'legal and policy development process' should be initiated. The interaction between these two development processes (business and legal and policy), and the effects of sound legal and policy frameworks, was taken into consideration by the Working Group when formulating its work plan and related activities. A legal and policy framework is considered 'sound' when it creates balance between competing interests. This balance may vary from country to country, and case by case.

8. The Working Group considered a draft biennial (2018 - 2019) work plan prepared by the Chair together with the scope of the draft work plan at its first online meeting on 22 January 2018, and agreed to limit its current considerations to the influences of laws and policies with respect to licensing, privacy and security of geospatial information within an overall scope that includes:

- (a) privacy;
- (b) security;
- (c) intellectual property and ownership;
- (d) authority, custodianship;
- (e) geo-regulation, spatial extents of legislation;
- (f) quality, uncertainty and timeliness;
- (g) access, availability;
- (h) licensing and liability;
- (i) cost recovery, pricing; and
- (j) standards.

9. A series of activities were identified in the work plan, along with applicable deliverables as well as indicative timing and deadlines. These assist the Working Group to prioritize and focus on its objectives and functions as endorsed by the Committee of Experts. The agreed work plan can be accessed at: http://ggim.un.org/documents/Work_plan_for_2018-19.pdf. The activities included initiating the consultation on the Compendium on Licensing of Geospatial Information as requested by the Committee of Experts, embarking on a use case exercise and conducting a sub-regional learning event on legal and policy frameworks.

10. The use case would prove to serve as a foundation of the Working Group's effort to identify some of the complex legal and policy issues that impact the collection, sharing and use of geospatial information to address critical transboundary issues. In this regard, it was important for members of the Working Group to clarify the national (or sub-national) context they were considering in the use case.

11. At its second online meeting on 16 May 2018, the Working Group reviewed its activities and progress to date against its agreed timeline, and discussed its progress on the use case exercise. The Working Group agreed that it would be beneficial to reach out to a number of other Member States that are not part of the Working Group to contribute to this activity. The initial findings from this use case exercise will be discussed in a side event to be convened by the Working Group on the margins of this eighth session of the Committee of Experts.

12. The Working Group confirmed its intention to convene its first physical expert meeting on the margins of the United Nations World Geospatial Information Congress in Deqing, China, tentatively scheduled for 17–18 November 2018 and to be hosted by the Government of the People's Republic of China. The Working Group is considering the possibility of having a workshop back-to-back with its physical meeting to address its objectives and functions.

IV. Compendium on the licensing of geospatial information

13. At its seventh session, the Committee of Experts expressed its appreciation for the development and preparation of the Compendium on Licensing of Geospatial Information, noting that it has had a number of productive reviews and consultation during the development stage. Additionally, in endorsing the terms of reference for the Working Group, the Committee of Experts requested the Working Group to finalize the Compendium through a consultation process involving the Regional Committees on United Nations Global Geospatial Information Management and other relevant stakeholders.

14. An open consultation process for the Compendium on Licensing of Geospatial Information was conducted from February 2018 through the Working Group's website at: http://ggim.un.org/UNGGIM-wg7/. Regional Committees on United Nations Global Geospatial Information Management, as well as UN-GGIM Networks, were specifically requested to review the Compendium.

15. The consultation process specifically requested reviewers to consider the draft, chapter by chapter, from introduction through to conclusion. Reviewers were offered the opportunity to make specific comments related to the contents in each of the chapters of the Compendium, provide general comments and feedback, and suggest issues and topics that could be addressed including in the next edition of the Compendium. The consultation provided additional and valuable feedback that allowed the Working Group to finalize the Compendium for Licensing of Geospatial Information.

- 16. Comments, contributions and issues raised in the consultation process included to:
 - (a) improve the structure of the Compendium, particularly, the preamble portion of the document;
 - (b) re-phrase where appropriate to ensure clarity, consistency and flow, and to avoid ambiguity;
 - (c) consider additional references suggested; and
 - (d) note additional areas to consider in future editions of the Compendium.

17. There were also comments that welcomed the work carried out, that the Compendium was clear and concise, highlighted main issues at hand, and was particularly useful and timely. The contributions were considered and the Compendium edited accordingly, including re-structuring the beginning portion of the document, and rephrased sentences and paragraphs as appropriate to ensure clarity, consistency and flow. Suggestions for future work were also noted and captured in the introduction chapter that also served as the executive summary.

18. The Working Group appreciated all of the efforts and contributions from Member States and the UN-GGIM Regional Committees and Networks. The entire development, preparation, drafting, consultation and finalization process for a complex document has taken approximately twenty-one months.

19. The final Compendium on Licensing of Geospatial Information, as contained in document E/C.20/2018/9/Add.2, is presented to the Committee of Experts for endorsement.

V. Raising awareness and capacity development

20. At its seventh session, the Committee of Experts requested the Working Group to develop mechanisms for Member States to improve capacity to address legal and policy matters. Together with the Secretariat, a body of work was commissioned under the Technical Cooperation Trust Fund Agreement between the United Nations and the Government of the People's Republic of China on Geospatial Information Management Capacity Development that developed a curricula and materials for regional learning events on legal and policy frameworks for geospatial information management.

21. The core component of this curricula and materials were four modules that addressed:

(a) Legal and policy framework around geospatial information management -Highlighted the different types of laws and policies that impact the collection, storage, dissemination and use of geospatial information, and provided examples of associated laws and policies around the world, and the impact that these laws and policies have on geospatial information management.

(b) Role and options on licensing in geospatial information management -Explained the role of a geospatial information licence (nomenclature differs in different jurisdictions, and may include terms and conditions of use, memorandum of understanding, data sharing agreement, notices or administrative arrangements) and why licensing is critical in the availability and accessibility of geospatial products and services.

(c) Key legal issues in geospatial information management -

Discussed legal concepts and operational considerations that address and allocate rights, restrictions, responsibilities and risks within a geospatial information ecosystem that includes collectors, producers, custodians, customers and citizens.

(d) Emerging legal and policy trends that will impact geospatial information management -

Highlighted a rapidly evolving technological and communication environment with emerging and varied applications and markets, the need to address what kind of data is sensitive and what is harmless, where 'geo' (location) is pervasive, and where the geospatial information community have a proactive role in helping shape emerging legal and policy issues.

22. Two international workshops were organized and successfully convened. The first was hosted by the Government of the People's Republic of China through its National Administration of Surveying, Mapping and Geoinformation, from 7–9 November 2017 in Tianjin, China. The second was hosted by the Government of the Kingdom of Tonga through its Ministry of Lands and Natural Resources, from 10–13 April 2018 in Nuku'alofa, Tonga.

23. At the first international workshop, there were 34 participants, 32 of whom came from 19 Member States as representatives of national agencies that came from least developed countries, small islands developing States, land locked developing countries, developing (including middle income) and developed countries. These participants, senior officers and executives, represented all five regions within the UN-GGIM regional architecture, namely, Africa, Americas, Arab States, Asia and the Pacific, and Europe.

24. Participants at the first workshop acknowledged the need for greater consideration and effort to ensure, and for some, to enforce adherence to provisions within any geospatial information license or data exchange/data sharing arrangements. Experiences were shared, including approaches such as audits, declarations, regular customer-facing education and engagements. Participants shared their challenges and approaches to address issues around the misuse of data, data privacy and data protection, acknowledged a need for better understanding of these issues particularly within the national context. They also expressed a need for similar events at sub-regional levels where there could be some contextual similarities, thus improving peer-to-peer sharing and learning.

25. The second international workshop, a sub-regional event, raised awareness among the 42 participants from 12 Member States and one Pacific Island Territory on the evolving and increasingly complex legal and policy environment that will impact the availability, accessibility and application of geospatial information to support and implement national development priorities, community level programs, regional development initiatives, and globally agreed development agendas, including the Sendai Framework, the SAMOA Pathway and the 2030 Agenda for Sustainable Development.

26. Participants at this international workshop, senior officers or executives in national agencies or ministries, expressed fairly similar challenges – the need to incrementally improve their legal and policy frameworks that are appropriate and relevant to their national circumstances, and the collective desire to improve data sharing and coordination within their respective governments and national stakeholders, as well as with one another. This was seen as being particularly important within the context of regional cooperation and strengthening of regional geospatial infrastructures amongst the Pacific Island States and Territories. Participants also confirmed that they gained and improved their awareness and understanding of legal and policy considerations needed to strengthen national geospatial information management, including the collection, production and application of geospatial information.

27. Participants agreed that they are operating within a highly digital environment, and that their geospatial products should be digitalized and made fit-for-purpose within this highly digital environment. They called for the development of practical mechanisms to engage, support and assist Pacific Small Island Developing States to strengthen their national geospatial information management and systems with appropriate and sound legal and policy frameworks. In this regard, participants expressed their desire for country-level activity to support Member States to work through and address legal and policy considerations within their country-level situations and circumstances.

28. A mini-workshop was conducted by the chair of the Working Group at the fifth plenary meeting of the Regional Committee on United Nations Global Geospatial Information Management for Europe that was convened from 6–7 June 2018 in Brussels, Belgium. Participants at this mini-workshop considered some emerging trends in Europe, including:

(a) Legislation is gaining importance for speeding up digitalization programmes in the public sector;

- (b) More open government data; and
- (c) Call for stronger data protection and data security.

29. This regional workshop discussion also addressed legal and policy challenges that should be prioritized to address European circumstances; considered what may be good practices where legal and policy frameworks supported the development of national geospatial information management; and issues related to open data, location data, privacy and security, and authoritative data. The majority of the 27 participants indicated that issues related to data access, availability, licensing and liability were priority areas for consideration, particularly within an increasing open government data environment.

30. The Working Group is considering many of the outcomes from the workshops and events delivered, and to factor appropriately into its activities within its agreed work plan. With regard to expressed desires for country-level activity to support Member States to address legal and policy issues, Regional Committees on United Nations Global Geospatial Information Management may wish to consider appropriate modalities and associated resources needed to support Member States to develop an increased capacity to address legal and policy matters.

31. The Working Group concurred that language may hinder broader or wider consideration and delivery of capacity development initiatives, as the materials, in the form of the Compendium on the Licensing of Geospatial Information, and its accompanying training curricula and materials, are currently only available in English. The Committee of Experts may wish to consider seeking resources, including voluntary contributions from Member States, to support efforts to translate these materials into other languages as appropriate, to facilitate regional or sub-regional learning and capacity building to support Member States to address legal and policy matters in geospatial information management.

VI. Points for discussion

32. The Committee of Experts is invited to:

(a) Take note of the report and work of the Working Group, and its considerable progress to date;

(b) Express its views and provide guidance on the activities and progress of the Working Group, including recommendations with regard to its membership and resources needed to further the objectives and functions of the Working Group; and

(c) Express its views on the Compendium on Licensing of Geospatial Information with a view to its endorsement.