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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 eighth session, held in New York from 1 to 3 August 2018, the Committee of Experts adopted decision 8/106, in which it endorsed the compendium on the licensing of geospatial information and commended the Working Group on its activities and significant progress made, including having convened two international workshops and one mini-workshop that facilitated regional and subregional learning and capacity development. The Committee requested that the Working Group contribute its subject matter expertise towards the preparation and development of the strategic pathway on legal and policy matters in the Integrated Geospatial Information Framework. In this present report, the Working Group provides information on its progress and activities, including its first meeting held on the margins of the United Nations World Geospatial Information Congress convened in Deqing, China, in November 2018, at which it deliberated on the results of its use-case exercise and the development of implementation guidance aligned with the strategic pathway on legal and policy matters in the Integrated Geospatial Information Framework. The report contains details of the initial findings of the use-case exercise and options to address issues related to data security, data privacy, intellectual property and licensing in the context of data-sharing and data dissemination. In the report, the Working Group also discusses updates on its workplan for the period 2019–2020 and its ongoing contribution to the development of the implementation guide on the Integrated Geospatial Information Framework and provides an overview of its planned activities for 2019.

* E/C.20/2020/1

I. Introduction

1. Geospatial information is presented in many forms and mediums and provides the integrative platform for all digital data that has a location dimension to it. All countries and all sectors need geospatial information for national development, policy and decision-making, programs and projects. In an era of rapid digital transformation of society and economy, there are issues, challenges and opportunities related to the availability, accessibility, exchange, application and management of geospatial information, and these are common and experienced across various levels of society, government and economy. Increasingly, there is the need to address the issue of custodianship and authority of geospatial data within Member States, and beyond Member States for cross-border, regional and international collaborations and applications. Sound and enabling legal and policy frameworks on geospatial information management can address these issues.

2. The ultimate goal for any well working legal and policy framework is to maximize the utility of geospatial information while protecting a country or agency against potential business and security risks. The United Nations Integrated Geospatial Information Framework strategic pathway on policy and legal seeks to proactively monitor the legal and policy environment, and address issues arising from emerging technologies and creative use of geospatial information. The strategic pathway provides for sound and robust legal and policy frameworks for geospatial information management to achieve the goals around enriched societal value and benefits, and effective and integrated geospatial information management.

3. At its eighth session, the Committee of Experts adopted decision 8/106, in which it welcomed the Working Group's workplan for the biennium 2018–2019 focused on systematically addressing complex legal and policy issues in geospatial information management. The Committee endorsed the compendium on the licensing of geospatial information and appreciated the suggestion and offers to translate the compendium into languages other than English to facilitate better understanding by Member States with regard to addressing legal and policy matters.

4. The Committee of Experts commended the Working Group for facilitating regional and subregional learning and capacity development activities and requested that the Working Group contribute its subject matter expertise towards the preparation and development of the strategic pathway on legal and policy matters in the Integrated Geospatial Information Framework.

5. This present report provides information and updates to the Committee of Experts on the Working Group's progress and activities, including its first formal meeting. The Committee is invited to take note of the report, express its views on the initial findings of the use-case exercise, the updated workplan of the Working Group, and its ongoing contribution to the development of the implementation guide of the Integrated Geospatial Information Framework. Points for discussion and decision are provided in paragraph 32.

II. Membership of the Working Group

6. During this reporting period, Guyana and India joined the Working Group. The Working Group is presently composed of expert representatives from eleven Member States¹, and six from relevant organizations from the Committee of Experts' stakeholder community including the Centre for Spatial Law and Policy and the International Bar Association. The Working Group is presently chaired by Sweden.

¹ Australia, Austria, Canada, China, Finland, Guyana, India, Malaysia, Mexico, Sweden and Tonga (Kingdom of)

7. The Working Group is of the belief that it could additionally benefit from expertise in legal and policy matters as relate to geospatial information management, from across the developmental context and broader geographic representations including from Africa and the Arab States.

III. First formal meeting

8. The first formal physical meeting of the Working Group was held from 17-18 November 2018 on the margins of the United Nations World Geospatial Information Congress². The meeting was hosted by the Ministry of Natural Resources of China at the Novotel Deqing Moganshan Hotel in Deqing, China.

9. The two-day meeting was conducted in a very collegial and productive atmosphere, expert representatives and invited participants readily shared and discussed a range of legal and policy matters that impacted geospatial information management including the issue of authoritative data. The Working Group noted the growing dependency on geospatial information in daily activities and transactions; the emergence of innovative approaches and technologies in the collection, production and delivery of geospatial information; the need for geospatial data to be "machine-readable"; and the need for better awareness of legal and policy challenges more broadly within Member States.

10. The issue of authoritative data was discussed, and the Working Group considered the continuum of mechanisms that support authority, such as approaches or mechanisms for compliance, for compulsion, and for cooperation. It was also noted that some jurisdictions shifted the recognition of authority from policy measures to legislative mandates.

11. The Working Group deliberated extensively on the activities identified in its workplan and their progress. Recalling its decision to focus on privacy, security, intellectual property and licensing during its initial years, the Working Group considered the challenges related to 'authority and custodianship', which is another area of focus.³ Members of the Working Group took turns to share the issues and challenges they faced, and the experiences they had when addressing legal and policy matters in geospatial information management. This provided rich context and perspectives and aided the discussion and review of the workplan.

12. The Working Group also discussed the challenges with open data and possible approaches to address these challenges, worked through and analysed the responses from its use-case exercise, and drew some initial findings. The Working Group reviewed and discussed an initial draft of the implementation guidance aligned to the policy and legal strategic pathway of the Integrated Geospatial Information Framework prepared by the Centre for Spatial Law and Policy and provided constructive comments and feedback.

13. This meeting provided the Working Group with a conducive forum to interact, exchange knowledge and experiences, and identify and deliberate on legal and policy issues and challenges in geospatial information management. The meeting also afforded opportunities to connect with the Expert Group on Land Administration and Management.

² 19-21 November 2019, Deqing, Zhejiang Province, China

³ The Working Group in its workplan had identified nine areas of focus, namely and in no order of prominence, privacy; security; intellectual property, ownership; authority and custodianship; geo-regulation, spatial extents of legislation; quality, uncertainty and timeliness; access, availability, licensing and liability; cost recovery and pricing; and standards.

14. The Working Group agreed to a number of outcomes that included: i) preparation of a meeting report; ii) to update and revise the workplan to include additional activities identified for the biennium 2019-2020; iii) further consider and analyze the use-case responses, and encourage additional responses; iv) prepare a 'white paper' to address issues, implications, consequences, and solutions from the findings of the use-case; v) conceptualize and scope an appropriate side event to discuss further the findings of the use-case and the proposed 'white paper'; and vi) support the development of Part 2 – Implementation Guide of the Integrated Geospatial Information Framework.

IV. Workplan and activities

15. The Working Group convened an open meeting on the margins of the eighth session of the Committee of Experts in August 2018 to engage with delegates from Member States and observers on the objectives and activities of the Working Group. During this reporting period, in addition to its formal meeting, the Working Group met virtually to progress its workplan and activities. The three virtual meetings convened were:

- (a) Third (virtual) meeting on 10 October 2018;
- (b) Fifth (virtual) meeting on 12 February 2019⁴; and
- (c) Sixth (virtual) meeting on 28 May 2019.

Compendium on licensing of geospatial information

16. The Working Group welcomed volunteered resources from Belgium to translate the compendium on licensing of geospatial information into Dutch and French, and from Spain to translate the compendium into Spanish. The Working Group and secretariat acknowledge the contributions of Belgium, Canada, the Netherlands, Mexico and Spain in translating or reviewing the translated compendium. These efforts greatly improve the understanding and utility of the compendium, especially at the regional and/or national levels. There may be similar additional translation efforts completed or underway that the Working Group has yet to be informed.

Capacity development

17. The Regional Committee on United Nations Global Geospatial Information Management for the Arab States (UN-GGIM: Arab States), with the support of the secretariat, organized a two-day workshop on legal and policy frameworks for geospatial information management from 16-17 February 2019 in Jeddah, Kingdom of Saudi Arabia prior to its sixth plenary meeting. UN-GGIM: Arab States had recognized the need for its Member States to address legal and policy issues that impact geospatial information management.

18. The workshop raised awareness and understanding on how an existing and evolving legal, regulatory and policy environment impacts the availability, accessibility and application of geospatial information. The participants, the majority of whom do not have legal training, were engaged and stimulated to think and consider possible/feasible nationally formulated solutions tailored to national circumstances. The workshop acknowledged: i) the importance of sharing and exchanging experiences within the region; ii) the value of guidance and good practices to reference when considering appropriate legal and policy frameworks to address institutional arrangements – roles and responsibilities, and institutional collaboration; iii) the need to be proactive, to be engaged in policy and legislative processes to the extent possible; and vi) to raise awareness on the importance to address legal and policy issues at all levels – policy makers, producers and users of geospatial information.

⁴ Fourth meeting was the formal meeting of the Working Group from 17-18 November 2018 in Deqing, China

Development of implementation guidance aligned to Strategic Pathway 2 of the Integrated Geospatial Information Framework

19. The initial draft of the implementation guidance aligned with Strategic Pathway 2 – Policy and Legal of the Integrated Geospatial Information Framework was discussed at the Deqing meeting of the Working Group. Valuable insights and perspectives were provided together with constructive comments and feedback. Subsequently, at its fifth (virtual) meeting, the Working Group considered a draft implementation guidance document with recommended actions aligned with the policy and legal strategic pathway of the Framework.

20. The guidance and recommended actions were helpful, useful, and applicable by the Working Group. As an example, a recommendation was to perform a ‘gap-analysis’ by screening relevant and existing legislation, policies and context which may include a number of issues that would otherwise be deemed ‘sensitive’ in some national situations. The Working Group further observed that the guidance and recommended actions had taken into consideration differing circumstances and levels of development. The Working Group noted that the compendium on licensing of geospatial information is an important resource and reference in the development of the implementation guidance. Additional feedback and suggestions were provided by the Working Group into the development process of the implementation guidance with a view to have the draft finalized at its next virtual meeting.

21. The Working Group at its sixth (virtual) meeting agreed that the implementation guidance document developed is an important resource for the implementation of the Integrated Geospatial Information Framework. The implementation guidance document was developed and prepared referencing a significant body of knowledge and work contributed by Member States, the Working Group, and the Centre for Spatial Law and Policy. The Working Group agreed that the “*Guidance and Recommended Actions aligned with Strategic Pathway 2: Policy and Legal*” document be provided as a background document to this present report and has thus been provided.

Workplan for the biennium 2019-2020

22. The Working Group at its Deqing meeting agreed to update and revise the workplan to include additional activities identified for the period 2019 to 2020. During each of its meetings, formal or virtual, the Working Group has continued to review its activities and progress vis-à-vis its workplan. The Working Group finalized its updated workplan for the biennium 2019–2020 at its sixth (virtual) meeting, taking into consideration the discussions and activities agreed by the Working Group at its previous meetings and progress. The updated workplan is provided as a background document to this present report.

23. The Working Group plans to convene a second formal meeting on the margins of the Sixth High Level Forum on United Nations Global Geospatial Information Management to be held in the United Kingdom in April 2020.

V. Use-case exercise

24. The scope of the use-case was to address geospatial data sharing across borders, where the need of making data more openly available and accessible can be difficult to achieve for legal and policy reasons. The Working Group made some initial findings but observed that these initial findings came from situations where there exists some form of legal and policy framework addressing the collection, production and sharing of geospatial data. These initial findings will need to be contrasted with situations where there is a lack of, or insufficient, legal and policy frameworks and geospatial data. Hence the Working Group continue to appeal for additional contributions to its use-case exercise.

25. The initial findings from the use-case exercise revealed four general legal and policy issues and challenges:

- (a) Laws and policies requiring data be collected by ‘authoritative’ data providers limit the availability of geospatial information to address certain issues;
- (b) Licensing terms of commercial data providers can restrict the use of geospatial information to address key governmental functions;
- (c) Existing legal and policy frameworks are not able to adapt to new technologies critical to the collection, use and sharing of geospatial information; and
- (d) National and homeland security concerns hinder the ability of the geospatial community to collect and use certain types of geospatial information.

26. The Working Group observed that the laws and policies behind these issues and challenges characteristically belong to two groups of laws and/or policies. The first group is around the issue of ‘authority’, as an example, to decide who may collect data and what data may be collected. The second group is around the processing of information and the assessment of risks with data sharing.⁵ When considering feasible options to address these legal and policy issues and challenges, the approaches may be different depending on what information, actors and purposes are involved. These differences can impact the availability and accessibility of geospatial information at the local, national and international levels. Possible solutions included: i) provision of exceptions for specific purposes in data sharing; and ii) transboundary cooperation arrangements for data sharing.

27. The potential of geospatial information itself (as an example, with the increasing innovative and creative applications) may also increase the need for legal and policy mechanisms that go beyond support for data sharing, but also to balance the potential against possible risks, including those to national security and privacy interests. Such mechanisms could be tools or mechanism for compliance, for coercion, and for collaboration. Different legal and policy barriers can be addressed by different legal and policy mechanism.

28. In considering the issue around data protection, the Working Group recognized the need to strike a balance between security, and openly available and open use; which vary widely and depend upon national circumstances. There is the need to assess what data is harmless and what is sensitive, and perhaps address these with a set of principles. When considering the issue of authority and custodianship, it was observed that national agencies generally have sufficient authority under existing legislation, regulation, policy or some form of decision to undertake their day-to-day activities. However, the need here is to better

⁵ It is noted that the two groups discussed correspond to two of the elements of the Strategic Pathway on Policy and Legal in the Integrated Geospatial Information Framework. The elements are ‘Governance and Accountability’ and ‘Data Protection, Licensing and Sharing’.

understand who is involved in the geospatial data supply chain and to bring about greater data sharing and coordination. In this regard, a continuum of mechanisms that support authority and custodianship will be considered.

29. During this ninth session of the Committee of Experts, the Working Group will convene a roundtable amongst Member States, industry and related stakeholders to further consult and consider the issues, challenges and possible approaches arising from the use-case exercise and the Working Group's considerations. The outcome of the roundtable and additional responses to the use-case from Member States will further contribute to a better understanding of the issues and challenges, to consider feasible options and solutions together with proven practices towards developing robust, sound and enabling legal and policy frameworks that optimize the application and value of geospatial information towards enriched societal, environmental and economic benefits and value.

Proposed white-paper

30. A 'white paper' was proposed as an outcome document of the Working Group, to capture the knowledge, understanding and experiences from the use-case exercise and the substantive considerations and results of the Working Group. It was proposed that the paper be prepared in two stages. A draft will be initiated under the first stage and be considered at the proposed roundtable convened as a side event during this ninth session, the outcome of which will feed into the preparation of the proposed 'white paper'. The second stage was for the 'white paper' to be deliberated at the second formal meeting of the Working Group in April 2020.

31. The aim and purpose of the 'white paper' are to address complex legal and policy issues in geospatial information management, and to support the implementation of the Integrated Geospatial Information Framework Strategic Pathway 2 – Policy and Legal. In this regard, an Implementation Guide is being developed to assist and provide countries with guidance and recommended actions to establish, strengthen or organize their national (or sub-national) arrangements towards enriched societal, economic and environmental benefits and value from integrated geospatial information management. The guidance to implement the Framework is built upon the existing body of work of the Committee of Experts, its Subcommittee, and Expert and Working groups including this Working Group.

VI. Points for discussion

32. The Committee of Experts is invited to:

(a) Take note of the report on the activities and progress of the Working Group including an updated workplan for the biennium 2019-2020, provided as a background document to this present report;

(b) Take note of the efforts and progress of the Working Group in developing guidance to support the implementation of the Integrated Geospatial Information Framework and the “*Guidance and Recommended Actions aligned with Strategic Pathway 2: Policy and Legal*” document, provided as a background document to this present report; and

(c) Express its views and provide guidance on the activities of the Working Group, including its workplan, use-case exercise and proposed white paper.