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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 on the legal and policy issues to be considered in developing a framework to support global geospatial information management in the public and private sectors, including issues related to authoritative data.

At its fourth session, held in New York from 6 to 8 August 2014, the Committee of Experts adopted decision 4/109, in which it welcomed the report on legal and policy frameworks, including issues related to authoritative data, and noted the increased location-based technological developments around the world that could impact the development of legal and policy frameworks as they apply to the collection, use, storage and dissemination of geospatial information. The Committee of Experts also recognised the concerns expressed by Member States regarding the International Bar Association's proposed Convention on Geoinformation, and agreed that the Convention was attempting to address complex geospatial issues that require further careful consideration. Noting that Member States should be exclusively consulted on the formulation and possible establishment of the proposed Convention, the Committee of Experts requested the Bureau and the Secretariat to communicate with the International Bar Association on the proposed Convention, and to continue to monitor and inform the Committee and Member States on the emerging legal and policy issues. The report, prepared with the assistance of the Centre for Spatial Law and Policy, describes the issues that have an impact on the requisite legal and policy frameworks globally, and highlights the Secretariat's engagement with the International Bar Association to draft a Convention on Geoinformation.

I. Introduction

1. At its fourth session, held in August 2014, the Committee of Experts noted the increased location-based technological developments around the world that could impact the development of legal and policy frameworks as they apply to the collection, use, storage and dissemination of geospatial information. With the growing convergence of geospatial information and associated services, particularly data acquisition and location-based services, with other non-traditional business sectors, many new opportunities are opening up. However, the associated legal and policy issues, and potentially new regulatory regimes, are becoming more complex and more important for national geospatial information agencies to consider. Due to the complexities of the issues, the Committee requested the Bureau and the Secretariat to continue to monitor the emerging geospatial legal and policy issues, including issues related to authoritative data, and inform the Committee and Member States on its efforts.

2. At its fourth session, the Committee also recognized the concerns expressed by Member States regarding the International Bar Association's proposed Convention on Geoinformation. The Committee agreed that the Convention was attempting to address complex geospatial issues that require further careful consideration, and noted that Member States should be exclusively consulted on the formulation and possible establishment of the proposed Convention. Therefore, the Committee requested the Bureau and Secretariat to reach out to the International Bar Association (IBA) on the proposed Convention, and communicate the disquiet shown by Member States, and the Committee's continued efforts in this area.

3. This report, prepared with the assistance of the Centre for Spatial Law and Policy, updates the Committee of Experts on recent developments that could have an impact on legal and policy frameworks supporting geospatial information. It also captures the Secretariat's engagement with the IBA regarding their current work on a proposed Convention on Geoinformation. The Committee of Experts is invited to take note of the report and to express its views on the way forward in addressing the legal and policy frameworks for geospatial information management, including issues related to authoritative data. Points for discussion and decision are provided in paragraph 20.

II. Developments impacting existing legal and policy frameworks

4. There have been a number of legal and policy developments around the world that will likely have an impact on geospatial information management. Many of the most important developments arise as geospatial technology and geospatial information are integrated into and with other technologies. While this integration results in more complete solutions to end users and highlights the growing maturity of the geospatial ecosystem, it also raises a number of new legal and policy challenges for the geospatial community.

5. As technology changes, coupled with increasing interoperability among sectors, the geospatial community will have to have greater interaction with legal and regulatory bodies. For example, many in the geospatial community believe there is great promise for unmanned aerial vehicles (UAVs), commonly known as

drones, for both traditional and new applications using geospatial information (geoinformation). However, while sensors have been deployed on satellites, manned aircraft, and ground-based platforms for years in many countries around the world, government authorities have openly expressed concerns with regard to sensors mounted on drones. Such concerns include potential injury to persons and property, privacy and homeland security. As a result, geospatial organizations that wish to utilize drones will increasingly have to interact with a new set of government bodies and regulations. The challenge therefore is that the collection and use of geoinformation from drones is likely to be seen as a threat to a society, rather than a benefit, by many regulatory bodies.

6. Another potential consequence of the integration of geospatial technology is that governments are more likely to introduce laws, policies and regulations that restrict the use of geoinformation and/or have unintended negative consequences for the broader geospatial community. For example, Uber and Lyft (transportation network companies) capture and use geoinformation in smartphone applications so customers can hire private drivers to take them to their destination. These businesses are proving to be quite disruptive to the traditional taxi industry, and lawmakers and regulators are struggling to adapt the existing laws and regulations pertaining to taxis, to Uber and Lyft drivers. As a result, some regulators have tried to prohibit Uber and Lyft from including maps on their smartphone applications, thereby making it difficult for a user to know when a private driver may be nearby.

7. In addition, when lawmakers and regulatory bodies do try to address a perceived legal or policy issue involving geoinformation, the trend is to introduce new laws and regulations rather than adapt existing laws or policies. Lawmakers often receive more publicity from stakeholders and their constituents by creating new legislation rather than amending or broadening existing legislation. Similarly regulatory bodies often focus on particular industry segments or technologies (e.g. energy, transportation, and telecommunications) and therefore have limited ability to change another agency's regulations. As a result, it is often easier to create new laws and regulations rather than modify a variety of otherwise unrelated laws and regulations. Unfortunately, these new laws and regulations tend to be restrictive rather than technology-enabling.

8. One likely result is that it is often difficult to conform to these new laws and regulations. For example, if government agencies each develop their own definitions of what types of geoinformation should be protected for privacy purposes, these definitions will often be different. In addition, each agency may have different requirements as to how long the information can be stored and whether it can be distributed to third parties. These differences will make it increasingly difficult for organizations that try to develop products and services using geoinformation from across industry sectors and technology platforms. Organizations will need to spend time and money making sure they identify and comply with diverse and, in some cases, divergent regulations.

9. This issue will become even more complex when aggregating and sharing geoinformation from various sectors and technology platforms in order to address important transnational issues, such as sustainable development. The Third High Level Forum (HLF) on United Nations Global Geospatial Information Management (UN-GGIM) – Sustainable Development with Geospatial Information, held in October 2014 in Beijing, China, highlighted the critical need

for the sharing of geoinformation in order to achieve the sustainable development goals. Specifically, the Beijing Declaration issued at the conclusion of the HLF highlighted the need to “promote the greater use and application of geospatial information for managing climate change and disaster management”.

10. The HLF stressed that this sharing of geoinformation needs to occur not only between government agencies, but also between stakeholders in the broader geospatial community, including new stakeholders and technologies. For example, the Beijing Declaration cited the need to “leverage the new data and technology revolution, including consideration of the importance of the wisdom of the crowd, citizen engagement, open source, sensors, the dynamic nature of the data, semantics, the provider community and geospatial enabled solutions for planning, implementing and assessment.” It added that “engagement should continue with the important work of the community on placing authority into informal data sources.” These will include stakeholders from emerging technologies, such as UAVs, cube-sats, indoor mapping, smart grids and autonomous vehicles. Unfortunately, each of these technologies will likely be subject to their own legal and regulatory regimes.

III. Engagement with the International Bar Association

11. In December 2014, the Secretariat reached out formally to the Executive Director of the IBA regarding the proposed Convention on Geoinformation. The Secretariat reflected on the various concerns of Member States including that the proposed Convention does not reflect a complete understanding of the nature of geospatial technology or the geospatial community at large, and that continued efforts to promote the proposed Convention could have a number of negative impacts on Member Nations that collect and use geospatial information for a variety of governmental, societal and economic purposes.

12. The communication also noted that the Committee acknowledged that there are important geospatial information legal and policy issues that must be addressed, and that it will continue to engage with lawmakers, policymakers and lawyers on geospatial technology requirements, data including open data, applications and processes, as well as the value of geospatial information management. In addition, it was noted that the Committee will continue to engage various stakeholders in an effort to find ways to balance perceived legal and policy risks with the numerous benefits associated with geospatial technology and the many critical uses of geospatial information. In recognition of the valuable role that the IBA and its members can play in this process, the Secretariat urged the IBA to reconsider its efforts to promote the proposed Convention without substantial input from the Secretariat and its Member States, and to work with and consult the Committee of Experts on this important initiative.

13. Subsequent to the letter, a productive teleconference was held between the Secretariat and Executive Director of IBA on 12 March 2015. This was followed by a formal written response from the IBA on 24 March 2015. Noting that the proposed Convention was a long-standing process, with its origins dating back to 2008, the IBA agreed that there was a need for greater stakeholder engagement, particularly with the Committee of Experts, so that the expert opinions are brought into the debate. The IBA reiterated its willingness to collaborate with the Committee, and that, in viewing cooperation with the Committee as an important part of IBA’s work on the proposed Convention; it would be open to participating in both selected workshops and bi-lateral meetings as appropriate. In this regard,

the IBA has submitted a Briefing Note on the proposed Convention for the Committee's information, and is provided as a background document to this report.

IV. Addressing the legal and policy challenges

14. Based on the issues identified in this report it becomes apparent that the geospatial community now needs to be more proactive in the geo-legislative arena. The Secretariat therefore requests that the Committee consider the following recommendations.

15. Noting the increased location-based technological developments that could impact the development of legal and policy frameworks as they apply to the collection, use, storage and dissemination of geospatial information, the Secretariat and the Bureau believes it is important to continue to work with the Centre for Spatial Law and Policy to identify the legal and policy developments around the world that could have an impact on geoinformation management at the local, national and international levels. The Secretariat will continue to share these developments with the Member States through the Committee and other UN-GGIM channels, including the regional committees.

16. The Secretariat and the Bureau believes it is important to continue to express its concerns with the proposed Convention on Geoinformation to the International Bar Association. In addition, the Secretariat and the Bureau will work with relevant stakeholders, including the Member States, the Centre for Spatial Law and Policy and the International Bar Association, to begin identifying ways in which to balance perceived legal and policy risks with the numerous benefits associated with geospatial technology and the many critical uses of geospatial information.

17. Action is required to address the issues relating to data collection, use and accessibility using drones. Initially the Committee of Experts should evaluate and agree on whether the use of drones is integral to the growth of the geospatial sector. The outcome of this task could be a statement on the importance of drones in advancing the geospatial sector and overall sustainable development. Should there be overall agreement, research and a global survey could be conducted to determine what measures have been and/or are to be adopted and/or implemented by national governments on the use of drones. This should be followed by an evaluation of these measures to determine their impact on the growth and evolution of the geospatial sector. Based on the results of both studies it is recommended that a set of global guidelines be prepared to support the use of drones as a source of geospatial data collection.

18. The Committee of Experts may wish to consider increasing advocacy within the legislative/legal community on the importance and use of geospatial data for national and global development. Clearly there is need for two way public education and awareness; for geospatial professionals to understand the legislative processes and the creation of laws and their implications, and on the other hand, for lawyers and legislators to understand the use and benefits of geospatial information. Should the Committee agree that two way advocacy is needed, then a plan of action and strategy could be prepared to begin the engagement process between relevant parties. The IBA, the Centre for Spatial Law and Policy, the Global Spatial Data

Infrastructure Association – Legal and Socioeconomic Committee, and academia should be considered as important contributors to this exercise.

19. The Committee is invited to note the cross cutting nature of issues between the work of the National Institutional Arrangement Working Group and those raised in this paper, and to further consider the hosting of a UN-GGIM workshop in 2016 to further explore legal and policy and national institutional arrangement issues, and to devise appropriate strategies and action plans.

V. Points for discussion

20. The Committee may wish to:

(a) Take note of the report and updates on recent developments that could have an impact on developing legal and policy frameworks supporting geospatial information;

(b) Provide guidance on the Secretariat's engagement with the International Bar Association and its proposed Convention on Geoinformation;

(c) Encourage contributions from Member States, and appropriate international professional associations, academia on work items as applicable; and

(d) Consider the recommendations for action and express its views on the way forward in guiding activities to address the legal and policy frameworks for geospatial information management, including issues related to authoritative data.