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## Committee of Experts on Global Geospatial Information Management

### Sixth session

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Item 13 of the provisional agenda\*

### Knowledge base for geospatial information management

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### Note by the Secretariat

#### Summary

The present paper contains the report of the Secretariat on new developments with regard to the knowledge base for geospatial information management for consideration by the Committee of Experts on Global Geospatial Information Management.

At its fifth session, held in New York from 5 to 7 August 2015, the Committee of Experts took note of the report of the Secretariat on the status of the development of the knowledge base for geospatial information, including its functionalities and dissemination through a web-based portal. The Committee acknowledged the critical role of the knowledge base portal as a valuable tool for information-sharing and capacity-building, encouraged Member States and the five regional committees to continue to provide relevant material to the Secretariat for the population of the knowledge base and requested the Secretariat to periodically report on the continued maintenance of the portal. In its report, the Secretariat provides an overview of the improvements in the thematic structure of and the content and functionalities added to the existing resources of the knowledge base since the Committee's fifth session. Given that the geospatial information management portal has been developed, the report outlines a number of actions to be taken for updating it.

## **I. Introduction**

1. At its fifth session, held in August 2015, the Committee of Experts, by decision 5/111 (see E/2015/46-E/C.20/2015/17), took note of the report of the Secretariat on the status of development of the knowledge base for geospatial information, including its new items, content and functionalities. The Committee of Experts acknowledged the critical role of the knowledge base portal as a valuable tool for information-sharing and capacity-building, encouraged Member States and the five regional committees to continue to provide relevant material to the Secretariat for the population of the knowledge base, and requested the Secretariat to periodically report on the continued maintenance of the portal.

2. The present report provides an overview of the improvements brought to the thematic structure of and the content and functionalities added to the existing resources of the knowledge base since the Committee's fifth session. Given that the portal has been developed and is currently at the status of a final product, the report outlines a number of actions to be taken for updating and maintaining it. The Committee of Experts is invited to take note of the present report.

## **II. Improvements in the thematic structure, content and functionalities of the knowledge base**

3. Taking into account decisions made by the Committee and comments provided by Member States, following the presentation of the report on the knowledge base at the fifth session of the Committee of Experts (E/C.20/2015/11 Add.1), the Secretariat has made improvements to the structure of the sub-categories of the knowledge base to highlight some themes and enable greater ease of access and discovery. Under the Global category the following sub-categories have been added, these are "Future Trends" and "Status of Mapping in the World".

4. The Secretariat, with the assistance of Interns, has continued to populate the knowledge base with key content. Links to and information on documentation related to educational/training institutions, integration of geospatial and statistical information, national spatial data infrastructures, as well as for national geospatial information laws and directives, were uploaded to the knowledge base under the Global/UN-GGIM Resources Centre and Global/Integration of Geo-Statistical Information category and sub-category, as well as the National category.

5. Two major items the Committee of Experts has been working on were upgraded and highlighted: the "Future Trends in Geospatial Information Management: the five to ten year vision", and the "Status of Mapping in the World". The Committee has recognized the need to document the emerging trends in the geospatial information world over the next 5 to 10 years, and that such trends would help guide the work programme and frame the technical discussion of the Committee of Experts, and keep the professional geospatial community abreast of new trends in geospatial information and particularly with the impact of these geospatial technologies. The "Status of Mapping in the World" has been a continuing effort carried out by the International Society for Photogrammetry and Remote Sensing (ISPRS) as a valuable contribution to the work of the Committee since 2012. With contributions from 115 Member States, the status of mapping provides a synopsis of the information collected on the infrastructure for mapping in various countries and regions, giving a comprehensive picture of the key trends, issues and gaps in the status of mapping and geospatial information in the world.

6. With regard to the improvements in functionalities and the Graphic User Interface, it is worth noting that a test has been conducted to represent some content through maps. Indeed, a distribution map of National Spatial Data Infrastructures (NSDI) has been created to display and highlight the countries which have or are in the process of building their NSDI. Some improvements have also been brought to the Graphic User Interface of the portal which looks with a better design by comparison to the previous one which was too basic.

### **III. Maintenance and future developments of the knowledge base**

7. A knowledge base portal is always a “work in progress”. Its content needs to be updated and continuously reviewed. Improvements to make the access to the portal easier and more intuitive to users should also be carried out, at least, periodically. In short, maintaining the knowledge base should be an ongoing and continuous task for the Secretariat, acknowledging the limitation of resources and that they may not always be available.

8. With regard to the future developments, it is advantageous to have the information contained in the knowledge base organized by countries in order to measure progress and changes over time in the status of geospatial information. Questionnaires related to the status of geospatial information within countries gain to be carried out online through the knowledge base portal with a periodic analysis to have indicators on the progress made by countries. More importantly, these indicators will allow identifying the gaps experienced by countries, and help find the best ways to work with them and the relevant organizations on how to overcome and close these gaps.

9. Another important body of information needed for the knowledge base and already proposed by the United Nations Group of Experts on the Integration of Statistical and Geospatial Information (EG-ISGI) is the Global Statistical Geospatial Information Framework, as a global principles framework for the integration of statistical and geospatial information. The development of this Framework will contribute to the strengthening of the institutional cooperation between the National Geospatial Information Authorities and the National Statistical Offices, and enhancing the dialogue between the geospatial and statistical communities. This body of information would be added as an item under the sub-category: Integration of Geo-Statistical Information.

10. Geospatial Information in support of the SDGs Indicator Framework and the 2020 Round of Censuses is also a very important body of information to be shared through the knowledge base. More specifically, these global initiatives offer the opportunity for geospatial information and earth observations to prove how they are able to provide new and consistent data sources and methodologies to integrate multiple ‘location-based’ variables to support and inform official statistics and the indicators for the SDGs, as well as to support census and statistical activities. This body of information can be covered under the existing sub-categories: Geospatial Information and SDGs and the Integration of Geo-Statistical Information.

### **VI. Conclusion**

11. The development of the knowledge base has reached the stage of a final product. The population of the knowledge base will continue and be ongoing, and its maintenance will be a 'work in progress' in the foreseeable future. In this regard, the Secretariat would like to reiterate its thanks to China for its continuing support to the knowledge base, particularly for dedicating fellows from the National Administration of Surveying, Mapping and Geo-information (NASG) to work on its development until the final stage. The knowledge base portal is still open for further developments upon requests from Member States, the main users targeted by this knowledge base.

12. It is worth reiterating that since the knowledge base has been established, as requested by Member States and dedicated primarily to their user needs, its sustainability relies on the degree of their involvement and a continued provision of updated documents on the status of development of their geospatial information infrastructures. The benefits of having such an important global geospatial knowledge resource available, especially for developing countries to explore and learn from, are immense and should not be underestimated.

13. Equally important is the contribution of the UN-GGIM Regional Committees to populate the knowledge base with useful and productive information on the progress made at regional levels. In particular, Regional Committees could help with the provision of country profiles of their member countries, as this Fact Book, sought since the inception of the knowledge base, is very helpful to measure the progress being made at national and regional levels in the field of geospatial information.

14. The Committee of Experts is invited to take note of the present report.