A Preliminary UN-GGIM Work to Integrate Land and Sea

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SUMMARY

The challenges of integrating various domains such as terrestrial and maritime are not new to many geospatial professionals. Recently under the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), the UN Expert Group on Land Administration and Management (EG-LAM) together with other functional groups such as UN Working Group on Marine Geospatial Information, has carried out the work to develop a guidance paper on integration of terrestrial, maritime, built, and cadastral domains. The guidance paper aims to provide a reference for developing, unifying, strengthening the integration of the four domains in geospatial information management.

Terrestrial and maritime domains are generally referred to topography and baltimetry surfaces, while built and cadastral domains are respectively referred to built environment and ownership space. Understand the huge amount of work to cover the four domains, the paper will be developed in phases with initial focus on land and sea integration (i.e. terrestrial and maritime domains) followed by built and cadastral domains. In the presentation, we will describe the background and motivation of the on-going work, its approach, current progress, etc. The presentation aims to share, discuss, and solicit feedback and potential solutions from geospatial professionals.

The issues of integration are not merely technical, they are also political, social, and economic. To deal with the issues we take the approach by anchoring the nine strategic pathways from the United Nations Integrated Geospatial Information Framework (UN-IGIF). We conduct focus group discussions, workshops, technical discussions with professionals from government agencies, academia, and the private sector to understand their problems and possible solutions. We not only document success stories but also are interested in lessons learnt or unsuccessful stories. When the feedback is gathered, we analyse them based on the nine strategic pathways and recommend solutions as deem necessary.

The objective of the guidance paper is two-fold. Firstly, it is to identify innovative and insightful ways to deploy the UN-IGIF on addressing the issues of integration. Secondly, it aims to encourage collaboration across domains and working groups in the UNGGIM, and the international communities to address global challenges, through the co-development of the paper.

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BIOGRAPHICAL NOTES

Kean Huat SOON is Principal Geomatics Manager at Geospatial & Survey Division of the Singapore Land Authority. He is Chair of Working Group 2 – Cadastre and Land Management under the UN-GGIM-AP, the regional committee of the United Nations Global Geospatial Information Management for Asia and the Pacific. He earned a MSc in Geography from the Pennsylvania State University, a MSc in Geoinformatics and Bachelor of Surveying (Land) from Universiti Teknologi Malaysia. His research interests include semantic interoperability, data modeling, cadastral information system and ontology.

Victor KHOO is Director at the Geospatial & Survey Division of Singapore Land Authority (SLA). He is also one of the Co-Chairs of the Experts Group of Land Administration and Management (EG-LAM) under United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM), and a Vice President of UN-GGIM-AP. He received his Ph.D. and Master of Engineering from the Nanyang Technological University (NTU), Singapore and his bachelor's degree in Land Surveying from Universiti Teknologi Malaysia (UTM). Victor is a Registered Surveyor, a professional surveyor registered under the purview of Singapore's Land Surveyors Act. He works in diverse geospatial related subjects that encompass the collection, management, and dissemination of geospatial data. His specific areas of interest include Differential GPS, Cadastral Surveying and Spatial Data Infrastructure.

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