

How the United Nations Subcommittee on Geodesy Is Strengthening Geodetic Foundations to Improve Decision Making

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SUMMARY

The Global Geodetic Reference Frame (GGRF) is the term adopted by the United Nations (UN) to describe the collection of datums, infrastructure, governance, data analysis, standards and people which together enable accurate and reliable positioning and the alignment of geospatial data. The GGRF is an important foundation for evidence-based policies, decisions and program delivery. It underpins the collection and management of nationally integrated geospatial information and is used to monitor our dynamic Earth for social, environmental and economic initiatives.

In a world increasing reliant on high accuracy measurements and location based services, the sustainability of the GGRF is more important than ever before. However, its quality, accuracy and accessibility are at risk of failure due a multitude of complex issues including a lack of geodetic infrastructure, poor accessibility in some regions, a reliance on in-kind contribution and insufficient collaboration and coordination.

Recognising the importance of the GGRF to an ever-increasing location-based society, the UN General Assembly adopted resolution 69/266 in February 2015, entitled 'A Global Geodetic Reference Frame for Sustainable Development'. Since 2015, the UN Global Geospatial Information Management Subcommittee on Geodesy (UN-GGIM SCoG) have been working with countries to better understand what they need to sustain, and improve access to, the GGRF. Furthermore, it is hoped that a more robust GGRF will improve a country's ability to measure and monitor progress against initiatives such as the 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction, and the Small Island Developing States Accelerated Modalities of Action (SAMOA) Pathway.

This presentation will discuss the UN-GGIM SCoG Position Paper on Sustaining the GGRF which

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was provided to the Tenth Session of the UN-GGIM Committee of Experts (UN-GGIM CoE) in August 2020. The paper describes a plan to achieve the long-term sustainability of the GGRF by delivering improvement in five focus areas: Governance; Geodetic Infrastructure; Policies, Standards and Conventions; Education, Training and Capacity Building; and Communication and Outreach. The presentation will also discuss one of the recommendations of the position paper – the establishment of a Global Geodetic Centre of Excellence – which was welcomed by UN-GGIM CoE and will be established in Bonn, Germany. The Centre will assist in sustaining the GGRF by addressing critical gaps in global geodesy capacity and capability including: enhancing global cooperation and coordination; strengthening geodetic infrastructure; making geodetic data Findable, Accessible, Interoperable and Reusable; supporting education, training and capacity building, and improving communication.

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