A Global Survey of Reference Frame Competency in terms of Education, Training and Capacity Building (ETCB): Results, Analysis and Update

Ryan Keenan (Australia), Allison Craddock (USA), Mikael Lilje (Sweden), Rob Sarib (Australia) and Demian Gomez (USA)

Key words: Capacity building; Reference frames; Geodetic compentency; capability development

SUMMARY

Modernising geodetic infrastructure such as densifying continually operating reference stations (CORS), are a vital component to realising a global geodetic reference frame (GGRF), as well as underpinning the management of a nation's geospatial information (data) structure. As such, a strong foundation of Education, Training and Capacity Building (ETCB) is also essential to ensure geodetic infrastructure (including systems) can be established, maintained and operated correctly, but also that their data and information outputs can be processed, analysed and interpreted correctly.

In early 2018, the UN-GGIM Subcommittee on Geodesy facilitated an online self-assessment and questionnaire of all member nations' sovereign capabilities to manage and maintain reference frames. From the feedback, the Subcommittee's working group on ETCB developed a Reference Frame Competency matrix. In relation to this framework, a second Survey was run in 2020-21 so as to gain deeper insights into a nation's status, and how they have progressed the development of their competencies.

This paper presents the results of the second survey, affords a brief analysis of the findings, challenges, and also identifies a number of follow-on tasks for the UN-GGIM Subcommittee on Geodesy, and its working groups to contemplate. For example, further consideration of - initiatives that demonstrate how the GGRF will benefit broader community; action that can improve geodetic capacity and capability in regions to address the global challenges of today, and concepts to influence the scope of the forthcoming Global Geodetic Centre of Excellence.

_____

A Global Survey of Reference Frame Competency in terms of Education, Training and Capacity Building (ETCB): Results, Analysis and Update (12230)
Ryan Keenan (Australia), Allison Craddock (USA), Mikael Lilje (Sweden), Rob Sarib (Australia) and Demian Gomez (USA)

FIG Working Week 2023
Protecting Our World, Conquering New Frontiers
Orlando, Florida, USA, 28 May–1 June 2023