Transitioning to a New Paradigm – the Development and Implementation of a Modernised National Datum from a Regional Perspective

Amy Peterson and Robert Sarib (Australia)

Key words: GNSS/GPS; Implementation of plans; Positioning; Reference frames; Reference systems; Standards; datum modernisation, geodesy

SUMMARY

Australia is transitioning to a new national datum GDA2020 from 2017. Preceding this implementation, there has been a decade of planning, design, development and refinement of a national geodetic adjustment, leading to datum realisation and ongoing enhancement. Through a collaborative national effort, individual jurisdictions have worked in a unified capacity to contribute to, and ultimately deliver, a product that will continue to support positioning and geospatial information management into the foreseeable future.

This paper will reflect on the Territory's practical undertakings to achieve a modernised datum through a national collaborative framework. It will discuss both the assessment of legacy and implementation of new business rules and systems to support the process and way we acquire, validate, store, manipulate, exchange and manage our spatial data. The paper will also value the significant role of standards and consistency in achieving a fit-for-purpose national datum, providing users with an accurate, interoperable and maintained reference frame.

Finally, as we move into the implementation phase and ultimately adoption of a time-dependent realisation of the reference frame, the paper will demonstrate how a collaborative framework will manage national issues at the jurisdiction level, and converse, can be supported in a transparent and productive environment.

Transitioning to a New Paradigm – the Development and Implementation of a Modernised National Datum from a Regional Perspective (8931) Amy Peterson and Robert Sarib (Australia)

FIG Working Week 2017 Surveying the world of tomorrow - From digitalisation to augmented reality Helsinki, Finland, May 29–June 2, 2017