

Monday, 10 May 2021

Ms. Louise Friis-Hansen
Director
International Federation of Surveyors (FIG)
Kalvebod Brygge 31-33
DK-1780 Copenhagen V

Dear Ms Friis-Hanson

Letter of Support for Dr Ryan Keenan's nomination as Chair-Elect, Commission 5

Australia is one of several nations that has taken a leadership role in the advancement of PNT. This leadership status is demonstrable by Australia expecting to be one of the first nations to officially activate SBAS v2.0 - the first of the next-generation SBAS (Space Based Augmentation System) services featuring DFMC. DFMC stands for 'dual frequency multi constellation' and uses both GPS and Galileo constellations on their L1 and L5 frequencies. DFMC will provide higher accuracy and higher precision solutions with improved reliability and performance due to the improved ionospheric handling from the second frequency. Australia is also planning to integrate a PPP-RTK capability on their SBAS signal, (acknowledging that the Japanese have already achieved that this year with their QZSS-CLAS signal, and the Europeans are currently testing their HAS (high Accuracy Service)).

Dr Ryan Keenan has been at the forefront of Australia's PNT/GNSS developments and has been active in Australia's advancement, as well as contributing internationally via his various key roles in both Australian bodies and international bodies to advance the application of PNT. These roles include being previously Program Director of Positioning Commercialisation (Cooperative Research Centre for Spatial Information – CRC-SI) as well as sitting on the powerful Research and Investment Committee of CRC-SI, his current membership of UN-GGIM SCoG WG ETCB and being active in 2 different capacities, and being a Co-Project Lead, International Standards Organisation Technical Committee 20 Sub-committee Working Group 1 on Space operations and systems while being an active member of FIG Commission 5, co-chairing WG 5.4 GNSS. Dr. Keenan was a co-inventor of the Master-Auxiliary Concept for distributing Network RTK corrections, soon after adopted by RTCM SC-104 as the first internationally standardised Network-RTK message type.

SSSI strongly endorses Dr Keenan's nomination for the Chair of Commission 5 for the coming period 2023-2026. Ryan is an Australian Citizen and an active SSSI member. He received his training in surveying and geodesy in the UK, first completing a Bachelor of Engineering (First Class with Honours) Civil Engineering Surveying, Nottingham Trent University, UK (1996). He later completed his PhD in Geodesy and GPS Navigation, University College London, UK (2001).

Dr Keenan now has over 20 years of GNSS positioning experiences first with high-precision GNSS receiver manufacturers and more recently as an international GNSS advisor, business developer and marketer.

Living in five different countries, and working in over fifty more, Dr. Keenan has amassed a wealth of professional experiences, market knowledge and cultural exposure. Core to these activities, has been a desire to identify, develop and share unique insights into the development and implementation of location technologies for the greater good. Additionally, in his earlier career, he has installed more than twenty high-precision GNSS CORS networks for both public and private sector organisations advising on many more.

SSSI Australia believes this background and active commitment to GNSS Positioning – both in Australia and internationally makes Dr Ryan Keenan a unique, capable and worthy candidate for the important role of FIG Commission 5 Chair, and we hereby strongly endorse his application.

Yours sincerely



Tony Wheeler

Chief Executive Officer

M +61 412 210 576

E: tony.wheeler@sssi.org.au

W: www.sssi.org.au