SDGs & Geospatial Information,
Sunday, 1.30 pm, 17 Sept 2023,
CR6, UN, New York
Speech by Ambassador Peter Thomson, UNSG's Special Envoy for the Ocean

Excellencies,

Ladies and Gentlemen,

Many thanks to the organisers for this opportunity to address you all on this important topic.

As we have just seen, the science of Geodesy includes the accurate measurement and understanding of the fundamental properties of Planet Earth. We do indeed live on a dynamic planet, and Geodesy measures the changes underway in its geometric shape, its orientation in space, and its gravity field.

Central to Geodesy is the role of the Global Geodetic Reference Frame (the GGRF) in our modern society. The GGRF is a generic term describing the framework that allows users to

precisely determine and express locations on our planet, and to quantify changes of the Earth's place in space and time.

The benefits of Geodesy extend to everyday products and applications using positioning and navigation services, such as car navigation systems and the applications on our mobile phones. But Geodesy suffers from being so fundamental that it is often ignored or at best under-appreciated, resulting in it being under-resourced.

Without ongoing commitments and investments from countries, over time, the GGRF will be in danger of degradation, gradually losing its accuracy and thereby the fundamental role it plays today in science and society.

This means we have work to do. We must secure the necessary investment in more and newer geodetic infrastructure, and we must ensure there is adequate resourcing for organizations that operate geodetic infrastructure and produce our geodetic products and services.

Ladies and Gentlemen,

Sustainable development faces immense challenges. Climate change, rising sea levels, increasing occurrence and ferocity of destructive tropical cyclones, the list goes on. In this evolving world reality, the importance of Geodesy, and the accuracy of its observations and predictions, becomes ever more fundamental to security.

That was why in 2015 the UN General Assembly adopted a resolution entitled 'A Global Geodetic Reference Frame for Sustainable Development'. Co-sponsored by 52 countries, it was the first UN resolution to recognize the importance of a globally coordinated approach to Geodesy. In my capacity at the time as the Permanent Representative of Fiji, I had the privilege of introducing the resolution to the General Assembly. Emphasizing that no one country can do the job alone, the resolution calls for greater multilateral cooperation on Geodesy and for the development and sustainability of the GGRF.

Today, as we look towards accelerating implementation of the SDGs, we should all be stressing the need to raise awareness of Geodesy's importance. We should all be making

ourselves aware of the important work that is taking place in this field.

A good example will be illustrated in a few moments by my distinguished colleague from Germany as he describes the establishment of the United Nations Global Geodetic Centre of Excellence in Bonn. On the banks of the mighty Rhine, I was pleased to visit the Centre of Excellence during the Ocean-Climate Dialogues held in June this year.

A second example is contained in a short video you're about to see. Hosted by the Norwegian Mapping Authority, Kartverket, I had the privilege in April last year, of visiting the geodetic Earth observatory in Ny-Ålesund, Svalbard.

Gathered close to the top of Planet Earth, we celebrated a milestone for global Geodesy as we witnessed NASA's installation of the world's northernmost, state-of-the-art, Satellite Laser Ranging Instrument or SLR. For the uninitiated, an SLR is a geodetic instrument that determines the distance between the satellites orbiting above us and the planet's centre of mass. Due to their location at 79 degrees north, the geodetic

instruments installed in Ny-Ålesund are critical for an accurate GGRF for the world.

And so, Ladies and Gentlemen, I leave you with the affirmation that the importance of having accurate planetary measurements cannot be overstated. They provide the foundation of the information required by decision-makers to make evidence-based decisions on the global challenges we face. Climate change mitigation, adaptation and preparedness, steadily rising sea levels, diminishing ice cover, atmospheric variations, movements of the Earth's crust: all need accurate measurement, and this is where Geodesy comes in.

I thank you for your attention.
