## Statement by Ryan Guglietta, United States Representative, on Agenda Item 8, "Recent Developments in Global Navigation Satellite Systems," February 1, 2024

Thank you, Chair and distinguished delegates. I think we all understand the importance of Global Navigation Satellite Systems and the value that they bring to the world economy. The United States is proud to maintain the Global Positioning System or GPS, free of charge to the world, serving as a reliable pillar for services that depend on this technology. Last year we celebrated the 50<sup>th</sup> anniversary of the GPS program and the evolution of the system to where it is today. To ensure that GPS operates effectively and efficiently, the United States engages in activities focused on compatibility and interoperability with the other global and regional systems that provide similar service.

The United States continues to upgrade the capability and service of GPS through the integration of the newest generation of satellites, GPS Block III (three), which are broadcasting the 3<sup>rd</sup> civil signal, L1C, in addition to the legacy signals. The sixth GPS Block III satellite vehicle was launched in early 2023, and we expect additional satellites to be launched over the next couple of years, completing the GPS III modernization by 2026.

We are also designing new capabilities and enhancements that will be available on the GPS Block IIIF (three F) satellites, beginning with GPS-III, Space Vehicle 11. In addition to more resilience, the GPS Block IIIF satellites will also host two new NASA-sponsored secondary payloads: a laser retro-reflector array to enable precise optical laser ranging of GPS satellites, and a Canadian-furnished Search and Rescue repeater that will relay distress signals to rescuers as part of the U.S. contribution to the COSPAS-SARSAT international system.

Chair, the United States is upgrading the GPS ground control system to support the new capabilities brought on by the Block III and Block IIIF satellites. The new next generation operational control system is being rolled out in phases, and we anticipate further performance improvements and increased capabilities for all users as we complete the rollout.

The National Space-Based Positioning, Navigation, and Timing, Advisory Board, sponsored by NASA since 2007 on behalf of the National Space-Based PNT

Executive Committee, continued holding public meetings to seek feedback from GPS commercial, scientific, and international users and formulate recommendations to advise the U.S. federal government. A particular focus of the board has been to look at ways that the United States can protect, toughen and augment GPS.

As a contributing founder of the International Committee on GNSS or ICG, the United States continues its engagement and leadership in activities through this multilateral organization. In addition to hosting the ICG twice, the United States also co-chairs the Working Group on Systems, Signals and Services, which is making great progress on important issues related to compatibility and interoperability. We appreciate the European Union and the Government of Spain for hosting the 17<sup>th</sup> meeting of the ICG in Madrid in October 2023 and the UN Office for Outer Space Affairs for continuing to serve as the ICG Secretariat. In particular, we are pleased with the progress made on addressing the importance of spectrum protection and interference detection and mitigation, as well as a new recommendation to discuss the impacts to existing GNSS from new large constellations being developed in low earth orbit. This presents new challenges that the ICG is ready and poised to take on. In 2024, the United States will chair the ICG Providers' Forum and looks forward to working with other GNSS providers to advance the important work, especially with regards to spectrum protection and IDM.

The United States also co-chairs the Space Use Subgroup under the ICG Working Group on Enhancement of GNSS Performance, New Services and Capabilities. The activities are focused on documenting the capabilities and benefits of the Interoperable GNSS Space Service Volume or SSV. The Interoperable SSV will enable improved navigation for future space operations up to and beyond geosynchronous orbit, even including lunar missions. The subgroup unveiled the second edition of its booklet on this subject at the fifteenth meeting of the ICG, which fully updated and expanded the content of the first edition released in 2018. Further work is underway to advance PNT in the lunar environment through U.S. leadership in this Subgroup.

In addition to the GNSS multilateral cooperation that takes place through the ICG, the United States has many productive bilateral relationships dealing with civil satellite navigation issues. This includes both policy level meetings and technical discussions aimed at ensuring compatibility and encouraging interoperability with GPS, to the extent possible. In the last year, the United States has continued its close cooperation with the European Union on GNSS activities under our 2004 GPS-Galileo Cooperation Agreement, including working level discussions on enhancements to GNSS. Additionally, the United States has engaged with Japan, India, and the Republic of Korea as future regional and GNSS-augmentation providers. Through NASA, we are also engaged with the European Space Agency and Italian Space Agency to conduct flight experiments to validate the combined use of GPS and Galileo signals to support navigation for space users and improve their PNT capabilities.

In conclusion, let me reiterate several key policy principles that remain centerpieces from the 2020 U.S. National Space Policy and the 2021 Space Policy Directive 7 for Space-based Positioning Navigation and Timing. The United States intends to continue to improve GPS accuracy, availability and resilience through the enhanced performance of modernized satellites and ground infrastructure. The United States intends to continue broadcasting GPS signals free of direct user charges. And the United States is committed to keeping GPS as a reliable pillar in an emerging international GNSS system of systems.

Thank you, Chair.