

Agenda Item 7 – USA  
“Recent Developments in Global Navigation Satellite Systems”  
February 6, 2025

Thank you, Chair and distinguished delegates. The United States notes the importance of Global Navigation Satellite Systems and the value that they bring to the world economy and public safety. The Global Positioning System or GPS, continues to serve as a reliable pillar for positioning, navigation, and timing services, provided by the United States free of charge to the entire world. The United States continues to engage globally to ensure that GPS operates effectively and efficiently and remains focused on ensuring that the system remains compatible and interoperable to the fullest extent possible with other global and regional systems that provide similar services.

The United States is continuing to upgrade the capabilities of GPS through the integration of the newest generation of satellites, GPS Block III (three), providing enhanced services with the 4th civil signal, L1C, in addition to the legacy signals L1 C/A, L2, and L5. Currently there are 7 Block III satellites on orbit, 6 of which are operational and a seventh which is undergoing testing. We expect the remaining three Block III satellites to be launched over the next year, completing GPS III modernization by 2026.

We are also designing new capabilities and enhancements that will be available on the GPS Block III F (three F) satellites, beginning with GPS-III, Space Vehicle 11. In addition to more resilience, the GPS Block III F 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 (SAR) 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 also upgrading the GPS ground control system to support these new capabilities brought on by the Block III and Block III F satellites. The next generation operational control system is being rolled out in phases, and we anticipate further performance improvements and increased capabilities for all users as the rollout commences.

As a contributing founder of the International Committee on GNSS or ICG, the United States continues its engagement and leadership in this important technical 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 commend the Governments of New Zealand and Australia for hosting the 18<sup>th</sup> meeting of the ICG in Wellington in October 2024, and the UN Office for Outer Space Affairs for continuing to serve as the ICG Secretariat.

The United States appreciates the progress made in the ICG on addressing the importance of spectrum protection and interference detection and mitigation, as well as important discussions on the plans for new larger constellations being developed in low-Earth orbit and the impacts that these systems may have on existing GNSS constellations operating in medium Earth orbit and Geosynchronous orbit.

Additionally, the United States led the effort to establish a new ICG working group focused on Lunar PNT and is very pleased with the adoption of this recommendation at ICG-18. This new platform provides a critical forum for further multilateral discussion on interoperability of the systems that will enable improved navigation for future space operations beyond geosynchronous orbit into cislunar space, to include lunar missions. Under United States' leadership within the Working Group, a workshop is taking place next week here at the UN in Vienna, focused exclusively on lunar PNT. This has led to development of an Interoperable Multi-GNSS Space Service Volume concept for future mission planning for all space agencies, and Lunar GNSS Receiver Experiment, or LuGRE, where at this very moment a Lunar Lander called the Blue Ghost is en route to the Moon with the first GNSS receiver in history due to land on Mare Crisium on March 2. LuGRE is a technology demo led by NASA and the Italian Space Agency directly prompted by the ground-breaking work enabled by the ICG. The success of this mission will be a historic 1<sup>st</sup> world record breaker.

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.

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 improvements to 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 most reliable cornerstone in an emerging international GNSS system of systems. Thank you, Chair.