



## GNSS milestone achieved as ICAO Council adopts new dual-frequency multi-constellation standards

For immediate release

**Montréal, 23 March 2023** – The ICAO Council achieved a major milestone this week in the global standardization and roll-out of new dual-frequency multi-constellation (DFMC) capabilities for international aviation’s Global Navigation Satellite System (GNSS).

“This is an important development toward improving the safety, efficiency and sustainability of international air transport through more precise airspace management and more efficient routes and procedures,” emphasized Council President Salvatore Sciacchitano.

“Eventually these new standards will provide international aviation with access to an extensive global infrastructure and over 50 new GNSS satellites.”

DFMC GNSS permits the combined leveraging of dual frequency signals from up to four GNSS constellations simultaneously, including the GPS system (United States), Galileo (European Union), GLONASS (Russian Federation), and BeiDou (China).

The capability has been enabled through latest advances in aircraft-, satellite-, and ground-based augmentation systems, and will become more prevalent as aircraft become increasingly equipped with DFMC-capable avionics.

Currently, global aviation GNSS capabilities rely mainly on just one constellation and one frequency via GPS L1, meaning that the new multi-constellation capability will assure greater system accuracy and redundancy, delivering important air network capacity and safety benefits.

“ICAO has worked in close cooperation with EUROCAE and the RTCA on the development of these new standards, to ensure that they fully align with industry specifications,” commented ICAO Secretary General Juan Carlos Salazar.

“These types of partnerships are very cost-effective while improving end-results, and by managing the overall process through the ICAO Navigation Systems Panel, it means that the global constellations now being operated by individual States and the European Union, will be able to be confidently embraced and benefitted from by the many other countries in our global network.”

---



---

## Resources for Editors

### About ICAO

The International Civil Aviation Organization (ICAO) is a United Nations agency which helps 193 countries to cooperate together and share their skies to their mutual benefit.

Since it was established in 1944, ICAO's support and coordination has helped countries to diplomatically and technically realize a uniquely rapid and dependable network of global air mobility, connecting families, cultures, and businesses all over the world, and promoting sustainable growth and socio-economic prosperity wherever aircraft fly.

As it enters a new era of digitization, and of incredible new flight and propulsion innovations, air transport is relying more than ever on ICAO's expert support and technical and diplomatic guidance to help chart a new and exciting future for international flight. ICAO is innovating itself to answer this call, and expanding its partnerships among UN and technical stakeholders to deliver a strategic global vision and effective, sustainable solutions.

### General Contact

[communications@icao.int](mailto:communications@icao.int)

Twitter: [@ICAO](https://twitter.com/ICAO)

### Media Contact

#### **William Raillant-Clark**

Communications Officer

[wraillantclark@icao.int](mailto:wraillantclark@icao.int)

+1 514-954-6705

+1 514-409-0705 (mobile)

Twitter: [@wraillantclark](https://twitter.com/wraillantclark)

LinkedIn: [linkedin.com/in/raillantclark/](https://www.linkedin.com/in/raillantclark/)