

SUMMARY

of the Thirty-Second Meeting of the Providers' Forum held in conjunction with the Nineteenth Meeting of the International Committee on Global Navigation Satellite Systems (ICG)

19 and 23 October 2025

Busan, Republic of Korea

The Thirty-Second Meeting of the Providers' Forum, chaired by China, was held in conjunction with the Nineteenth Meeting of the International Committee on Global Navigation Satellite Systems (ICG) in Busan, Republic of Korea, on 19 and 23 October 2025, in a hybrid format. China, the European Union, India, Japan, the Russian Federation and the United States of America were represented at the meeting.

Service Performance Monitoring

China introduces the basic information of the International GNSS Monitoring and Assessment System (iGMAS), including its purpose, composition and functions. The presentation shows the consistency between iGMAS's high-precision products (such as orbit, clock offset, station coordinates and ionosphere products) and similar international products over the past year and describes iGMAS's assessment results of the basic services of the four major navigation systems in the recent year—covering continuity, availability, positioning accuracy, position dilution of precision (PDOP) and the Coordinated Universal Time (UTC) offset error (UTC OE). In particular, it shows the changes in PDOP and UTC OE of the four major navigation systems over the past year, among which the UTC OE of the BeiDou Navigation Satellite System (BDS) has achieved a significant improvement. Additionally, the presentation introduced the monitoring results of BDS B2b precise point positioning (PPP) and the events of the eleventh iGMAS Workshop.

Spectrum Protection and Interference Detection and Mitigation

The Working Group S co-chairs noted the successful interference detection and mitigation (IDM) workshop held in Baku in August 2025.

Multi-GNSS Demonstration Project in the Asia/Oceania Region

Japan provided an update on the planned activities of Multi-GNSS Asia (MGA), which promotes multi-GNSS in the Asia/Oceania region. Japan noted the next annual MGA conference is planned

to be held on 6 to 8 March 2026 in Tokyo, Japan. All GNSS providers are invited to present their system updates and ICG related meetings.

ICG Information Centres: Regional Centres for Space Science and Technology Education (affiliated to the United Nations)

The ICG Executive Secretariat reported that the United Nations-affiliated regional centres for space science and technology education were in operation in Africa (Morocco and Nigeria), in Asia and the Pacific (China and India), in Latin America and the Caribbean (Brazil and Mexico) and in West Asia (Jordan).

The providers noted that the nine-month postgraduate courses on GNSS were being held at the regional centres in the academic year 2025/2026. It was also noted that support was provided for GNSS development and applications in those regions by organizing regional workshops for capacity-building and knowledge exchange and fostering institutional partnerships to develop pilot projects and joint activities.

Potential areas of coordination between the ICG and the international organizations

The liaison from the ICG to the Interagency Operations Advisory Group (IOAG) provided an update on relevant activities of the IOAG. The IOAG provides a forum for space agencies to coordinate on matters related to interoperability, communications and positioning, navigation and timing (PNT). The IOAG jointly organized the 2025 Multilateral Cislunar PNT Workshop with the ICG on 11 - 13 February 2025. More than 80 attendees were present in person, and 46 presentations were given. The proceedings are available at <https://ioag.org/meetings/cislunar/>. The IOAG held its IOAG-27 face-to-face meeting on 15 - 17 July 2025 in Cologne, Germany at the German Aerospace Centre (DLR). The outcomes of this meeting were that the National Aeronautics and Space Administration (NASA) stepped down as IOAG chair, with the European Space Agency (ESA) as acting chair; several working groups were proposed for mergers or closure; and a plan for future face-to-face meetings was established. The next meeting will be held in Cabrera, Spain in May/June 2026. The IOAG upcoming activities include co-organizing the 2026 Cislunar PNT Workshop with the ICG and moving to a new meeting schedule with one face-to-face each year and quarterly intersessional meetings.

Other Matters:

Terms of Reference of the Providers' Forum and the ICG

Two meetings of the ad hoc working group were held during the nineteenth meeting of ICG. Although the amendments to the Terms of Reference (ToR) of the Providers' Forum were not fully agreed, the providers agreed to the text below which sets principles for chairing the future Providers' Forum meetings:

“The chair of the Providers' Forum is open to all members of the Providers' Forum with at least two full years of membership in the Providers' Forum. If an eligible member of the

Providers' Forum serving as the chair is hosting the annual ICG meeting, they shall be the chair of the Providers' Forum for that year. Otherwise, the chair of the Providers' Forum shall be the Providers' Forum member that least recently chaired the Providers' Forum.”

The providers agreed to continue this work by correspondence in preparation for the next Providers' Forum meeting in 2026. Some providers expressed the view that an exchange of views on the goals, priorities, and role of the Providers' Forum would help advance this process.

Membership

On Pakistan's application, India conveyed that it had remained constructively engaged on the agenda item despite its concerns and reservations, including with regard to India's territorial integrity and sovereignty arising from objectionable depictions by the applicant at ICG previously. India noted that its technical queries dated 4 October 2024 had not been addressed by the applicant in its view. India expressed serious concerns about the possible politicisation of a technical forum, such as the ICG, that need to be addressed. India also stated that it had never objected to Pakistan attending any meeting of ICG as an invited observer.

China noted that Pakistan had been actively engaged in the ICG for many years and its Satellite Based Augmentation System (SBAS) work is advancing and contributing to the platform's technical exchanges. China also expressed its concern of politicisation of the ICG. China remarked that if consensus cannot be reached, it may undermine the ICG's objective of furthering international cooperation, therefore ICG and the Providers' Forum should accelerate this process. China also noted that Pakistan in its note verbale dated 6 October 2024 and presentation made by Pakistan during the nineteenth meeting of ICG, which in its view responded to India's queries dated 4 October 2024.

The providers took note of the applications by the United Nations Global Geodetic Centre of Excellence (UN-GGCE) and the Secure World Foundation (SWF) for observer status in ICG.