



SUMMARY
of the Twenty-Eighth Meeting of the Providers' Forum
held in conjunction with the Seventeenth Meeting of the International Committee
on Global Navigation Satellite Systems (ICG)

15 and 19 October 2023

Madrid, Spain

The twenty-eighth meeting of the Providers' Forum, chaired by the European Union, was held in conjunction with the seventeenth meeting of ICG, in Madrid on 15 and 19 October, in a hybrid format with both in-person and virtual participation. The meeting agenda is attached as an annex to the present report. China, India, Japan, the Russian Federation, the United States and the European Union were represented at the meeting.

After considering the items on its agenda, the Providers' Forum adopted the report on its twenty-eighth meeting, containing the discussions and recommendations set out below.

Open service information dissemination

The European Union gave an update on the Galileo programme, emphasizing the services already provided and the new services under preparation. Participants were also invited to participate in the upcoming User Consultation Platform.

Service performance monitoring

China gave an overview of progress made on its international GNSS monitoring and assessment system. The performance of four global navigation satellite systems was reviewed through daily monitoring of per-slot availability and continuity, signal-in-space range errors, Universal Time Coordinated offset errors, standard positioning accuracy, and ionosphere activity influences on positioning accuracy. The outcome was also shared of the latest work on continuous monitoring of the BeiDou Navigation Satellite System and Galileo precise point positioning services, analysis of advanced receiver autonomous integrity monitoring integrity support message parameters and global availability of multi-GNSS.

Multi-GNSS demonstration project in the Asia-Oceania region

Japan provided an update on Multi-GNSS Asia, which promoted multi-GNSS in the Asia-Oceania region. The next annual Multi-GNSS Asia conference was planned to be held from 30 January to 2 February 2024 in Chiang Rai, Thailand. The Multi-GNSS Asia co-chair

(Thailand) invited participants in the Providers' Forum and the ICG meeting via video message to contribute to the conference.

Information centres of the International Committee on Global Navigation Satellite Systems: regional centres for space science and technology education, affiliated to the United Nations

A representative of the executive secretariat of ICG noted that the nine-month postgraduate courses on GNSS would be held at the regional centres for space science and technology education, affiliated to the United Nations, in the academic year 2023/2024. The Regional Centre for Space Science and Technology – in French Language, in Rabat, hosted the intersessional meeting and related workshops of the ICG Working Group on Systems, Signals and Services from 28 to 31 August 2023. Participants in the Providers' Forum were invited to contribute to the work of the regional centres by providing educational materials and expertise.

Potential areas of coordination between ICG and international organizations

The liaisons from the Interagency Operations Advisory Group to ICG presented an update on all activities under its five work packages, on the database of space missions that use GNSS and, in particular, activities in the area of lunar positioning, navigation and timing, on the fifth interoperability plenary meeting of the Interagency Operations Advisory Group, held in June 2023, and on the Group's twenty-sixth annual meeting, held in September 2023. Highlights from the activities under the five work packages included progress made on the LunaNet framework of standards for lunar communications and positioning, navigation and timing interoperability and a recommendation for a joint workshop led by the Interagency Operations Advisory Group and ICG to provide an international forum for the coordination of GNSS and lunar communications and navigation providers. At the Group's twenty-sixth annual meeting, the release of draft documents relating to the LunaNet Interoperability Specification was announced, with comments sought by 30 November 2023.

Other matters

Requests for membership of the International Committee on Global Navigation Satellite Systems

The providers discussed the requests from the following States Members of the United Nations for membership of ICG: Pakistan (notes verbales dated 4 January 2021 and 24 May 2023, respectively), Türkiye (letter dated 13 February 2023) and Algeria (letter dated 31 May 2023).

The providers agreed to recommend to the plenary session of ICG that the request made by Algeria for membership of ICG be accepted.

India highlighted once again the incompleteness of the information provided by Pakistan in response to its request for additional information, as well as the gross incorrectness of the international boundaries depicted in the presentation given in support of the application, and indicated that it was not in a position to support the application, pending the provision of

additional information and the relevant rectification. Furthermore, India asked for more time to consider the request made by Türkiye for membership of ICG.

The providers received a proposal from China to amend the terms of reference of ICG, which was being discussed by the ICG terms of reference ad hoc working group, and agreed to discuss it further within the Providers' Forum.

The providers also discussed the requests made by the Republic of Korea (letter dated 7 February 2023), Australia (letter dated 10 August 2023) and New Zealand (letter dated 11 August 2023) to change their description to "current and future space-based regional and augmentation system providers" as per the terms of reference of ICG. As no consensus was reached, the matter would be discussed further by the Providers' Forum.

Review of the terms of reference of the Providers' Forum

On the basis of a proposal submitted by China, the providers reviewed the terms of reference of the Providers' Forum and agreed to reinstitute the rotation mechanism for the selection of the Chair of the Providers' Forum. On 19 October, the Providers' Forum adopted by consensus the revised terms of reference with a new paragraph 7, which reads as follows:

In the case a provider hosts an ICG annual meeting, it will chair the Providers' Forum meetings for the year of that ICG annual meeting. Otherwise, the chair of the Providers' Forum will rotate among its members subject to a decision on the basis of consensus. The Office for Outer Space Affairs of the United Nations Secretariat, consistent with its role as the executive secretariat of ICG, will also fulfil these responsibilities for the Providers' Forum, in support of the chair.

The Providers' Forum agreed that the United States would chair the meeting of the Providers' Forum to be held in 2024 and that China would chair the meeting to be held in 2025.