

SUMMARY

of the Eleventh Meeting of the Providers' Forum

held in conjunction with the Eighth Meeting of the International Committee
on Global

Navigation Satellite Systems (ICG)

9, 11 and 13 November 2013

Dubai, United Arab Emirates

The Eleventh Meeting of the Providers' Forum (PF), co-chaired by China and the United States, was held in conjunction with the Eighth Meeting of the International Committee on Global Navigation Satellite Systems (ICG), on the 9th, 11th, and 13th of November 2013, in Dubai, United Arab Emirates. The meeting agenda is attached as an annex to this report. China, the European Union, India, Japan, the Russian Federation, the United States and the United Arab Emirates, as the host of the Eighth meeting of the ICG, were represented at the meeting.

Opening Remarks

A proposal was made to update the ICG Booklet for the tenth meeting of the ICG in 2015. System Providers have been requested to provide updated information to the ICG Executive Secretariat. It was noted that ICG Working Group A has developed a recommendation addressing this in more detail.

Open service information dissemination

The following presentations were provided:

- **GNSS Space Service Volume Update**

The United States presented an update to the Global Navigation Satellite Systems (GNSS) Space Service Volume (SSV) concept. The United States continues to encourage development of an interoperable SSV to enable improved capabilities. The presentation highlighted some of the advantages of creating an interoperable global SSV, including

improvements to space weather predictions and lunar navigation. A template was previously distributed through the ICG WG B for assistance in this effort.

- **Galileo IOV**

The European Union provided an update on the GALILEO In Orbit Validation (IOV), which is the validation before system deployment. They reported two successful IOV satellite launches and highlighted that they are well on their way to achieving full operational capability. The IOV campaign was initiated in May 2013 and completed in November 2013, with very good performance results.

Service performance monitoring

The following presentation was provided:

- **Civil GNSS Performance Monitoring**

The U.S. made a presentation on GNSS civil performance monitoring, explaining that this provides benefit to both providers and users and supports the ICG Principle of Transparency. The Civil Monitoring Performance Specification (CMPS) addresses current civil Global Positioning System (GPS) signals by specifying metrics that address performance measures based on the GPS performance standard.

Spectrum protection: interference detection and mitigation

The following presentation was provided:

- **GPS Spectrum Topics**

The United States is currently working on a GPS adjacent-band capability assessment to draft new GPS spectrum interference standards. The purpose is to determine GPS spectrum protection criteria to inform future proposals for non-space commercial uses of the adjacent bands. The United States wants to be proactive in protecting GPS from interference. The United States also reported on efforts taking place in the International Telecommunications Union (ITU) Joint Task Group 4-5-6-7 (JTG) in preparation for the World Radiocommunication Conference (WRC-15). This group is evaluating additional spectrum allocations for mobile broadband services and the United States is working to protect GNSS spectrum bands from outside interference as a result of any changes to spectrum allocations. It was noted the next JTG Meeting would be held 20-28 February 2014 in Geneva and the United States encouraged other administrations to actively participate in its activities leading up to the final recommendations to WRC-15, where the spectrum allocation changes will be finalized.

Report on a multi-GNSS demonstration project in the Asia/Oceania region

The following presentation was provided:

- **Status of Multi-GNSS Asia**

The Secretariat of the Multi-GNSS Asia (MGA) provided an update on the activities taking place. The three main activities include: (1) establishment of multi-GNSS monitoring network (MGM-net), (2) working groups to conduct experiments, and (3) the Asia-Ocean Regional Workshop on GNSS. The next workshop is scheduled for 1-3 December 2013 in Hanoi.

ICG Information Centres and Information Portal

The ICG Executive Secretariat reported that the United Nations-affiliated regional centres on space science and technology education, also acting as the information centres for ICG, will implement the nine-month postgraduate course on GNSS in 2013 and 2014 using the GNSS education curriculum. The Improvement of the ICG Information Portal will continue to be discussed in the ICG Working Group C.

Future role and work of the ICG and its Providers' Forum

The discussion was based upon previous Providers' Forum meetings. The co-chairs reviewed two related papers, "The Summary of Discussions Concerning the Future of the ICG" and the "Meeting with the Associate Members and Observers that took place at the seventh meeting of the ICG". The summary of discussions will be presented to the full ICG for adoption.

The co-chairs made a presentation on the way forward to increase user contributions to the ICG. This included identifying several questions for the ICG regarding users and the relationship to the ICG. The Providers' Forum agreed that the establishment of a Users' Forum is premature, but noted that further discussion on ways to bring user input into the ICG should continue.

Selection of the chairperson/co-chairs for the Providers' Forum

At the tenth meeting of the Providers' Forum, it was agreed that the topic of selection of co-chairs for future Providers' Forum meetings would be discussed.

The Russian Federation made a presentation proposing some ideas to consider for selection of future co-chairs. They also suggested updating the Providers' Forum Terms of Reference.

China made a presentation on the selection of co-chairs. Their proposal would allow each provider to co-chair on a 2 year rotational basis, and established a schedule for the next several years. The Providers agreed to the schedule through 2017 and will confirm the remaining schedule through 2019 in the coming months. The Terms of Reference will be modified accordingly and circulated for the final approval.

Membership of the ICG (Request for Observer status)

The co-chairs reported that the Arab Institute of Navigation (AIN) and (European Space Policy Institute (ESPI) requested Observer status with the ICG.

Next Meeting of the Providers' Forum

A Providers' Forum planning meeting will be held 17 February 2014 in Vienna, Austria in conjunction with the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space (COPUOS). There will also be a symposium on GNSS commercial applications held in conjunction with the Subcommittee on 17 February 2014.