



SUMMARY
of the Seventh Meeting of the Providers' Forum
4, 6, 8 and 9 September 2011
Tokyo, Japan

The Seventh Meeting of the Providers' Forum (PF), co-chaired by Japan and the United States, was held in conjunction with the Sixth Meeting of the International Committee on Global Navigation Satellite Systems (ICG), on the 4th, 6th, 8th and 9th of September 2011 in Tokyo, Japan. The meeting agenda is attached as an Annex to this report. China, India, Japan, the Russian Federation and the United States, as well as the European Union, were represented at the meeting.

First Session of the Providers' Forum, Sunday, 4 September 2011, 17:00 – 18:00

1. Structure of the ICG/PF

The topic of structure and nature of the ICG was raised by a member of the Providers' Forum. After some discussion it was decided that the members would conduct informal discussions during the course of the meeting and that the topic would be revisited during the sessions of the PF meeting, later in the week.

2. Question regarding ICG meeting reports generated by the United Nations Office for Outer Space Affairs (UNOOSA)

A member requested clarification on the status of the documents generated during the ICG meeting (joint statements, recommendations and report of the Providers' Forum). The Secretariat (provided by UNOOSA) provided information on the different nature of the documents and explained that the joint statement and report of PF as a part of report of ICG, will be included in the UN official report on the Sixth Meeting of the ICG.

3. Representation of the European Union in the ICG/PF

The European Commission informed the PF members that, from this point forward, the European Union should be considered to be the ICG/PF member instead of the European Community. The individuals that had been representing the European Community will now be representing the European Union.

Second Session of the Providers' Forum, Tuesday, 6 September 2011, 11:15 – 13:15

4. Second Session Agenda

The meeting was called to order. The agenda was presented with the following additions: Interagency Operations Advisory Group (IOAG) and [Fédération Aéronautique Internationale](#) (FAI) applications, and Inter-Agency Space Debris Coordination Committee (IADC) relation to the ICG.

5. Open service information dissemination

China gave a report on the preliminary positioning results of BeiDou Navigation Satellite System. In this report, preliminary positioning results using BeiDou observations and an analysis on the performance of the system were presented. From these results, information on the accuracy available to the users of navigation and high precision relative positioning can be derived. The accuracy shown in this presentation is very promising, though the BeiDou constellation has not been fully deployed.

6. Service performance monitoring

It was noted that the Working Group A would likely have recommendations on this subject for consideration by the PF at the third session of the PF on Thursday, 8 September 2011. No further comments were offered at this time.

7. Spectrum protection: interference detection and mitigation

The United States provided information on the status of the United States domestic regulatory process related to conditional Federal Communications Commission (FCC) approval for LightSquared (LSQ) operations in the bands directly below and slightly above the Radio-Navigation Satellite Services (RNSS) L-1 allocation. FCC final approval is contingent upon determination that use of Global Positioning Systems (GPS) and global navigation satellite systems (GNSS) services are not adversely impacted by the planned LSQ operations. The FCC's process is ongoing and no determination has been made at this time. Testing of LSQ equipment was conducted for the purpose of evaluating the impacts of these operations on GPS use. It was further noted that this matter of ancillary mobile-satellite service (MSS) operations (the International Telecommunication Union (ITU) refers to these operations as Complimentary Ground Component (CGC)) adjacent to the RNSS band may be considered by a future ITU World Radio Conference (WRC) and may be addressed through the ITU radio bureaus working party process.

The United States stated that if additional interference testing is conducted by the government, they would consider including receivers using other systems signals, provided that all necessary coordination can be completed in time. The United States committed to identify a point of contact for interested system providers.

The European Union noted that similar operations have been studied in Europe and found to be disruptive of other MSS operations and so discarded as an implementation option.

Japan noted that it had provided input to the FCC stating its concerns regarding this operation. Japan also noted that the official position of the Asia Pacific Telecommunity (APT) is to oppose any action favorable to CGC that may be considered at WRC-2012.

China noted that with establishing of new systems and increasing of new frequency bands and applications of new services, more and more space systems will face this kind of issue. It is envisioned that this may lead to additional overlapping of frequency bands and more interference between systems. Since GNSS is a service-oriented system, which is aimed at serving all humankind, this issue warrants significant attention across the world. The BeiDou system, as a member of the GNSS family, would like to join with others in the discussion of this issue.

The European Union made a comment related to Spectrum Protection, stating that Interference, Detection and Mitigation (IDM) is an issue they are concerned about. There are policy issues being discussed within the European Union related to GNSS jammers. The WG A co-chair noted that the working group would be considering a recommendation for an IDM workshop to be considered at the third session of the Providers' Forum Meeting on Thursday, 8 September 2011.

8. ICG Information Centres

The Secretariat gave a report on the Regional Centres for Space Science and Technology Education affiliated to the United Nations acting as the ICG Information Centres. It was noted that China offered to make available an information centre at Beihang University in Beijing, and that UNOOSA is investigating the feasibility of this offer.

China proposed that the providers should assume more responsibility for disseminating GNSS information and facilitating GNSS awareness. China noted that GNSS providers have more experience, resources in GNSS applications, and are geographically distributed throughout the world to take advantage of this. China proposed to explore among the Providers the idea of establishing ICG information centers out of the current UN affiliated Regional Centres for Space Science and Technology Education.

9. ICG Information Portal

The chairman opened the discussion on the proposed redesign of the ICG Information Portal. The Secretariat proposed an ad hoc group be formed to assist the ICG Executive Secretariat in restructuring the ICG Information Portal to ensure that information can be easily navigated.

The United States noted that at the June 2011 Providers' Forum planning meeting, input was requested on improvements to the site. In July 2011, the United States provided a website redesign proposal to the Secretariat for review. The United States presented the concepts of the proposal. The proposal focused on a complete redesign of the site, and would establish an external section accessible by anyone, as well as an internal section, which would be restricted, with access obtained by logging in.

The Secretariat noted that depending on the nature of the modifications to the website, there may be some financial implications but this cost could not be evaluated without submission of a

proposal to the Web Development Team of the United Nations Information Technology Service. Also there are rules concerning UN websites that would have to be adhered to.

After some discussion it was decided that the United States would circulate its proposal to the members for their comments.

10. Glossary of terms related to the work of the ICG and the Providers' Forum

The Secretariat asked for the comments on the draft glossary of terms so that it could be considered at the next meeting, and approved at the next ICG meeting.

11. Document consolidating decisions and conclusions reflected in the reports of past meetings of the ICG and its Providers' Forum

The Secretariat offered the view that this is an informal internal document. After some discussion (such as proposals from China and the European Union to make the ICG document available on the ICG Information Portal) it was proposed by the United States that the PF could approve this document and then format the document suitable for public posting to the ICG Information Portal. This proposal was accepted by the PF.

12. Structure of the ICG

Russia proposed that the PF members think about the structure of the ICG and whether it makes sense to consider some changes. India offered further views. The United States clarified that the Working Groups (WG) procedures on setting work plans address at least some of the views offered.

The European Union requested clarification regarding how this discussion relates to the topic of structure as was discussed at the first session of the PF Meeting. Russia clarified this by indicating that the remarks were intended to stimulate the PF members to begin thinking about the direction of the ICG, but not meant as a specific proposal.

The Chairman proposed some options for examining this further, including setting this as a dedicated agenda item as part of a future PF meeting. This will be further discussed at the third session of the Providers' Forum meeting, on Thursday, 8 September 2011..

Third Session of the Providers' Forum Thursday, 8 September, 16:30 – 17:30

13. Applications of IOAG and FAI to the ICG

After a brief description of the topic by the Co-Chair, the PF endorsed the Observer status and the Associate member status respectively to these organizations.

14. IADC ICG relationship.

The Co-Chairman noted the proposal from Italy. China and the United States stated that it wasn't clear what type of relationship was being requested and expressed concerns about creating a new type of ICG relationship beyond what currently exists. The Co-Chair proposed that this be

considered at the next ICG meeting, and that Italy be requested to provide more information on their proposal at that time.

15. Replacement and succession of the European Community by the European Union in the Terms of Reference of ICG and its Providers' Forum

China requested clarification from the European Union regarding the change of name and representation. The European Union offered that this name change will not have any impact on the future representation. The Secretariat provided information that the European Union had submitted a letter requesting this name change. The Co-Chair proposed that the Secretariat distribute this letter to the members and that the members adopt this name change request by email. This was accepted.

16. Document with conclusions and recommendations

The Co-Chair proposed that it be adopted and posted as it stands without reformatting. The United States requested that this be posted as a document for internal ICG/PF usage only. China proposed that the title be modified to reflect that this document is not the ICG report but extracts of the ICG reports. "Extracts from Reports of the ICG and Providers' Forum" was proposed by the Co-Chair as the new title and it was accepted by the members. The Co-Chair noted that the document will be updated to reflect the proceedings of this meeting.

17. Glossary of terms related to the work of the ICG and its Providers' Forum

The Secretariat noted that comments were still pending from the Russian Federation and Working Group D. The Co-Chair proposed that the Glossary of terms remain open with a view of completing the work by the end of the year and approval at the next ICG meeting. China noted that they would provide additions and comments in regards to this document. The Co-Chair noted that this document would be periodically revised.

18. Future structure of ICG

The Co-Chair noted that this had been discussed at the earlier PF sessions of this week and opened the floor for discussion. The United States stated that they would have thoughts on this matter and requested a timeframe for addressing this topic. The Co-Chair proposed that at the next PF meeting an agenda item be devoted to this topic and that specific proposals may be made at that time. The Co-Chair proposed that the agenda item be titled "Future role and work of the ICG and its Providers' Forum". The Co-Chair noted that other venues exist between this and the next PF meeting where members could discuss this further.

China expressed that this discussion topic seemed to entail a lengthy process.

The European Union expressed the opinion that the User Forum seems to be redundant with the Working Groups and questioned its need. They also noted that the addition of sub-groups made it difficult for them to attend all the extra meetings. The European Union also noted that the rules for the establishment of Chairs were lacking in the existing Terms of Reference. The European Union proposed that these topics be included in the discussion at the next PF meeting.

The United States proposed that this be an agenda item at the UN International Meeting on GNSS applications to be held in Vienna on 12-16 December 2011. This would give experts an opportunity to propose recommendations on the future work of the ICG and Providers' Forum, which could be considered as part of the discussion at the next PF meeting. The Co-Chair proposed that the Secretariat add that to the agenda of that December meeting of experts. This was accepted.

19. Brochure entitled “10 years of achievement of the United Nations on GNSS”

The Co-Chair noted that UN OOSA is producing the report on the 10 years of achievement of the United Nations on GNSS and that it will be published as a UN document available by the UN International Meeting on GNSS applications in December 2011.

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

Japan presented a report on the progress of the multi-GNSS demonstration project.

- a. JAXA received 11 applications as a result of a “call for hosting JAXA’s receivers”. Six organizations are now investigating participation in the network with their own receivers;
- b. A new call for joint experiments will be issued in the middle of September 2011;
- c. The 3rd Asia Oceania Regional Workshop on GNSS will be held on 1-3 November 2011 in Jeju, Korea. Japan requested that PF members attend the workshop.

21. ICG Working Group recommendations

The WG B recommendations were presented by the Co-Chair and adopted by the members with the exception of Recommendation 6 on Space Service Volume. The last bullet of Recommendation 6 was modified.

The WG C recommendations were presented by the Co-Chair and adopted by the members.

The WG D recommendations were presented by the Co-Chair and adopted without comment, with the exception of recommendation 12. This recommendation was modified per the members concerns and subsequently adopted by the PF.

The WG A Co-Chair presented four recommendations, which were all adopted without comment.

The United States made a general comment requesting clarification of the procedural basis of the PF revising Working Groups recommendations. Under this process, the Working Groups may no longer wish to go forward with the revised recommendation. The Co-Chair noted that discussions would be held with the Working Groups Chairs regarding the PF recommendation modifications.

22. Next meeting of the Providers' Forum

The providers agreed to meet no later than June 2012. The providers also agreed to have a planning meeting in February 2012.