



Eighth Meeting of the Providers' Forum

United Nations Office at Vienna, Vienna International Centre

**4 June 2012
Vienna, Austria**

Summary of Discussions

The Eighth Meeting of the Providers' Forum, co-chaired by China and the United States, was held on 4 June 2012 in Vienna, Austria in conjunction with the 55th Session of the Committee on the Peaceful Uses of Outer Space (COPUOS), 6 – 15 June 2012. The meeting agenda is attached (Annex I). China, Japan, the Russian Federation and the United States, as well as the European Union, were represented at the meeting. The list of participants is attached (Annex II).

Spectrum protection: interference detection and mitigation

The representative of the United States briefed the Meeting on LightSquared (LSQ) status regarding proposed a ground-based 4G broadband network. It was noted that in January 2011, LSQ was granted a conditional waiver, and that the Federal Communications Commission (FCC)'s deadline was closed on 30 March 2012 to receive comments on the National Telecommunications and Information Administration (NTIA) letter and FCC's plans to "suspend indefinitely" LSQ's underlying authorization allowing it to build an all-terrestrial ancillary terrestrial component composed of the base stations. A presentation slide is available at: http://www.unoosa.org/pdf/icg/2012/pf8/LSQ_Chart.pdf

The Meeting also took note of the Workshop on Global Navigation Satellite Systems (GNSS) Spectrum Protection and Interference Detection and Mitigation to be held on 7 – 8 June 2012 in Vienna, Austria. The Workshop agenda is available at: <http://www.unoosa.org/oosa/en/SAP/gnss/icg/activities.html>

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

The representative of Japan delivered a presentation on "The current status of Asia-Oceania multi-GNSS demonstration campaign" on behalf of the Multi-GNSS Asia (MGA) Secretariat. It was noted that the 4th Asia Oceania Regional Workshop on Global Navigation Satellite Systems (GNSS) was scheduled to be held on 9 – 10 December 2012, in Kuala Lumpur, Malaysia to discuss about new application experiments of GNSS and information sharing of the results of the current status of the activities of Multi-GNSS Asia. In this regard, representatives from each Provider were invited to participate in and contribute to the Workshop. A power point presentation is available at: <http://www.unoosa.org/pdf/icg/2012/pf8/MGA.pdf>

The representative of China emphasized that it was essential participation of the international GNSS community in MGA, as well as in the BeiDou/GNSS application demonstration and experience campaign (BADEC) and the international GNSS monitoring and assessment service (iGMAX) project to test, validate and demonstrate multiple constellation applications and their benefits in the early deployment stage of multi-GNSS and modernized signals.

The Meeting also took note of the Multi-GNSS Global Experiment (M-GEX) of the International GNSS Service (IGS) aimed to operate an expanded network of new receivers capable of tracking new signals in addition to the Global Positioning System (GPS) of the United States and GLObal NAVigation Satellite System (GLONASS) of the Russian Federation.

The representative of the Russian Federation noted that it was important to investigate validation procedures for GNSS-based navigation systems at national levels through the multi-GNSS projects. The reference was made to the procedures to be developed for the validation of the required signal-in-space parameters and the performance of the user equipment that together would define the overall navigation system performance/system improvement.

It was noted that Russia has analyzed the performance of GLONASS and GPS. Russia's recommendation was that agreement should be reached on a set of parameters to be monitored with a common understanding of how they are calculated, validated and how to improve the systems.

It was also noted that the WG A would develop a proposal to optimize existing and planned capabilities of the systems and identify additional activities necessary for international GNSS monitoring and assessment to ensure the service quality consistent with common open service performance parameters. An important approach was to determine whether international GNSS monitoring and assessment required.

The Meeting noted that the WG A interim meeting is scheduled to take place in conjunction with the workshop of the International GNSS Services (IGS) in Olsztyn, Poland, on 23 – 27 July 2012. The workshop agenda is attached (Annex III).

ICG Information Centres

The ICG Executive Secretariat informed that the UN-affiliated Regional Centres, located in Morocco and Nigeria for Africa, in India for Asia and the Pacific, in Brazil and Mexico for Latin America and the Caribbean, in their capacity as Information Centres of ICG, have been organizing short term training programmes on GNSS. It was noted that the Centres have received the promotional videos introducing GPS and Beidou/Compass and their applications. The reference was made to the Galileo Information Centre for Latin America, hosted by the Regional Centre for Space Science and Technology Education for Latin America and the Caribbean (CRECTEALC), Brazil that is working towards the dissemination information about EGNOS/GALILEO to increase awareness among main actors around GNSS in the region.

It was highlighted that by using the existing infrastructure of the Regional Centres, ICG/GNSS providers might save significant effort and financial resources by taking

advantage of the operational regional centres for information dissemination. The Regional Centres can then expand their range of training programmes and services and thus open new opportunities to connect to other GNSS providers.

The Providers' Forum members were invited to cooperate with the Regional Centres and share (via the Secretariat) GNSS technologies related materials so that they complement existing courses and programmes of the Centres. This would also facilitate long-term uptake of GNSS in the regions, identifying new applications that could be developed in the regions based on the current/planned systems and their services.

ICG Information Portal

The ICG Executive Secretariat informed that the United States submitted a website redesign proposal. It was highlighted that any key redesign features must be built into the overall design of the UNOOSA website that is hosting service of the ICG Information Portal. Also there are rules concerning UN websites that would have to be adhered to.

The Secretariat invited all members to submit proposals for topics to be included in the ICG Information Portal.

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

The ICG Executive Secretariat informed that Providers' Forum members provided their inputs/reviews on the glossary. The glossary will be finalized and submitted to the editorial review. This glossary of terms will be added to the GNSS education curriculum resources of the UN-affiliated Regional Centres that will be published in December 2012. The electronic version will be available at the ICG Information Portal, and will be updated/revised as more information becomes available.

Draft provisional agenda for the Ninth Meeting of the Providers' Forum

The Meeting adopted the agenda (see Annex IV) for the Ninth Meeting of the Providers' Forum to be held in Beijing, China in conjunction with the Seventh Meeting of the ICG, 5 – 9 November 2012. It was agreed that China and the United States would co-chair the meeting.

Other matters

The Meeting noted that there is a formal procedure in place for the Providers' Forum consideration of actions and recommendations developed by working groups or individual Members/Associate Members of ICG. It was noted that the working group co-chairs were concerned over the decision made by the Providers' Forum about the working group recommendations.

To facilitate the working groups' (WG) efforts towards implementation of their recommendations, the Meeting agreed that the WGs co-chairs will be invited to the Providers' Forum deliberations so that decisions/consensus reached.

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

The Meeting had before it for its consideration the report on the United Nations International Meeting on the Applications of GNSS, held in Vienna, from 12 to 16 December 2011 (see Annex V) and the summary (see Annex VI) of the informal meeting of providers held on 17 May 2012 on the margins of the 3rd China Satellite Navigation Conference (CSNC2012), 15 – 19 May 2012, in Guangzhou, China.

The Meeting noted that the above referenced meetings of providers resulted in the identification of a list of issues/questions, which have been prioritised in the table “Issues and Questions”.

To determine importance of issues/questions, the Meeting reviewed the table and organized the issues/questions (parts A and B) into the following three categories (see Annex VII): (1) currently under consideration (easy to implement); (2) further consideration will be given; (3) more in-depth study to be conducted. The list of questions (part C) emanated from the workshops were assigned to the ICG working groups to be addressed.

With regard to the document “Extracts from reports of the International Committee on GNSS (ICG) and its Providers’ Forum”, the question was raised whether the document (recommendations) should be signed by the Providers’ Forum.

The view was expressed that there is no need to sign, as the recommendations are adopted by consensus.

The questions about the establishment of a Users’ Forum were put forward to be considered at the ICG-7 in Beijing: the structure of the User’s Forum; its position in the future ICG structure; its membership; its terms of reference; and methods of work.

With regard to the GNSS user community representation in the ICG and its Providers’ Forum, some participants expressed the view that various users groups (e.g. BIPM, IAG, IGS) have already been represented in the ICG. In addition, representatives of the GNSS user community are also participating in the Providers’ Forum meetings as part their delegations.

It was noted that the main objective of the Users’ Forum would be to discuss common problems, to provide feedback to the providers on what could be done to increase the efficiency of GNSS applications in the multi-GNSS environment.

It was noted that the ICG members/associate members should be contacted and informed to be prepared to lead discussions about the Users’ Forum and to present their views/recommendations.

The view was expressed that to ensure the working groups achieve progress and meet their milestones, a permanent Chair is needed for some working groups. Also it is often useful, and perhaps inevitable, to establish a sub-group (study group/task force) of a working group to develop proposals to solve particular problems.

The meeting noted that consideration should be given to the staff capacity of the ICG Executive Secretariat, assisting with the planning and organization of the meetings of the ICG, its working groups and its Providers’ Forum, in the future structure of the ICG.

The Providers' Forum was also requested to take into account a vacancy for Associate Expert on Enabling Space Technology that is being opened in support of the ICG Executive Secretariat. The Terms of Reference is attached (Annex VIII). Detailed information is available at: <http://esa.un.org/techcoop/associateexperts/index.html>