## Fourth Meeting of the International Committee on Global Navigation Satellite Systems (ICG)

## 14 – 18 September 2009 Saint-Petersburg, Russian Federation

## Joint Statement

The Fourth Meeting of the International Committee on Global Navigation Satellite Systems (ICG) was held in Saint Petersburg, Russian Federation from 14 to 18 September 2009, to continue reviewing and discussing developments in global navigation satellite systems (GNSS) and to allow ICG members, associate members and observers to consider matters of interest. ICG also addressed GNSS science and innovative technology applications and future commercial applications. Representatives from industry, academia and Governments shared views on GNSS compatibility and interoperability.

The Meeting was hosted by the Government of the Russian Federation. Attendees included China, Italy, Japan, the Russian Federation, the United States of America, the European Community and the European Space Agency (ESA), as well as the following international organizations: the Civil Global Positioning System Service Interface Committee (CGSIC), the European Position Determination System (EUPOS), the IAG Reference Frame Sub-Commission for Europe (EUREF), International Bureau of Weights and Measures (BIPM), the International Federation of Surveyors (FIG), the International Association of Geodesy (IAG), the International Earth Rotation and Reference Systems Service (IERS), the International Association of Institutes of Navigation (IAIN), the International GNSS Service (IGS), and the Office for Outer Space Affairs. The representatives of the International Civil Aviation Organization (ICAO), the UN-affiliated Regional Centres for Space Science and Technology Education located in Mexico, Brazil, Morocco and Nigeria, and Space Generation Advisory Council attended the Meeting.

ICG recalled that the General Assembly, in its resolution 63/99 of 5 December 2008, had noted with appreciation that ICG had been established on a voluntary basis as an informal body to promote cooperation, as appropriate, on matters of mutual interest related to civil satellite-based positioning, navigation, timing and value-added services, as well as the compatibility and interoperability of global navigation satellite systems, while increasing their use to support sustainable development, particularly in developing countries, and that it held its first meeting in Vienna, 2006, and its second meeting in Bangalore, India, 2007, and its third meeting in Pasadena, USA, 2008.

ICG noted that the working groups focused on the following issues: compatibility and interoperability; enhancement of the performance of GNSS services; information dissemination and capacity building; and interaction with national and regional authorities and relevant international organizations. It also noted that substantive progress had been made in furthering the ICG and Providers Forum workplans that had been approved at the previous meetings of the ICG.

ICG noted that the Working Group A (WG A) on compatibility and interoperability had organized two workshops in 2009 to explore further the issue of GNSS interoperability from users' perspectives before resuming its deliberations at the Fourth Meeting of the ICG. At the Fourth Meeting of the ICG, WG A made some amendments to its workplan, in particular, regarding further elaboration and implementation of the principle of compatibility, consistent with International Telecommunication Union (ITU) regulations and recommendations, and proposed a new principle of transparency. At a minimum, WG A plans to hold an additional interoperability workshop in 2009 and a compatibility workshop in 2010.

The Working Group B (WG B) on enhancement of the performance of GNSS services discussed techniques for enhancement of GNSS services and the opportunity to monitor the ionosphere during the next solar maximum and its effects on GNSS receivers.

The Working Group C (WG C) on information dissemination and capacity building continued to develop a programme on GNSS applications and emphasized the participation of ICG in the International Space Weather Initiative (ISWI).

The Working Group D (WG D) on interaction with national and regional authorities and relevant international organizations successfully initiated the work of its Task Forces to develop processes to align and maintain Geodetic and Timing references, which are fundamental to interoperability of GNSS for users. It was also agreed to hold additional workshops in between the annual ICG meetings.

ICG and the Providers' Forum discussed the revision of their workplans. During a plenary session ICG also decided to support a proposal for a multi-GNSS Demonstration Project in the Asia/Oceania region.

ICG accepted the invitation of Italy and the European Community to jointly host the Fifth Meeting in Turin, Italy, from 18 to 22 October 2010. The Office for Outer Space Affairs, as the Executive Secretariat of ICG and the Providers' Forum, will assist in the preparations for those meetings and for interim planning and working group activities. ICG noted the expression of interest by Japan to host ICG-6 in 2011 and by China to host ICG-7 in 2012.