# **United Nations**



SYMPOSIUM TO STRENGTHEN THE PARTNERSHIP WITH INDUSTRY

**COMMERCIAL APPLICATIONS OF** 

**GLOBAL NAVIGATION SATELLITE** 

**SYSTEMS** 

**Nations Unies** 

Important Notice

Non-Delegates

In order to attend the Symposium, please register by submitting your name to the Office for Outer Space Affairs in advance and present this invitation together with an appropriate identification document at the entrance of the Vienna International Centre.

> 17 February 2014 15:00

Board Room D (4<sup>th</sup> floor), Building C, Vienna International Centre

The Committee on the Peaceful Uses of Outer Space in its fifty-sixth session held in Vienna from 12 to 21 June 2013 (A/68/20, para.183) agreed that the topic for the symposium to be organized in 2014 by the Office for Outer Space Affairs, in accordance with the agreement reached by the Subcommittee at its forty-fourth session in 2007 (A/AC.105/890, annex I, para.24), should be "Commercial applications of global navigation satellite systems". The Symposium will be held during the first week of the fifty-first session of the Scientific and Technical Subcommittee in Vienna, from 10 to 21 February 2014.

On the occasion of the Fifty-first session of the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space

Co-ordination by the

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# Commercial Applications of Global Navigation Satellite Systems

The use of the signals received from existing global navigation satellite systems (GNSS), the best known of which are the Global Positioning System (GPS) of the United States of America and the Global Navigation Satellite System (GLONASS) of the Russian Federation, has become a cross-cutting tool to support growth in precise positioning applications. With the European Satellite Navigation System (Galileo) and China's Compass/BeiDou satellite navigation system currently being developed and deployed, the number of satellites available at any given time will increase greatly, thereby enhancing the quality of services and increasing the number of potential users and applications.

The International Committee on GNSS (ICG), established in 2005 under the umbrella of the United Nations, is a forum where governments and interested non-governmental entities from around the world discuss all matters regarding GNSS. The goal of ICG is to promote the greater use of GNSS capabilities to support sustainable development and to promote new partnerships among Committee members and institutions, particularly taking into account the interests of developing nations.

Today, GNSS is being used for commercial applications in agriculture, transportation, machine control, marine navigation, and other industries where efficiencies can be gained from the application of precise, continually available position and time information. GNSS is also used in a broad range of consumer applications, including vehicle navigation, mobile communications, hiking and athletics. As GNSS technology improves and becomes less expensive, more and more applications will be conceived and developed. In addition to position, GNSS receivers can provide users with very accurate time, by "synchronizing" their local clock with the high precision clocks onboard the satellites. This has enabled technologies and applications such as the synchronization of power grids, cellular systems, the internet and financial networks.

Presentations of the industries involved in satellite navigation activities will cover all aspects of commercial applications of GNSS and discuss the wide range of benefits that GNSS can bring to society.

### Monday, 17 February 2014

#### Chair

Mr. Xiancheng Ding Co-chair of the 2014 Providers' Forum, China Satellite Navigation Office, China

15:00	Opening remarks by the Chair
15:10	<b>United States of America:</b> <i>The Global Positioning System</i> (GPS)
15:30	<b>Russian Federation:</b> <i>The Global Navigation Satellite System</i> ( <i>GLONASS</i> )
15:40	<b>European Union:</b> The European Satellite Navigation System (GALILEO)
16:00	China: The COMPASS/BeiDou Navigation Satellite System
16:20	<b>India:</b> The Indian Regional Navigation Satellite System (IRNSS) and the GPS-aided GEO-augmented navigation system (GAGAN)
16:40	Japan: The Quasi-Zenith Satellite System (QZSS)
17:00	Discussion