PRELIMINARY PROGRAMME


Organized jointly by
The United Nations Office for Outer Space Affairs and the Russian Federal Space Agency (ROSCOSMOS)

Co-organized by
The International Committee on Global Navigation Satellite Systems

Hosted by
The Reshetnev Information Satellite Systems (ISS) Joint Stock Company

Krasnoyarsk, Russian Federation

18-22 May 2015

The Workshop programme will include plenary sessions and sufficient time for discussions among participants to identify the priority areas where pilot projects should be launched and examine possible partnerships that could be established. A half-day technical tour will be arranged by the Local Organizing Committee during the Workshop. As a preliminary suggestion the following sessions will be organised:

Thematic Sessions

Session 1: Current and planned GNSS and satellite-based augmentation systems

- Programme updates on GNSS and satellite-based augmentation systems: GLObal NAvigation Satellite System (GLONASS) and System of Differential Correction and Monitoring (SDCM), Global Positioning System (GPS) and Wide-Area Augmentation System (WAAS), European Satellite Navigation System (GALILEO) and the European Geostationary Navigation Overlay Service (EGNOS), BeiDou Navigation Satellite System (BDS), Indian Regional Navigation System (IRNSS) and GPS Aided Geo-Augmented Navigation (GAGAN), Quasi-Zenith Satellite System (QZSS).

Session 2: GNSS-based applications focusing on, but not limited to

- Advances and performance benefits due to multi-sensor integration of GNSS applications in surveying and geodesy;
- The use of GNSS for aviation, including integration of satellite navigation technology into air traffic management and airport surface navigation and guidance;
- The use of navigation and timing systems for road, rail, and engineering applications, including vehicle guidance, geographic information system (GIS) mapping, and precision farming;
- Navigation systems operation in marine environment, including waterway navigation, harbour entrance/approach, marine archaeology, fishing, and recreation;
- Challenges for positioning and navigation in the Arctic;
- Commercial applications of GNSS.

**Session 3: GNSS and space/atmospheric weather monitoring**

- Atmospheric monitoring (troposphere) to improve numerical weather predictions
- Space weather monitoring (ionosphere) for space situation awareness

**Session 4: GNSS reference frames/systems and reference station networks**

- Programme updates on regional and national reference frames/systems and perspectives for a regional cooperative mechanism
- International GNSS Service (IGS) and other initiatives, Continuously Operating Reference Stations (CORS) network and multi-GNSS environment

**Session 5: Capacity building, training and education in the field of GNSS**

- GNSS education opportunities at different levels/needs
- The strengthening of a specialized master’s programmes for long-term professional education and support to PhD training and networking in GNSS
- GNSS education tools/open source software related to GNSS

**Discussion Sessions**

- Issues, concerns and approaches for pilot projects/initiatives, requirements of implementing, mechanisms and resources of implementing
- Possible follow-up projects and initiatives and proposals for future workshops/training courses/technical seminars

**Technical Tour**