# United Nations/United Arab Emirates/United States of America Workshop on the Applications of Global Navigation Satellite Systems

## **Dubai, 16 – 20 January 2011**

#### **DRAFT PROGRAMME**

(as of 20 December 2010)

Day 1,	, 16 Januai	ry 2011
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08:00	Registration of Participants		
09:30	Delegates and guests to be seated in the Higher Colleagues of Technology Auditorium		
10:00	Opening and Welcome Remarks, and Key Note Addresses		
	■ H.H SHEIKH HAMDAN BIN MOHAMED, United Arab Emirates		
	■ H.H SHEIKH NAHAYAN BIN MUBARAK AL NAHAYAN, United Arab Emirates		
	■ Telecommunication Regulatory Authority Chairman, United Arab Emirates		
	<ul> <li>Director General, Emirates Institution for Advanced Science and Technology, United Arab Emirates</li> </ul>		
	<ul> <li>United Nations Office for Outer Space Affairs, Austria</li> </ul>		
	<ul> <li>Mr. Jeffrey AUERBACH, Department of State, United States of America</li> </ul>		
10:50	Group Photo		
11:00	Coffee Break		
11:30	Key Note Presentations		
	International Committee on Global Navigation Satellite Systems, <i>Ms. Sharafat GADIMOVA, United Nations Office for Outer Space Affairs</i> Establishing Space Policy, <i>Mr. Mohamed Ahmed TARABZOUNI, Saudi Arabia</i>		
12:00	Presentation Session 1: Trends in satellite-based navigation systems		
	Chairperson: Rapporteur:		

- GPS modernization: GPS IIIA On the road to the future, *Mr. Michael SHAW, United States of America*
- GLONASS status and update, tbc., Russian Federation
- Overview of the GALILEO Programme, *Mr. Ramon Alexander da SILVA CURIEL, United Kingdom*
- 13:00 Lunch Break

#### 14:00 Presentation Session 2: GNSS services and reference frames

Chairperson: Rapporteur:

- Continuous operating GNSS network for Saudi Arabia, Mr. Nasr ALSAHHAF, Saudi Arabia
- GNSS geodetic applications in Algeria, Mr. Salem KAHLOUCHE, Algeria
- Indonesian permanent GNSS stations network: the current status, *Mr. Cecep SUBARYA*, *Indonesia*
- GNSS reference station system LatPos in Latvia: regional cooperation with Lithuania, *Mr. Janis ZVIRGZDS, Latvia*
- Geodetic Infrastructure for GNSS positioning services, Mr. Vasile CHIRIAC, Moldova
- Pakistan satellite based augmentation system (PakSBAS), Mr. Ajmal MUHAMMAD, Pakistan

#### 16:00 Coffee Break

# 16:30 – Discussion Session 1: Using and implementation of GNSS technologies 17:30

 Issues and concerns, requirements of implementing, possibilities of success, mechanisms and resources of implementing

#### 18:00 Welcoming Reception

#### Day 2, 17 January 2011

## 09:00 Presentation Session 3: Initiatives/experiences in GNSS user applications

Chairperson: Rapporteur:

- GNSS augmentation and applications, Mr. Jeffrey AUERBACH, United States of America
- GLONASS applications, tbc., Russian Federation
- Implementation of EGNOS-based LPV approaches in Europe, *Mr. Luis CHOCANO, Spain*
- High-end GNSS based application used for the German railway clearance measuring train, *Mr. Ivo MILEV, Germany*
- tbc., United Arab Emirates
- Developing GNSS applications in Morocco: projects, research, training and action plan, Mr. Mustafa AMGHAR, Morocco

#### 11:00 Coffee Break

# 11:30 Presentation Session 4: International/Regional Experiences of the use and implementation of GNSS technologies: Case studies and practical cooperation models

Chairperson:

Rapporteur:

Design and realization of delay mapping receiver based on GPS for sea surface wind

measurement, Mr. Dongkai YANG, China

- tbc., United Arab Emirates
- Comparison between remote sensing and GPS measurements for earthquake ground deformation monitoring, Ms. Ferdaous CHAABANE, Tunisia
- Improvement of the ellipsoid height for the maps of Uzbekistan based on GPS data, Mr. Erkin MIRMAKHMUDOV, Uzbekistan

#### 13:00 Lunch Break

#### 14:30 Presentation Session 5: Education and training on GNSS

Chairperson: Rapporteur:

- UN-affiliated Regional Centres for Space Science and Technology Education, Ms.
   Antonella BINI, United Nations Office for Outer Space Affairs
- An initiative for developing a training structure on GNSS and geomatics at national and regional level, *Mr. Alexandru BADEA*, *Romania*
- GNSS education and training programme in Thailand, Ms. Pirada TECHAVIJIT, Thailand

#### 15:30 Coffee Break

### 16:00 Discussion Session 2: Developing Partnerships and Networks

#### **Discussion Panel:**

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Discuss plans, framework for a mechanism of regional cooperation; follow-up projects and initiatives.

Discussion paper:

18:00 Adjourn

#### Day 3, 18 January 2011

## 09:00 Presentation Session 6: GNSS applications and technology development

Chairperson:

Rapporteur:

- GNSS and its application in the context of Bangladesh, *Mr. Mozammel SARKER, Bangladesh*
- Monitoring major landslides using GPS: case study Hammana region, Lebanon, Mr. Chadi ABDALLAH, Lebanon
- GPS measurements of current crustal movements along the Gulf of Suez, Egypt, Ms.
   Nadia ABO-ALI, Egypt
- Satellite-based navigation systems and their application in Kyrgyz Republic, Mr.
   Azamat DYIKANBAEV, Kyrgyz Republic
- Onboard orbit predictor and altitude control hardware for small satellite missions, *Mr.* Sanjay NEKKANTI, Germany
- Planned differential GPS system at Yangon International airport, Mr. Thet LWIN, Myanmar

#### 11:00 Coffee Break

#### 11:30 Presentation Session 7: International Space Weather Initiative

Chairperson: Rapporteur:

- Monitoring solar-terrestrial interaction at the United Nations Office at Vienna,
   Ms. Sharafat Gadimova, United Nations Office for Outer Space Affairs
- Study of a geomagnetic storm effect on the ionosperic scintillation and total electro content (TEC) over the SCINDA station in Abidjan, *Mr. Kouadio OBROU, Cote d'Ivoire*
- Space weather effects on GNSS performance and operation: a fundamental component of GNSS curriculum, Mr. Renato FILJAR, Croatia
- 13:00 Lunch Break

#### 14:30 - Technical Visit/City Tour

17:00

#### Day 4, 19 January 2011

#### 09:00 Working Groups Sessions

**Working Group 1: Capacity Building and Institutional Strengthening** 

**Working Group 2: Geodetic Reference Network** 

Working Group 3: Specific global navigation satellite systems applications

11:00 Coffee Break

## 11:30 Working Groups Sessions (continues)

13:00 Lunch Break

#### 14:30 Working Groups Sessions (continues)

15:30 Coffee Break

### 16:00 Discussion Session 3: Round table to finalize the recommendations/observations

18:00 Adjourn

## Day 5, 20 January 2011

#### 09:00 Plenary Closing Session

- Summary reports of presentation sessions
- Summary report of discussion sessions: presentation of proposals and recommendations consolidated at the discussion sessions

#### 11:00 Coffee Break

## 11:30 Closing remarks

- Concluding Remarks, United Nations Office for Outer Space Affairs
- Concluding Remarks, United Arab Emirates

## 12:00 Adjourn