

**UNITED NATIONS/COLOMBIA/UNITED STATES OF AMERICA WORKSHOP ON
THE APPLICATIONS OF GLOBAL NAVIGATION SATELLITE SYSTEMS**

**Follow up to the 5th Space Conference of Americas and
Preparatory for the 6th Space Conference of Americas**

**Hosted by and Co-organized with the
Vice Presidency of the Republic of Colombia, and the
Colombian Commission on Space (CCE)**

**Medellin, Colombia
23 – 27 June 2008**

PROGRAMME

Monday, 23 June 2008		
07:30 – 08:30	Registration of Participants	
08:30 – 10:00	Opening and Welcome Remarks	
	▪ Committee on the Peaceful Uses of Outer Space	<i>Mr. Ciro AREVALO, Chairman of COPUOS</i>
	▪ United States of America	<i>Mr. Jason KIM, U.S. National Coordination Office for Space-Based Positioning, Navigation and Timing, USA</i>
	▪ United Nations Office for Outer Space Affairs	<i>Ms. Alice LEE, United Nations Office for Outer Space Affairs</i>
	▪ Colombian Comision on Space	<i>Mr. Ivan Dario GOMEZ GUZMAN, Executive Secretary CCE</i>
10:00 – 10:20	<i>Coffee Break</i>	
10:20 – 12:20	Session 1: State-of-the-art of GNSS Technologies	<i>Chairperson: Mr. Won Suk LEE, USA Rapporteur: Oscar PICO, CCE</i>
10:20 – 10:50	▪ United Nations Programme on Space Applications and Status of the Follow-up Projects and Initiatives since the UN/USA International Meeting of 2004	<i>Ms. Alice LEE, United Nations Office for Outer Space Affairs Ms. Sharafat GADIMOVA, United Nations Office for Outer Space Affairs</i>
10:50 – 11:20	▪ U.S. Space-based Positioning, Navigation and Timing Policy and Programs	<i>Mr. Jason KIM, U.S. National Coordination Office for Space-Based Positioning, Navigation and Timing, USA</i>
11:20 – 11:50	▪ GLONASS Status and Progress	<i>Mr. Sergey REVNIVYKH, Federal Space Agency, Russian Federation</i>
11:50 – 12:20	▪ Galileo and EGNOS Programmes' development	<i>Mr. Gerardo DELGADO, Galileo Info Centre for Latin America</i>
12:20 – 14:00	<i>Lunch Break</i>	

14:00 – 15:30	Session 2: State-of-the-art of GNSS Technologies (continues)	<i>Chairperson: Mr. Jose MOLIN, Brazil Rapporteur: Juan Antonio CLAVIJO, Colombia</i>
14:00 – 14:10	<ul style="list-style-type: none"> ▪ The United Nations and GNSS: International Committee on Global Navigation Satellite Systems 	<i>Ms. Sharafat GADIMOVA, United Nations Office for Outer Space Affairs</i>
14:10 – 14:40	<ul style="list-style-type: none"> ▪ Follow up activities since the 2005 International Workshop 	<i>Mr. Ivan Dario GOMEZ GUZMAN, Executive Secretary CCE</i>
14:40 – 15:10	<ul style="list-style-type: none"> ▪ The Geocentric Reference Systems of the Americas (SIRGAS) 	<i>Mr. Claudio BRUNINI, Plata National University, Argentina</i>
15:10 – 15:40	<ul style="list-style-type: none"> ▪ Mobile Communication systems for localization applications 	<i>Andres HENAO, SIMS TECH / Inmarsat / Iridium</i>
15:40 – 16:050 <i>Coffee Break</i>		
16:00 – 17:00	Discussion Session 1: State-of-the-art of GNSS Technologies	<i>Chairperson: Sharafat GADIMOVA, UNOOSA / Hector MATAMOROS, Colombia Rapporteur: Won Suk LEE, USA / Oscar PICO, Colombia</i>
	<ul style="list-style-type: none"> ▪ Interoperability/compatibility from user perspective and regional cooperation in applying GNSS technologies to the areas of: <ul style="list-style-type: none"> - Civil aviation and land transportation; - Surveying, mapping and Earth Science; - Agriculture and management of natural resources, the environment and disasters; - Timing, telecommunications and related applications; - Education and capacity building (Regional Centres and ICG Information Centres); - Tele-health and landscape epidemiology. ▪ Issues and concerns of application, requirements of implementing, possibilities of success, mechanisms and resources of implementing 	
Tuesday, 24 June 2008		
08:00 – 10:00	Session 3: International Experiences of the use and implementation of GNSS technologies	<i>Chairperson: Mr. Claudio BRUNINI, Argentina Rapporteur: William MARTIMEZ, Colombia</i>
08:00 – 08:35	<ul style="list-style-type: none"> ▪ Precision agriculture – methods and applications 	<i>Mr. Won Suk LEE, Agricultural and Biological Engineering University of Florida, USA</i>

08:35 – 09:25	<ul style="list-style-type: none"> ▪ GNSS system and LIDAR sensors integration 	<i>Mr Jorge SANCHEZ / Alvaro MARTINZ, DIMAR</i>
09:25 – 10:00	<ul style="list-style-type: none"> ▪ SIGPA-BOYACA project and the satellite images 	<i>Mr. Roberto ZWINGGI, Andean Ecosystems Foundation ECOAN, Switzerland</i>
10:00 – 10:20	<i>Coffee Break</i>	
10:20 – 12:20	Session 4: Regional Experiences of the uses and implementation of GNSS technologies	<i>Chairperson: Mr. Jorge IZAURRALDE, Argentina Rapporteur: Vicky GUERRERO, Colombia</i>
10:20 – 10:50	<ul style="list-style-type: none"> ▪ SBAS type ionospheric correction and integrity assessment experiment in the Central and South American region 	<i>Mr. Claudio BRUNINI, Plata National University, Argentina</i>
10:50 – 11:20	<ul style="list-style-type: none"> ▪ Experiences of precision agriculture with the use of GNSS for savings and yield improvements on tropical agriculture 	<i>Mr. Jose MOLIN, University of Sao Paulo, Brazil</i>
11:20 – 11:50	<ul style="list-style-type: none"> ▪ GPS Applications for Geodynamic and Meteorological Studies 	<i>Mr. Hector MORA, Ingeominas, Colombia</i>
11:50 – 12:20	<ul style="list-style-type: none"> ▪ Water Evaluation and Planning System for Water Resources Planning 	<i>Mr. Jeffrey Raul RIVERA ALVAREZ, Ministry of Environment and National Resources, Guatemala</i>
12:20 – 14:00	<i>Lunch Break</i>	
14:00 – 15:30	Session 5: Regional Experiences of the uses and implementation of GNSS Technologies (continues)	<i>Chairperson: Mr. Paul ACQUATELLA, Venezuela Rapporteur: Jaime DIAZ, Colombia</i>
14:00 – 14:30	<ul style="list-style-type: none"> ▪ Some applications of GPS in Cuba 	<i>Ms. Lourdes Barbara PALACIO-SUAREZ, IGA, Cuba</i>
14:30 – 15:00	<ul style="list-style-type: none"> ▪ Modernization and New Services of the Brazilian Active Control Network 	<i>Ms. Sonia Maria ALVES COSTA, IBGE, Brazil</i>
15:00 – 15:30	<ul style="list-style-type: none"> ▪ GIS and Remote Sensing a Tool in Public Health. Dengue Outbreak in Puerto Inirida 2008 	<i>Diana ROJAS, Instituto Nacional de Salud</i>
15:30 – 15:50	<i>Coffee Break</i>	
15:50 – 17:00	Discussion Session 2: International/Regional Experiences of the uses and implementation of GNSS technologies	<i>Chairperson: Sharafat GADIMOVA, UNOOSA / Hector MATAMOROS, Colombia Rapporteur: Oscar PICO, Colombia</i>
	<ul style="list-style-type: none"> ▪ Discuss plans, framework for a mechanism of regional cooperation; follow-up projects and initiatives. Result will be presented at the closing session.) 	

Wednesday, 25 June 2008		
08:00 – 09:15	Session 6: GNSS applications and case studies	<i>Chairperson: Mr. Raphael C. STEPHEN, Grenada, St. Vincent and the Grenadines Rapporteur: Diana Patricia ROJAS, Colombia</i>
08:00 – 08:25	<ul style="list-style-type: none"> ▪ An example of Gulich Institute applications on health: identification of priority areas for vector control activities of Chagas disease in Argentina 	<i>Ms. Ximena Porcase Gomez, CONAE, Argentina</i>
08:25 – 08:50	<ul style="list-style-type: none"> ▪ Time-space characterization of the presence of Wheat Streak Mosaic Virus (WSMV) and its vector <i>Aceria tosichella</i> in Argentina 	<i>Mr. Jorge IZAURRALDE, CONAE, Argentina</i>
08:50 – 09:15	<ul style="list-style-type: none"> ▪ NTRIP Fundamental Tool for Cartography and Cadastral Works 	<i>Mr. Marquez ANTONIO, Scientific and Industrial Measurement, Venezuela</i>
09:15 – 09:30 <i>Coffee Break</i>		
09:30 – 11:30	Session 7: GNSS applications and case studies (continues)	<i>Chairperson: Mr. Jeffrey Raul RIVERA ALVAREZ, Guatemala Rapporteur: Alvaro MARTINEZ, Colombia</i>
09:30 – 10:00	<ul style="list-style-type: none"> ▪ CAR/SAM Regional Programme for Satellite-based air navigation/SACCSA Project/Technical cooperation of the OACI 	<i>Mr. Aldo MARTINEZ, OACI TCB, Montreal-Lima</i>
10:00 – 10:30	<ul style="list-style-type: none"> ▪ Inland Waterway – Magdalena River 	<i>Mr. Horacio ARROYAVE, Colombia</i>
10:30 – 11:00	<ul style="list-style-type: none"> ▪ Phase I: Satellite Research Activities in Colombia. Project Definition 	<i>Mr. Ricardo Lozano, IDEAM, Colombia</i>
11:00 – 11:30	<ul style="list-style-type: none"> ▪ National Active Geodetic Network, Operation, Products and Benefits 	<i>Mr. Guido Alejandro GONZALEZ FRANCO, INEGI, Mexico</i>
11:30 – 13:00 <i>Lunch Break</i>		
13:00 – 17:00	Technical Visit (Aeronautical Fair)	
Thursday, 26 June 2008		
08:00 – 10:00	Session 8: Education and training on GNSS/ Regulations/ International	<i>Chairperson: Mr. Edision Roberto LOZANO, Ecuador</i>

	Cooperation/ Knowledge Management	<i>Rapporteur: Alvaro MARTINEZ, Colombia</i>
08:00 – 08:25	<ul style="list-style-type: none"> ▪ GNSS Knowledge Map 	<i>Mr. Marco A. DUENAS, PNCB, Colombia</i>
08:25 – 08:50	<ul style="list-style-type: none"> ▪ United Nations Affiliated Regional Centres for Space and Technology Education and ICG Information Centres 	<i>Ms. Sharafat GADIMOVA, UN OOSA</i>
08:50 – 09:15	<ul style="list-style-type: none"> ▪ CRECTEALC-Campus Mexico: perspectives on research and education on GNSS 	<i>Mr. Celso GUTIERREZ MARTINEZ, CRECTEALC, Mexico</i>
09:15 – 09:35	<ul style="list-style-type: none"> ▪ Educational issues in GNSS 	<i>Ms. Lilia Patricia ARIAS DUARTE, Jefe Oficina Centro de Investigación en Información Geográfica – CIAF-IGAC, Colombia</i>
09:35 – 10:00	<ul style="list-style-type: none"> ▪ Activities in Aerospace Medicine in Colombia 	<i>CR. Lina SANCHEZ (FAC), Directora Centro de Medicina de Aviación, Colombia</i>
10:00 – 10:20 <i>Coffee Break</i>		
10:20 – 12:50	Session 9: Education and training on GNSS/ Regulations/ International Cooperation/ Knowledge Management (continues)	<i>Chairperson: Mr. Guillermo Enrique MONCADA OSORIO, Honduras</i> <i>Rapporteur: Ivan LUNA, Colombia</i>
10:20 – 10:45	<ul style="list-style-type: none"> ▪ Hands on space with SGAC: enabling space development and education among young people in developing countries 	<i>Mr. Paul ACQUATELLA, SGAC, Venezuela</i>
10:45 – 11:10	<ul style="list-style-type: none"> ▪ Planning Surveys with GPS receiver 	<i>Mr. Paulo Cesar GURGEL DE ALBUQUERQUE, Brazil</i>
11:10 – 11:35	<ul style="list-style-type: none"> ▪ IMSMA – Tool provided by UN by Geneva International Centre for Humanitarian Demining 	<i>Ms. Diana Marisol PEÑALOSA, PIACMA Program</i>
11:35 – 12:00	<ul style="list-style-type: none"> ▪ Utilizacion de herramientas SIG en el marco del brote de Fiebre Amarilla en Paraguay 	<i>Ms. Mara Griselda MUNOZ DE CABRERA, Paraguay</i>
12:00– 12:25	<ul style="list-style-type: none"> ▪ El sistema mundial de navegación por satélite GNSS en el sector aeronáutico del Ecuador 	<i>Mr. Enrique Bolivar DAVALOS, Ecuador</i>
12:25 – 12:50	<ul style="list-style-type: none"> ▪ V Spatial Conference of Americas Activities 	<i>Mr. Edision Roberto LOZANO, Ecuador</i>
12:50 – 14:00 <i>Lunch Break</i>		
14:00 – 15:30	Session 10: Working Groups Sessions	<i>Introduction to Working Group Sessions:</i> <i>Ms. Alice LEE, UN OOSA</i> <i>Ms. Sharafat GADIMOVA, UN OOSA</i>

		<i>Mr. Hector Jose MATAMOROS, Civil Aviation Authority, Colombia</i>
	Working Group 1: Transportation	
	Working Group 2: Surveying, mapping and Earth Science	
	Working Group 3: Management of natural resources, the environment and disasters	
	Working Group 4: Timing, telecommunications and related applications	
	Working Group 5: Education and capacity building	
	Working Group 6: Tele-health and landscape epidemiology	
15:30 – 15:50	<i>Coffee Break</i>	
15:50 – 17:00	Session 11: Working Groups Sessions (continues)	
Friday, 27 June 2008		
08:00 – 10:00	Wrap-up Session	
	▪ Summary reports of presentation sessions	
	▪ Summary report of discussion sessions	
10:00 – 10:20	<i>Coffee Break</i>	
10:20 -12:20	Closing remarks	
	▪ Concluding Remarks	<i>Ms. Alice LEE, UN OOSA</i>