#### Wednesday, 17 July 2002

Session VI	GNSS Applications to Promote Sustainable Development: Applications in Air and Land Transportation Chairperson: G. Solari (European Space Agency)		
14:00 – 14:30	GNSS for air navigation: US FAA plans and progress	N. Graham (USA)	
14:30 - 15:00	IATA's GNSS initiatives in Africa	J. Valiquette (Canada)	
15:00 – 15:30	Point positioning of navigation beacons at international airports in Zambia	L. Chunga (Zambia)	
15:30 - 16:00	ICAO programmes in Africa	ICAO invited	
16:00 - 16:30	Coffee/Tea Break		
16:30 – 17:00	GNSS applications for land transportation: "Automatic Vehicle Location systems"	W. Molla (Saudi Arabia)	
17:00 – 17:30	Satellite navigation and positioning systems in Morocco	L. Rasmy (Morocco)	

### Thursday, 18 July 2002

Session VII	<b>Education and training in the use and applications of GNSS technologies</b> Chairperson: L. Combrick (South Africa) <i>invited</i>	
9:00 - 9:30 9:30 - 10:00 10:00 - 10:30	GNSS education and training in South Africa Capacity building in education and training Training of GPS Surveying at Kenya Institute of Surveying and Mapping (KISM)	C. Merry (South Africa) A. Bassole (Burkina Faso) M. Kamamia (Kenya)
10:30 – 11:00 11:00 – 11:30	Coffee/Tea break Progress of OMNITSAR HP trials in Southern Africa	G. Smith (South Africa)
11:30 - 12:30 12:30 - 14:00 14:00 - 17:00	Short Presentations by Participants  Lunch  Topical Discussion Groups	

### Friday, 19 July 2002

Session VIII	Wrap-Up Session: Recommendations and Follow-up Actions Chairperson: J. Karner (USA)
9:00 – 11:00	Reports by the Chairpersons Recommendations and Follow-up Actions
11:00 – 11:30 11:30 10:30 – 11:00	Closing Ceremony and Closing Remarks GNSS for Earth science Adjourn
14:00 – 17:00	Technical Tour

4

# UNITED NATIONS / UNITED STATES OF AMERICA

### **WORKSHOP ON**

"The Use and Applications of Global Navigation Satellite Systems"

15-19 July 2002 Lusaka, Zambia

Hosted by the Government of Zambia Co-sponsored by the European Space Agency



DRAFT PROGRAMME VER. 10, 1 July 2002

### UN/USA WORKSHOP ON

# "The Use and Applications of Global Navigation Satellite Systems"

Programme Committee:
United States Department of State:
Government of Zambia: K. Hodgkins, J. Karner P. Zambezi, N. Imbuwa

United Nations: S.Camacho, V. Kotelnikov, M. Gerard

## Programme

Monday, 15 July 2002				
08:00 - 10:00	Registration:			
10:00 - 11:00	Mulungushi International Center Opening ceremony:			
10.00 – 11.00	Introductory remarks	The Honourable A. M. Chambeshi,		
	introductory remarks	MP, Zambia		
	Welcome address	His Excellency L.P. Mwanawasa S.C.,		
	Welcome address	President of Zambia		
	Opening statements	D. W. Mozena,		
	· F 8	Charge d'Affaires, Embassy of the		
		United States to Zambia		
		M. Tabache,		
		International Affairs, European Space		
		Agency		
		V. Kotelnikov,		
		United Nations Office for Outer Space		
	B. I	Affairs		
	Background, objectives, format of the	M. Gerard (USA)		
	Workshop			
Session I	Existing and Future GNSS Systems and Their Applications Chairperson: P. Zambezi, (Zambia)			
11:00 – 11:30	Status and development of the Global Positioning System	J. Karner (USA)		
11:30 - 12:00	Status and development of Glonass	S. Revnivych (Russian Federation)		
	1	invited		
12:00 - 12:30	Status and development of Galileo	A. Landabaso (European Commission)		
12:30 - 14:00	Lunch			
14:00 - 14:30	Status and development of GPS augmentations	R. Hamilton (USA)		
14:30 - 15:00	Status and development of EGNOS	G. Solari (European Space Agency)		
15:00 – 15:30	GNSS strategic opportunities: Potential for exploiting spatial technology and its impact on economic diversification and emerging growth sectors in Zambia	R. Moyo (Zambia)		
15:30 - 16:00	Break			
16:00 - 16:30	Overview of current and expected GNSS	J. Karner (USA)		
	applications			
16:30 - 17:00	GPS information systems	H. Skalski (USA)		
18:00 – 21:30	Cultural Evening			

#### Tuesday, 16 July 2002

Session II	GNSS Applications to Promote Sustainable Development: Management of Natural Resources Chairperson: S. Averin (Russian Federation) invited	
09:00 - 09:30 09:30 - 10:00 10:00 - 10:30 10:30 - 11:00	Agricultural information systems using GNSS GNSS for mining and geology Using GNSS to manage mountain forest resources in East Africa Coffee/Tea break	M. Rasher (USA) F. Njamu (Zambia) C. Lambrechts (Kenya)
Session III	GNSS Applications to Promote Sustainable Development: Environmental Monitoring and Disaster Management Chairperson: A. Bassole (Burkina Faso)	
11:00 – 11:30	Preliminary report on geodetic measurements in the Kenyan Rift Valley	M. Kamamia (Kenya)
11:30 - 12:00	Satellite communications for disaster warning and emergency services	A. Leyrer (Austria)
12:00 – 12:30	Using GNSS technology for the monitoring of parks and animal tracking	C. Beech (South Africa)
12:30 – 14:00	Lunch	
Session IV	GNSS Applications to Promote Sustainable D Surveying, Mapping and Earth Sciences Chairperson: K. Owolabi (Namibia)	evelopment:
14:00 - 14:30	Status of CODI and implications for SDI geodetic developments in Africa	C. Ezigbalike (Ethiopia)
14:30 - 15:00	International GPS Service: Global GNSS framework	R. Neilan (USA)
15:00 – 15:30	Progress status on the African Reference Frame (AFREF)	M. Chodota (Kenya)
15:30 – 16:00 16:00 – 16:30	Coffee/Tea break Plans for realizing SAREF – Reference frame in Southern Africa	R. Wonnacott (South Africa)
16:30 – 17:00	Status of NAREF activities since 2000 – Reference frame in Northern Africa	M. Unis (Libya)
17:00 – 17:30	International boundary surveys in Zambia: Integrating regional spatial data infrastructure using GPS technology	D. Mubanga (Zambia)
Wednesday, 17 Ji	uly 2002	
Session V	GNSS Applications to Promote Sustainable Development: Surveying, Mapping and Earth Sciences (Continued) Chairperson: C. Ezigbalike (Ethiopia)	
09:00 - 09:30	The IGS Station and its role in land delivery in Zambia	P. Nsombo (Zambia)
09:30 - 10:00 10:00 - 10:30 10:30 - 11:00 11:00 - 11:30 11:30 - 12:30 12:30 - 14:00	GPS networks in Egypt GNSS for Earth science The gravity connection to GNSS applications Coffee/Tea break Topical Discussion Groups Lunch	S. Mahmoud (Egypt) T. Herring (USA) C. Merry (South Africa)

2

3