

Communication Satellite Applications WG

Chairs' Report

Co-Chairs:


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APRSAF-12 Kitakyushu, Japan

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Outline

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- **Participants**
 - **Presentations**
 - **Main Themes**
 - **General Conclusions**
 - **Recommendation**

Participants of SatCom WG

■ ASEAN Secretariat	Dr. Alexander A. Lim	ASEAN Secretariat
■ Brunei	Mr. Arefin Jaya	Ministry of Development
■ Indonesia	Prof. Utoro Sastrokusuo	Institut Teknologi Bandung (ITB)
■ Malaysia	Prof. Syed Idris bin Syed Hassan	Universiti Sains Malaysia
	Dr. David Chieng Heng Tze	Faculty of Engineering Multimedia University
■ Mongolia	Ms. Banzragch Luvsanchimed	Infrastructure Consulting Co.,Ltd.
■ The Philippines	Dr. Dose Edgardo L. Aban	Dept. of Science and Technology (DOST)
■ Russia	Dr. Alexander I. Medvedchikov	Russian Federal Space Agency
	Mr. Alexander S. Viktorov	Russian Federal Space Agency
	Mr. Alexander F. Evstrakhov	Russian Federal Space Agency
	Mr. Alexey M. Korostelev	Russian Federal Space Agency
	Mr. Dmitry A. Medvedchikov	Russian Insurance Center
■ Sri Lanka	Dr. S. Namasivayam	Arthur C Clarke Center for Modern Technologies
■ Thailand	Mr. Jean-Philippe Thouard	Asian Institute of Technology (AIT)
	Mr. Chaiyan Peungkiatpairote	Ministry of Information and Communication Technology
	Ms. Chananporn Ponpadung	Ministry of Information and Communication Technology
■ Australia (CRCSS)	Prof. Andrew Parfitt	Cooperative Research Centre for Satellite Systems
■ Japan	Mr. Masaru Arakida	Asian Disaster Reduction Center (ADRC)
	Mr. Mitsuyoshi Iida	Association of Radio Industries and Businesses
	Mr. Yasuo Nakamura	JAXA
	Mr. Masaaki Shimada	JAXA
	Mr. Makoto Asaba	MELCO
	Mr. Yoichi Koishi	NTS
	Mr. Kazunori Inagaki	JAXA
	Mr. Aiichiro Hayata	JAXA
	Mr. Hirokazu Fukanogi	JAXA
	Ms. Maki Kaneko	JAXA

WG Presentations: 12th Oct.

- Yasuo Nakamura, JAXA, Overview of WINDS Payload
- Kazunori Inagaki, JAXA, WINDS Communications System
- David Chieng, MMU, Satellite Tele-Education : MMU's Experience
- Jean-Philippe Touard, AIT, e-Learning via Satellite and Development: the case of AIT and the Greater Mekong Sub-region
- Utoro Sastrokusuo, ITB, WINDS System Utilization for Extension of Telecommunication Services to Rural Areas Using Wireless IP Platform
- Syed Hassan, USM, Satellite Link Impairment due to Rain and Other Climate Factors
- Hirokazu Fukanogi, JAXA, Application of ETS-VIII Experiment for Disaster Scene
- Viktorov Aleksandr Sergeevich, Russian Space Communications System
- Satish Namasivayam, ACIMT, Can Space Technology help communication issues in rural Sri Lanka?
- Makoto Asaba, Melco, How can SatCom reduce the broadband access cost?
- Yoichi Koishi, NTS, A study of Satellite Communication Networking for Digital Divide

Issues Discussed

- Advanced communication satellite technology
 - WINDS and ETS-VIII
- Applications – e-Learning
- Technical issues – propagation
- Rural/remote area communications
 - Broadband and aggregated voice
- Commercial SatCom situation
- The Russian Satellite Communication System

Issues Discussed

- Capability of advanced broadband satellite technologies and pilot projects
 - Cost of ground stations
- Use of commercial satellite communications
 - Service cost models, systems, capability, efficient use of bandwidth
- Types of services
 - Video multicasting (e-Learning), voice aggregation, internet kiosk
- Disaster management/Telemedicine
 - Sustainable infrastructure provision, standardization

General Conclusion of WG

- Need to better understand the capability of satellite communications by developing nations
- Need to develop pilot projects for both high-technology systems (eg. WINDS) and current commercial systems
- Need to find ways to reduce cost of bandwidth

Recommendations of WG

- Finalize arrangements for Broadband Satellite Communications prize
- Conduct a regional workshop on satellite communications
- Recognise cost of WINDS ground stations
- Focus WG on new satellites, existing commercial systems and pilot projects

Proposed Workshop Themes

- **Mid-2006, Location TBD**
 - Consider applications for WINDS satellite
 - Scoping needs in education, health, information access, disaster management
 - Identifying ground station requirements
 - Developing projects for demonstrating low-cost systems
 - Increase awareness of next generation capabilities
 - Make proposals to APRSAF-13 on pilot projects
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