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# ITU INTERNATIONAL SATELLITE SYMPOSIUM 2015 AND WORKSHOP ON THE EFFICIENT USE OF THE SPECTRUM/ORBIT RESOURCE

DA NANG CITY, VIETNAM  
29 SEPTEMBER – 1 OCTOBER 2015

WORKSHOP: 29 SEPTEMBER  
SYMPOSIUM: 30 SEPTEMBER – 1 OCTOBER





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# ITU Workshop on the Efficient Use of the Orbit/ Spectrum Resource, Danang, Vietnam – Programme

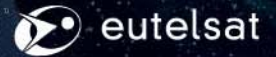
## WORKSHOP

TUESDAY, 29 SEPTEMBER 2015

08:00	Registration	
08:45-09:15	<b>Opening Session</b> Welcome remarks by ITU Opening remarks by ARFM/MIC Vietnam	Yvon Henri (ITU) ARFM/MIC Vietnam
09:15-10:30	<b>Session 1: Enabling Access to the Spectrum &amp; Orbit Resources</b> Presentations in this session will highlight opportunities for new entrants to gain access to the satellite/orbit resources and current capacity building efforts in the satellite industry including incentives for optimal spectrum/orbit use.	Lim Seng / Eyoh Chih Hong (SSII) Ting Ling Lee (SES) Vicky Wong (Asiasat) Prasanna Srinani (ABS)
10:30-10:45	Coffee Break	
10:45-12:00	<b>Session 2: Regulatory Best Practices</b> Presentations in this session will focus on the best practices governing the use of new technologies which are gaining wide spread prominence e.g. Earth Stations on Vessels, Earth Stations on Mobile Platforms or Unmanned Aircraft System, nano/pico satellites.	Mariah Shuman (O3b) Ethan Lavan (Eutelsat) Daryl Hunter (Viasat) [Guido Baraglia (Kratos Sat Corp)]
12:00-13:00	Lunch	
13:00-15:00	<b>Session 3: WRC-15 / WRC-19: Agenda Items for Efficient Use of the Spectrum/Orbit Resources</b> Director's report for WRC-15 PP Resolution 186 (Busan, 2014) Regional preparations <b>Open Discussion on WRC-15 / WRC-19</b>	Yvon Henri (ITU) Vicky Wong (Asiasat) Kumar Singarajah (Avanti)
15:00-16:00	<b>Session 4: Future Improvements to ITU and NGSO Satellite Framework</b>	Yvon Henri (ITU) Whitney Lohmeyer (OneWeb) Matthew Dunn (SpaceX)
16:00-16:15	Coffee Break	
16:15-17:30	<b>Session 5: Open Forum Discussion</b> The delegates will participate in moderated open-forum discussion relating to future steps to be taken relating to satellite spectrum and regulatory solutions.	Lim Seng / Eyoh Chih Hong (SSII) Ting Ling Lee (SES) Prasanna Srinani (ABS) Mariah Shuman (O3b) Ethan Lavan (Eutelsat) Daryl Hunter (Viasat) [Guido Baraglia (Kratos Sat Corp)] Vicky Wong (Asiasat) Kumar Singarajah (Avanti) Whitney Lohmeyer (OneWeb) Matthew Dunn (SpaceX)
17:30-17:45	<b>Closing Session</b> Closing remarks by ITU Closing remarks by ARFM/MIC Vietnam	Yvon Henri (ITU) ARFM/MIC Vietnam



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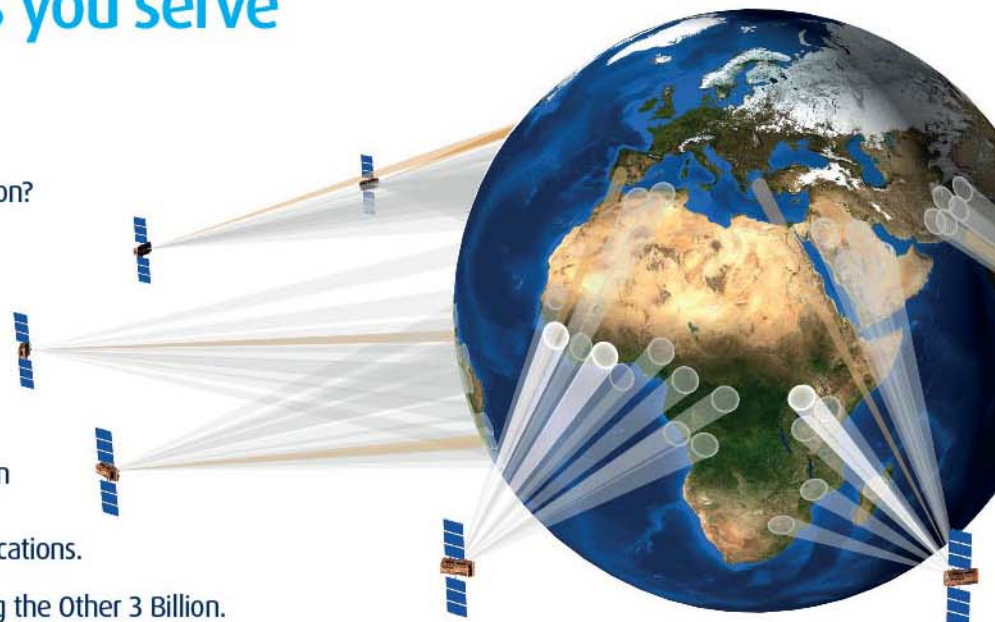
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# ITU/MIC International Satellite Symposium 2015 Satellite Regulation, Market, Technology Trends and Industry Opportunities

30 September – 1 October 2015

Vinpearl Luxury Danang, Danang City, Vietnam

<http://www.satellitesymposium2015.org/>

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## SYMPOSIUM

Wednesday 30 September 2015 (Day 1)

Regulatory issues

07:30 – 08:45 08:45 – 09:00	<p>Registration</p> <p><b>Opening Session</b></p> <ul style="list-style-type: none"> <li>Welcome Remarks by Mr.Yvon Henri, Chief SSD, Radiocommunication Bureau, ITU</li> <li>Opening Remarks by HE. Mr. Pham Hong Hai, Vice Minister of MIC, Viet Nam (TBC)</li> </ul>
09:00 – 09:30	<b>Group Photo and Coffee Break</b>
09:30 – 10:00	<p><b>Session 1: Satellite International Regulations update</b></p> <p>The session aims at discussions the Radio Regulations (RR), satellite international regulatory framework; efficient use of the spectrum/orbit resource and coordination of satellite networks; space stations filing procedures; bilateral agreements on coordination matters; terms of validity of filings and associated agreement.</p> <ul style="list-style-type: none"> <li>Keynote address by Mr.Yvon Henri, Chief, Space Services Department (SSD), Radiocommunication Bureau, ITU</li> </ul>
10:00 – 12:00	<p><b>Session 2: WRC-15: Key Agenda Items</b></p> <p>The session will discuss about: Increasing Satellite Spectrum Demand (e.g. AI 1.6 for Ku and AI 1.9 for X); Potential WRC-15 Proposals; Proposals for Wireless Use of Satellite Bands: C, Ku, Ka and beyond; Spectrum Sharing: Analysis &amp; Implications; [Satellite tracking]</p> <p><b>Chairperson:</b> Mr.Yvon Henri, Chief, Space Services Department (SSD), Radiocommunication Bureau, ITU</p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>Mr. Phung Nguyen Phuong, Director of International Cooperation and Frequency Coordination Division, ARFM, Vietnam</li> <li>“WRC 15 Agenda items of 1.1, 1.6 and 10” by Ms.Ting Ling Lee, Manager, Spectrum Management &amp; Development for the Asia Pacific region, SES</li> <li>Mr. Ethan Lavan, Director of In-Orbit Resources, Eutelsat</li> <li>Mr. Mathew Dunn, Space X</li> <li>Ms. Whitney Lohmeyer, Communications Systems and Regulatory Engineer Oneweb</li> </ul>
12:00 – 13:30	Lunch break
13:30 – 15:30	<p><b>Session 3: Satellite Service Regulatory Framework – country experiences</b></p> <p>This session will focus on satellite communications and broadcasting service regulatory framework from country perspective. Policy makers and regulators will share experience in related policy and regulation such as spectrum management, frequency coordination, licensing framework, satellite filing, and etc.</p> <p><b>Chairperson:</b> Mr. Doan Quang Hoan, Director General, Authority of Radio Frequency Management (ARFM), Vietnam</p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>Ms. Haruko S. Takeshita, International Frequency Policy, Ministry of Internal Affairs and Communications (MIC), Japan</li> </ul>



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# SYMPOSIUM

Wednesday 30 September 2015 (Day 1)

Regulatory issues

	<ul style="list-style-type: none"> <li>• Mr. Gerson Damanik, Head of Satellite Coordination Section, Ministry of Communication and Information Technology, Republic of Indonesia</li> <li>• Mr. Sopheak Cheang, Deputy Director General of Posts and Telecommunications, Ministry of Posts and Telecommunications, Cambodia</li> <li>• Mr. Md. Asaduzzaman, Senior Assistant Director, Bangladesh Telecommunication Regulatory Commission (BTRC), Bangladesh</li> <li>• Mr. Win Aung, Chief Engineer, Ministry of Communications and Information Technology, Myanmar</li> </ul>
15:30 – 16:00	Coffee break
16:00 – 17:30	<p><b>Session 4: Satellite Service in Landlocked Countries – country experiences</b>  <b>Chairperson:</b> Mr. Joaquin Restrepo, Head, Outreach and Publications Services (OPS/IAP), Radiocommunication Bureau, ITU  <b>Panelists:</b></p> <ul style="list-style-type: none"> <li>• Mr. Sonam Phuntscho, Senior Communication Officer, Bhutan InfoComm and Media Authority</li> <li>• Mr. Batbayar Vandansambuu, Head of Space and Radiocommunication Division, Information Technology Post and Telecommunication Authority (ICTPA), Mongolia</li> <li>• Ms. Jedtavong Thepvongsa, Engineer of Radio Spectrum Management Division, Ministry of Posts and Telecommunications, Laos PDR</li> <li>• Mr. Subodh Nepal, Technical Officer, Ministry of Information and Communications, Nepal</li> </ul>
18:30 – 20:30	<b>Networking Dinner hosted by MIC Vietnam</b>

# SYMPOSIUM

Thursday 1 October 2015 (Day 2)

Satellite Market and Technology Trends, Industry Opportunities

09:00 – 10:30	<p><b>Session 5: Satellite Service in Pacific Islands Countries – country experiences</b>  <b>Chairperson:</b> Mr. Ivan Fong, President of Pacific Islands and Telecommunications Association (PITA)  <b>Panelists:</b></p> <ul style="list-style-type: none"> <li>• Mr. George Tardio, Engineer III, Information and Communications Technology Office (ICTO), Philippines</li> <li>• Mr. Jackson Kariko, Manager International Affairs, National ICT Authority (NICTA), Papua New Guinea</li> <li>• Ms. Eretibete Timiti, Assistant Secretary, Ministry of Communications, Transport and Tourism Development, Kiribati</li> <li>• Mr. Lutoviko Lui Falemaka, Engineer Telecommunication, Ministry of Information and Communication, Tonga</li> </ul>
10:30 – 11:00	Coffee break
11:00 – 12:30	<p><b>Session 6a: Satellite Markets and Technology Trend</b>  This session will invite key industry players such as satellite service providers, operators, manufacturers, system integrators, etc. to present and discuss about satellite technologies, innovative services, market mechanism and competition, as well as business models in the satellite industry including satellite communications and broadcasting.  <b>Chairperson:</b> Mr. Stéphane Chenard, Euroconsult  <b>Panelists:</b></p> <ul style="list-style-type: none"> <li>• “The Internet of Everywhere” by Ms. Sara Lim, Senior Regulatory Officer, Inmarsat Global Ltd.</li> <li>• “Satellite Trends – O3b’s Innovative Service” by Ms. Mariah Shuman, Regulatory Counsel, O3b Networks</li> <li>• Mr. Charles Disneur, Regional Commercial and Marketing Manager, Eutelsat Asia</li> </ul>
12:30 – 14:00	Lunch break



<p>14:00– 16:00</p>	<p><b>Session 6b: Satellite Markets and Technology Trend</b></p> <p>The session will see presentations and discussions about future trend of the satellite industry by key regional organisations dealing with satellite communications. It aims at key issues and challenges being faced by any industry stakeholders. The session will also identify opportunities in the satellite market at both national and international levels.</p> <p><b>Chairperson:</b> Mr. Stéphane Chenard, Euroconsult</p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>• Video presentation by Mr. John Medeiros, Chief Policy Officer, CASBAA</li> <li>• “New Technologies and Applications with Market Challenges” by Mr. Nguyen Hong Son, CEO of OSB</li> <li>• “Advocating the Establishment of ISIU - International Space Internet Union” by Mr. Lim Seng, Co-Founder &amp; CTO SSII Singapore Space Intelligent Internet</li> <li>• Mr. Pham Dang Truong – Satcom Manager, VNPT-I</li> <li>• Mr. Mathew Dunn, Space X</li> <li>• Mr. Felix Damiba, Consultant</li> </ul>
<p>16:00 – 16:15</p>	<p>Coffee break</p>
<p>16:15– 17:15</p>	<p><b>Session 7: Panel Discussion</b></p> <p><b>Chairperson:</b> Mr. Yvon Henri, Chief, Space Services Department (SSD), Radiocommunication Bureau, ITU</p> <p><b>Panelists:</b></p> <ul style="list-style-type: none"> <li>• Mr. Doan Quang Hoan, Director General, Authority of Radio Frequency Management (ARFM), Vietnam</li> <li>• Mr. Stéphane Chenard, Euroconsult</li> <li>• Mr. John Medeiros, Chief Policy Officer, CASBAA</li> <li>• Mr. Ivan Fong, President of Pacific Islands and Telecommunications Association (PITA)</li> </ul>
<p>17:15 – 17:30</p>	<p><b>Closing Session</b></p> <ul style="list-style-type: none"> <li>• Closing remarks by Mr. Yvon Henri, Chief SSD, Radiocommunication Bureau</li> <li>• Closing remarks by Mr. Le Van Tuan, Deputy Director General of ARFM, Vietnam</li> </ul>



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### ENABLES CRITICAL FINANCIAL TRANSACTIONS


**1** **75,000**   
C-band VSAT sites in Indonesia enable  
15 million ATM transactions daily


**2** **300**   
mobile ATMs use C-band antennas  
for rural banking in Indonesia


**3** **5,050**   
C-band VSAT sites in 375+ cities connect  
stockbrokers to India's exchanges

**4** **5,000**   
additional C-band VSATs are in use in  
India for banking networks

### SUPPORTS THE ELECTRICAL GRID & NATURAL RESOURCES


**5** **1,300**   
C-band VSAT sites control India's  
electrical grid via the Karnataka  
Power Transmission Co.

**6** Two-thirds of Papua New  
Guinea exports rely on C-band 

**7** In 2014, India's Oil & Natural Gas  
Corp will increase reliance on  
C-band terminals by 50% 

### DELIVERS CRITICAL NEWS & ENTERTAINMENT TO THE REGION

**8** **55M**   
C-band dishes in Asia receive direct TV  
programming

**9** **\$300M**   
goes to the Indonesian economy  
from C-band broadcasting yearly

**10** **9000**   
Annual amount of rain\* (in mm) in areas of Papua New  
Guinea, making C-band essential for broadcasting