

TRAI - ASEAN Training Programme on  
**“Capacity Building and Sharing of Best Practices in Policy,  
 Regulation and Development”**

Hotel Royal Plaza, Ashoka Road, New Delhi.

18-22, November, 2019

**Agenda**

*as on 5.11.2019*

<b>(Day 1) 18<sup>th</sup> November’19, Monday</b>		
Date	Time	Session topics
Session	1000 – 1100 hrs	Inaugural Session
	1100 – 1130 hrs	Group Photo High Tea
<b>SESSION 1</b>	1130 - 1300 hrs	<p><b>Evolution of Regulatory Regime in Telecom Sector</b>  <i>(An introductory review of regulatory regime and why regulation is necessary in a competitive market. To learn about the evolution of telecom regulatory framework in Asia/South Asia region vis-à-vis Europe and American continents)</i></p> <p><i>This session will broadly discuss the roles and functioning of a telecommunication Regulator. Some of the issues which may be covered in this session are:</i></p> <ul style="list-style-type: none"> <li>○ Liberalization and privatization</li> <li>○ Role of a regulator in liberalized economy</li> <li>○ World trend in setting up of communications regulators</li> <li>○ Balancing the Policy making and Regulation</li> <li>○ Global Licensing frameworks</li> <li>○ Balancing regulatory functions of different sectoral regulators for overlapping issues.</li> </ul> <p><b>Speaker:</b></p> <ul style="list-style-type: none"> <li>● <b>Dr. Rajat Kathuria, Director &amp; Chief Executive, ICRIER</b>  <a href="#"><b>[Presentation]</b></a></li> </ul>
	1300 – 1400 hrs	<b>LUNCH BREAK</b>
<b>SESSION 2</b>	1400 - 1530 hrs	<p><b>Issues related to Competition, Licensing and Regulation in Telecommunications.</b>  <i>(The session will address the concepts of markets and competition. Also to look at the need for ensuring level playing field when multiple players are in the service provisioning. Will discuss about main features of a licensing regime and its implementation process, how license conditions will deal with technological changes and innovation)</i></p> <p><u>Competition Issues:</u></p>

		<ul style="list-style-type: none"> <li>○ What is competition? Monopoly, Duopoly and Oligopoly</li> <li>○ Market power and competition</li> </ul> <p><b><i>Licensing Issues:</i></b></p> <ul style="list-style-type: none"> <li>○ General and service-based licenses</li> <li>○ Unified licensing regime</li> <li>○ The future of licensing regimes and move toward general authorization</li> <li>○ Licensed markets and regulators</li> </ul> <p><b><i>Speaker :</i></b></p> <ul style="list-style-type: none"> <li>● <b><i>Prof V. Sridhar, IIT, Bangalore</i></b> [<a href="#">Presentation</a>]</li> </ul>
	1530 – 1600 hrs	Tea Break
<b>SESSION 3</b>	1600 – 1715 hrs	<p><b>Country Presentations of ASEAN Member States</b>  <i>(ASEAN Member countries will be requested to make presentations on the Telecom Regulatory Framework that exists in their respective countries. The presentations may include the following information which will be helpful for the participants)</i></p> <ul style="list-style-type: none"> <li>○ Country specific liberalization process</li> <li>○ Roles and exclusive powers of telecom regulator in your country</li> <li>○ Are there separate regulators for telecom, ICT and Broadcasting?</li> </ul> <p><b><i>Presenters :</i></b></p> <p><b><i>Country – 1 (Singapore)</i></b>  <b><i>Country – 2 (Malaysia)</i></b> [<a href="#">Presentation</a>]  <b><i>Country -3 (Thailand</i></b> [<a href="#">Presentation</a>] / <b><i>Indonesia</i></b> [<a href="#">Presentation</a>]</p>
	1715 – 1730 hrs	Wrapping up
	1900 – 2100 hrs	<b>WELCOME DINNER</b>
<b>(Day 2) 19<sup>th</sup> November, 2019 (Tuesday)</b>		
<b>SESSION 4</b>	1000 – 1130 hrs	<p><b>Regulatory Issues related to Spectrum Allocation and harmonization</b>  <i>(To study the need for an efficient allocation of spectrum resources and monitoring of usage in order to avoid harmful interference. Some modern spectrum management and monitoring tools will be discussed at his session)</i></p> <ul style="list-style-type: none"> <li>● Overview of Spectrum Policy</li> <li>● Spectrum Allocation and management</li> <li>● International practice in actioning of Spectrum</li> <li>● Spectrum trading and Spectrum Sharing</li> </ul> <p><b><i>Speakers :</i></b></p> <ul style="list-style-type: none"> <li>● <b><i>Mr. Randeep Raina (CTO Nokia India)</i></b> [<a href="#">Presentation</a>]</li> <li>● <b><i>Mr. Amit Marwah (CMO Nokia India)</i></b></li> </ul>

	1130 – 1145 hrs	Tea/Coffee Break
<b>SESSION 5</b>	1145 – 1245	<p><b>Approaches to Spectrum Valuation &amp; Pricing</b></p> <ul style="list-style-type: none"> <li>• Criteria to determine the value of spectrum</li> <li>• Pricing methods</li> </ul> <p><b>Speakers :</b></p> <ul style="list-style-type: none"> <li>• <b>Prof. V. Sridhar, IIIT, Bangalore</b></li> <li>• <b>Mr. Parag Kar, VP, Qualcomm [Presentation]</b></li> </ul>
	1245 – 1300 hrs	QUIZ/Activity
	1300 – 1400 hrs	<b>LUNCH BREAK</b>
<b>SESSION 6</b>	1400 – 1530 hrs	<p><b>Regulating Telecom Tariff in the Emerging Scenario</b>  <i>(Is regulation of tariff necessary or it should be kept at forbearance? Which tariff are to be regulated?)</i></p> <ul style="list-style-type: none"> <li>○ Transparency in Tariff offers issued by TSPs</li> <li>○ Non-discriminatory Tariff and predatory pricing</li> <li>○ Promotional Offers</li> <li>○ Regulating international roaming tariff</li> <li>○ Differential tariff</li> <li>○ Issues related Zero Rating offers</li> </ul> <p><b>Speaker :</b></p> <ul style="list-style-type: none"> <li>• <b>Mr. Vipul Puri, JA (F&amp;EA), TRAI [Presentation]</b></li> </ul> <p><b>Accounting Separation</b></p> <ul style="list-style-type: none"> <li>○ Why Account Separation?</li> <li>○ Framework for Accounting separation</li> <li>○ Reporting requirements of Service providers</li> <li>○ Costing approaches to be adopted</li> </ul> <p><b>Speaker :</b></p> <ul style="list-style-type: none"> <li>• <b>Mr. Anil Dhingra, JA (F&amp;EA), TRAI</b></li> </ul>
	1530 – 1600 hrs	<b>Tea/Coffee Break</b>
<b>SESSION 7</b>	1600 – 1730 hrs	<p><b>Bridging the Digital Divide</b>  <i>(To learn about government initiations and nationwide policies to promote connectivity in rural areas and bridge the gap between 'connected' and 'unconnected'. Also to discuss about the need for broadband penetration in rural areas and the bottlenecks in this initiatives)</i></p> <ul style="list-style-type: none"> <li>• Proliferation of ICT in rural areas</li> <li>• Universal service and universal Access</li> <li>• Concept of USO Funding</li> <li>• National Broadband policies (Case studies eg. BharatNet etc)</li> <li>• A case study on Digital India in nation building</li> </ul> <p><b>Speaker :</b></p>

		<ul style="list-style-type: none"> <li>• <b>Mr. Pankaj Kumar, Joint Administrator, USOF, DoT</b> <b>[<a href="#">Presentation</a>]</b></li> </ul>
	1730 – 1800 hrs	Group Activity
<b>(Day 3) 20<sup>th</sup> November, 2019 (Wednesday)</b>		
<b>SESSION 8</b>	1000 – 1130 hrs	<b>5G – The Path to next Generation (GSMA Session)</b> <ul style="list-style-type: none"> <li>○ Transition to fifth generation (5G) technology</li> <li>○ Increased connectivity in 5G regime</li> <li>○ Key aspects of 5G technology</li> <li>○ Roles of Government and Regulators in ushering in 5G services</li> <li>○ 5G and benefits to common man</li> </ul> <b>Speakers :</b> <ul style="list-style-type: none"> <li>• <b>Emanuela Lecchi, GSMA</b></li> <li>• <b>Michele Zarri, GSMA</b> [<a href="#">Presentation</a>]</li> </ul>
	1130 – 1200 hrs	Tea/Coffee Break
<b>SESSION 9</b>	1200 – 1330 Hrs	<b>Competition Policy in the Digital Age (GSMA Session)</b> <ul style="list-style-type: none"> <li>○ Multifaceted and dynamic competition in mobile telecommunications</li> <li>○ Regulatory approach to rapid technological changes that impact infrastructure competition</li> <li>○ Rules of competition and regulatory powers in the wider competitive landscape (including OTT Players)</li> </ul> <b>Speakers :</b> <ul style="list-style-type: none"> <li>• <b>Emanuela Lecchi, GSMA</b> [<a href="#">Presentation</a>]</li> <li>• <b>Michele Zarri, GSMA</b></li> </ul>
	1330 – 1430 hrs	<b>LUNCH BREAK</b>
	1430 – 1700 hrs	<b>Industrial Field Visit</b>
<b>(Day 4) 21<sup>st</sup> November, 2019 (Thursday)</b>		
<b>SESSION 10</b>	1000 – 1130 hrs	<b>Consumer Policy &amp; Protection (60 minutes)</b> <i>(One of the primary responsibilities of the Regulator is to protect consumer interests in this highly competitive market. Consumers friendly initiatives taken by various regulatory organizations will be discussed)</i> <ul style="list-style-type: none"> <li>○ Creation of Consumer awareness &amp; advocacy</li> <li>○ Consumer grievances Redressal Mechanism</li> <li>○ Consumer welfare regulation</li> <li>○ MNP and UCC Regulations to empower consumer rights</li> <li>○ Tools to assess consumer satisfaction and feedback</li> </ul> <b>Speaker:</b> <ul style="list-style-type: none"> <li>• <b>Mr. Sanjeev Banzal, Advisor (CA), TRAI</b> [<a href="#">Presentation</a>]</li> </ul> <b>Maintaining QoS, QoE and handling of UCC (30 minutes)</b>

		<b>Speaker:</b> <ul style="list-style-type: none"> <li>• <b>Mr. Asit Kadyan, Advisor (QoS), TRAI</b></li> </ul>
	1130 – 1200 hrs	Tea Break
<b>SESSION 11</b>	1200 – 1300 hrs	<b>Need for Futuristic Digital Communication Policies</b>  <i>(The recent time has seen exponential growth in technology and today IoT (Internet of Things), AI (Artificial Intelligence), M2M (Machine to Machine) communications etc have become a reality. Voluminous data is being generated whenever a user comes in contact with the digital eco-system, which is inevitable in this Digital era. Since data is ubiquitous in the world today; the issue of protection of personal data of the users is a matter of deep concern for everyone. The need for Digital Communication policy will be discussed)</i> <ul style="list-style-type: none"> <li>○ Digital Infrastructure Policies and Regulation</li> <li>○ Big data</li> <li>○ Issues related to data privacy and security</li> <li>○ Creation of comprehensive data protection framework</li> </ul> <b>Speaker :</b> <ul style="list-style-type: none"> <li>• <b>Mr. S.K. Singhal, Advisor TRAI</b></li> </ul>
	1300 – 1400 hrs	LUNCH BREAK
<b>SESSION 12</b>	1400 – 1530 hrs	<b>Emerging Technologies and Cross Sectoral Regulatory Challenges</b>  <i>(This session will discuss foreseeable technological advancements and related regulatory challenges. The imminent convergence of technologies of telecom, ICT and broadcasting will create a new regulatory environment and will converge the services also. The licensing framework needs adequate update to deal with this scenario. 5G, IoT, AI and M2M services will also bring in unique challenges)</i> <ul style="list-style-type: none"> <li>○ Convergence of technologies and services</li> <li>○ Regulatory approach to convergence and changes required in licensing conditions</li> <li>○ Regulatory Challenges in ICT and related Licensing issues</li> <li>○ Cross sectoral regulation (Ex. E-commerce, Digital Financial Services etc)</li> </ul> <b>Speakers:</b> <ul style="list-style-type: none"> <li>• <b>Mr. Ajay Ranjan Mishra, Digital Transformation Consultant – Ericsson</b></li> <li>• <b>Mr. Pavan Kumar Kolahal, Head, Technologies &amp; Emerging Business – Ericsson</b></li> </ul>
	1530 – 1600 hrs	Tea Break
<b>Session- 13</b>	1600 – 1700 hrs	<b>Regulatory Impact Analysis (RIA)</b>

		<p><i>(To understand RIA as a process that helps to improve the quality of a regulator's decisions through the action of analyzing – questioning, understanding real-world impacts and exploring assumptions)</i></p> <ul style="list-style-type: none"> <li>○ Introduction to RIA and its elements</li> <li>○ Process involved in Regulation making</li> <li>○ Design of regulatory options, costs/benefits</li> <li>○ Stakeholder consultation, feedback and regulatory response</li> </ul> <p><b>Speakers :</b></p> <ul style="list-style-type: none"> <li>● <b>Mr. Suyash Rai, Carnegie India [<a href="#">Presentation</a>]</b></li> </ul>
	1715 – 1730 hrs	<b>Quiz/Activity</b>
<b>(Day 5) 22<sup>nd</sup> November, 2019 (Friday)</b>		
SESSION 14	1000 – 1100 hrs	<p><b>Issues related to Net Neutrality</b>  <i>(This session will discuss many issues related to Net Neutrality. The regulatory policy of major telecom regulators on Net Neutrality (such as FCC). Should the ISPs be regulating content/traffic over their network?)</i></p> <p><b>Speakers :</b></p> <ul style="list-style-type: none"> <li>● <b>Mr. Asit Kadyan, Advisor (QoS), TRAI</b></li> </ul>
	1100 – 1115 hrs	Tea Break
SESSION 15	1115 - 1215	<p><b>Use of Technology in Regulation</b>  <i>(What is Regtech (Regulatory Technology)? How it can be used to facilitate the delivery of regulatory requirements?)</i></p> <p><b>Speaker :</b></p> <ul style="list-style-type: none"> <li>● <b>Mr. Sunil Bajpai, Principal Advisor (QoS), TRAI</b></li> </ul>
	1215 – 1300 hrs	<p><b>The Way Forward</b>  This session will discuss the targets achieved so far in this capacity building programme. Also will discuss about further follow-up action involved to continue the capacity building initiatives.</p> <p><b>Speaker :</b></p> <ul style="list-style-type: none"> <li>● <b>Mr. S.K. Gupta, Secretary, TRAI</b></li> </ul> <p><b>Wrapping up/Feed Back/Distribution of Certificates and Felicitation</b></p>
	1300 – 1400 hrs	Lunch Break
<b>HALF DAY CITY TOUR</b>		