

**COURSE PROGRAM FOR ITSO/ITU WORKSHOP ON SATELLITE COMMUNICATIONS AFRALTI, NAIROBI KENYA 17-21 July 2017**

Time	Day 1	Day 2	Day 3	Day 4	Day 5
08.30-09.00	<b>Opening Session</b>				
09.00-10.30	<b>Basics of Satellite Communications</b> <ul style="list-style-type: none"> <li>• Birth of Satellite</li> <li>• Communication Links</li> <li>• Satellite Orbits</li> <li>• Orbital Positions and Radio Interference</li> <li>• Satellite Lifecycle Management</li> </ul>	<b>Policy and Regulatory Guidelines for Satellite Services</b> <ul style="list-style-type: none"> <li>• Radio regulatory organizations</li> <li>• Satellite policy principles</li> </ul>	<b>Network Planning &amp; Link Budget Analysis</b> <ul style="list-style-type: none"> <li>• Satellite Network Topology</li> <li>• Access Schemes</li> </ul>	<b>VSAT Installation and Maintenance</b> <b>INSTALLATION:</b> <ul style="list-style-type: none"> <li>• Site Survey</li> <li>• Antenna Alignment</li> <li>• Configuring the IDU</li> <li>• Satellite Dish Assembly</li> <li>• Satellite Pointing</li> </ul>	<b>Radio Regulations (Cont'd)</b> <ul style="list-style-type: none"> <li>• Comments using SpaceCom</li> </ul>
<b>10.30-11.00</b>	<b>Morning Health Break</b>	<b>Morning Health Break</b>	<b>Morning Health Break</b>	<b>Morning Health Break</b>	<b>Morning Health Break</b>
11.00-12.30	<b>Basics of Satellite Communications (Cont'd)</b> <ul style="list-style-type: none"> <li>• The Space Segment</li> <li>• The Ground Segment</li> <li>• Introduction to Radio Regulation</li> <li>• Services</li> <li>• Technology Trends</li> </ul>	<b>Policy and Regulatory Guidelines for Satellite Services (Cont'd)</b> <ul style="list-style-type: none"> <li>• Legal Framework</li> <li>• Key regulatory and licensing trends</li> <li>• Means of monitoring and controlling the spectrum</li> </ul>	<b>Network Planning &amp; Link Budget Analysis (Cont'd)</b> <ul style="list-style-type: none"> <li>• C Band vs Ku/Ka Band</li> <li>• Digital Communications Techniques</li> <li>• Modulation</li> <li>• VSAT and Data Communications</li> </ul>	<b>VSAT Installation and Maintenance (Cont'd)</b> <b>MAINTENANCE:</b> <ul style="list-style-type: none"> <li>• Preventive Maintenance</li> <li>• Troubleshooting</li> <li>• Service Level Agreement</li> <li>• Escalation Procedure</li> </ul>	<b>VSAT Equipment and Bandwidth Procurement</b> <ul style="list-style-type: none"> <li>• Defining your needs:</li> <li>• Acquiring the VSAT</li> </ul>
<b>12.30-14.00</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>	<b>Lunch Break</b>
14.00-15.30	<b>Radio Regulations</b> <ul style="list-style-type: none"> <li>• Overview</li> <li>• Orbital Spectrum – International Regulatory Framework</li> <li>• Space FSS and BSS Plans</li> </ul>	<b>Radio Regulations (Cont'd)</b> <ul style="list-style-type: none"> <li>• BR Space Software and database.</li> <li>• BR IFIC on DVD-ROM, Preface;</li> </ul>	<b>Network Planning &amp; Link Budget Analysis (Cont'd)</b> <ul style="list-style-type: none"> <li>• Link Budget Analysis</li> </ul>	<b>Radio Regulations (Cont'd)</b> <ul style="list-style-type: none"> <li>• Capture, Validation and Submission of Earth Stations</li> </ul>	<b>WRC-15 Outcomes and WRC 19 Preparations</b>
<b>15.30-15.45</b>	<b>Aft'noon Health Break</b>	<b>Aft'noon Health Break</b>	<b>Aft'noon Health Break</b>	<b>Afternoon Health Break</b>	<b>Afternoon Health Break</b>
15.45-16.30	<b>Radio Regulations (Cont'd)</b> <ul style="list-style-type: none"> <li>• Non Planned Satellite Services (Coordination and Notification)</li> </ul>	<ul style="list-style-type: none"> <li>• Earth Station Coordination and Tools</li> </ul>	<ul style="list-style-type: none"> <li>• Link Budget Analysis (Cont'd)</li> </ul>	<b>Radio Regulations (Cont'd)</b> <ul style="list-style-type: none"> <li>• Receivability of notices for Space services,</li> </ul>	<b>Joint Wrap Up Session</b>