

## TU/ITSO Satellite Communications Training Mozambique – 24-28 June 2019 Draft Programme



	Day 1 – 24 June 2019	Day 2 – 25 June 2019	Day 3 – 26 June 2019	Day 4 – 27 June 2019	Day 5 - 28 June 2019
09.00- 11.00	Registration (09.00-09.30) Opening Session (09.30-10.00)  Basics of Satellite Communications:  Birth of Satellite Communication Links  Satellite Orbits  Orbital Positions and Radio Interference  Satellite Lifecycle Management	Fundamentals of Satellite Communications: Introduction to Satellite Communications Satellite Network Design Technology Trends Satellite Earth Station Components	Radio Regulations Cont'd:  Exercise on SpaceCom  Coordination procedures Non- planned space services  Notification of Notices- Examination of notices and Recording of of frequency assignments	<ul> <li>Link Budget Analysis:</li> <li>Components of a satellite circuit</li> <li>Digital Communications Chain</li> <li>Modulation</li> <li>Chanel Coding</li> <li>Efficiency</li> <li>Link Budget Analysis Tools</li> </ul>	VSAT Equipment and Bandwidth Procurement  Defining needs Procuring the VSAT system
11.00- 11.30	Health Break	Health Break	Health Break	Health Break	Health Break
11.30- 13.30	Basics of Satellite Communications (Cont'd):  The Space Segment The Ground Segment Services Digital Video Broadcasting, Digital Satellite News Gathering Broadband Internet Multicast Internet Services	<ul> <li>Radio Regulations Cont'd</li> <li>Receivability of Space Notices and e-submission (Resolution 908)</li> <li>BRIFIC (Space Services) and Preface</li> <li>Submission of Comments using Space Com</li> <li>Introduction to BR Space Software and Databases</li> <li>Installation of BR Software*</li> <li>Space Services Website</li> </ul>	Radio Regulations Cont'd:  Capturing of Earth Station for coordination  Creation of Earth Station coordination contours	Exercise on Link Budget Analysis VSAT Installation and Maintenance	Policy and Regulatory Guidelines for Satellite Services  Legal Framework  Key regulatory and licensing trends  Market Entry
13.30- 14.30	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
14.30- 16.30	<ul> <li>Radio Regulations and</li> <li>ITU and ITU-R Overview</li> <li>Orbital Spectrum –International Regulatory Framework</li> <li>Small Satellite Regulations</li> <li>Space FSS and BSS Plans</li> <li>Cost Recovery for satellite filings</li> <li>Harmful Interference (SIRRS)</li> </ul>	Network Planning Fundamentals: Digital Communication Techniques Modulation Satellite Economics Satellite Network Topologies	Excursion to Satellite Earth Station	<ul> <li>WRC-19 Preparations</li> <li>ITU-R Study Groups</li> <li>WRC-19 Agenda items related to Space ServicesSatellite Broadband:</li> <li>Regulatory Issues</li> <li>Principles</li> <li>Implementation</li> </ul>	General Test  Q&A  Closing Activities