| **ITU/ITSO WORKSHOP ON SATELLITE COMMUNICATIONS NAIROBI, KENYA, JULY 17-21, 2017Workshop Program** |
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| Time | **Day 1 ( July 17)** | **Day 2 (July 18)** | **Day 3 (July 19)** | **Day 4 (July 20)** | **Day 5 ( July 21)** |
| 08.30-09.00 | **Opening Session** |  |  |  |  |
| 09.00-10.30 | **Basics of Satellite Communications****(ITSO)** | **Radio Regulations (Cont’d) (ITU)** | **Link Budget Analysis (Intelsat)** | **Radio Regulations (Cont’d)** **(ITU)** | **Practical Exercises** **(ITSO)** |
| * Birth of Satellite
* Communication Links
* Satellite Orbits
* Orbital Positions and Radio Interference
* Satellite Lifecycle Management
 | * Receivability of Space Notices
* BR IFIC on DVD-ROM
* Space Databases
* Preface
* Space Services Website
 |  | * Introduction to BR Space software
* Notification and recording of assignments
* Submission of Comments using Space Com
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| **10.30-11.00** | **Morning Health Break** | **Morning Health Break** |  | **Morning Health Break** | **Morning Health Break** |
| 11.00-12.30 | **Basics of Satellite Communications (Cont’d)****(ITSO)** | **Policy and Regulatory Guidelines for Satellite Services****(ITSO)** | **Link Budget Analysis (Intelsat)** | **Radio Regulations (Cont’d)** **(ITU)** | **VSAT Equipment and Bandwidth Procurement****(ITSO)** |
| * The Space Segment
* The Ground Segment
* Services
* Digital Video Broadcasting,
* Digital Satellite News Gathering
* Broadband Internet
* Multicast Internet Services
 | * Legal Framework
* Who's in charge? Telecom Coordination among agencies in charge of spectrum, licensing, competition, etc.; Regional harmonization of regulatory frameworks
* Means of monitoring and controlling the spectrum
* Key regulatory and licensing trends
* Market entry (satellite systems, ground segments)- licensing types

Competition - Open access and International gateway liberalization |  | * Earth Station Coordination and Tools
* Capture, Validation and Submission of Earth Stations
 | * Defining your needs:
* Acquiring the VSAT
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| Time | **Day 1 ( July 17)** | **Day 2 (July 18)** | **Day 3 (July 19)** | **Day 4 (July 20)** | **Day 5 ( July 21)** |
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| **12.30-14.00** | **Lunch Break** | **Lunch Break** | **Lunch Break** | **Lunch Break** | **Lunch Break** |
| 14.00-15.30 | **(Intelsat)** | **Introduction to Network Planning** **(ITSO)** | **Satellite services & Regulatory Issues: (Intelsat )** | **VSAT Installation and Maintenance****(ITSO)** | **Wrap Up Session****(ITU+ITSO+ Intelsat)** |
| * Introduction to Satellite Communications
* Satellite Network Design
* Technology Trends
* Satellite Earth Station Equipment
* Digital Communications Techniques
* Modulation
* Satellite Economics
 | Satellite Network Topologies and Applications: Star Topology, Mesh Topology for Multimedia | * Digital Video Broadcasting,
* Digital Satellite News Gathering

Broadband Internet | * Site Survey
* Antenna Alignment
* Configuring the IDU
* Satellite Dish Assembly
* Satellite Pointing
* Preventive Maintenance
* Troubleshooting
* Service Level Agreement

Escalation Procedure |  |
| **15.30-15.45** | **Aft ‘noon Health Break** | **Aft ‘noon Health Break** | **Aft ‘noon Health Break** | **Aft ‘noon Health Break** | **Afternoon Health Break** |
| 15.45-16.30 | **Radio Regulations****(ITU)** | **Introduction to Network Planning Cont’d****(ITSO)**  | **WRC-Issues****(ITU+ Intelsat)** | **Practical Exercises** **(ITU)** | **Closing Activities**  |
| * Overview
* Orbital Spectrum –International Regulatory Framework

Space FSS and BSS PlansNon Planned Satellite Services (Coordination and Notification) | * Satellite Network Topologies and Applications: Star Topology, Mesh Topology for Multimedia
 | * WRC - 19 Preparations
 | * Comments API/A using SpaceCom
* Cost Recovery
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