



Satellite Communications

Sponsored by ITSO

10th –11th July 2014, Bujumbura, Burundi

PROGRAMME

| DAY 1 (July 10) | | |
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| Session 1: 9.00 AM- 10.30 AM | Satellite technology, Satellite communications systems | |
| | 1.1 Birth of satellite communications | |
| | 1.2 Development of satellite communications | |
| | 1.3 Configuration of a satellite communications service | |
| | 1.4 Types of orbits | |
| | 1.5 Orbital positions and radio interferences | |
| | 1.8 RF equipments | |
| | 1.9 Earth station measurements | |
| | 1.10 Services | |
| | 1.11 Technology trends | |
| | HEALTH BREAK | |
| Session 2: 11.00 AM- 12.30 PM | Policy and Regulatory Guidelines for Satellite Services | |
| | 2.1 Radio regulations organizations | |
| | 2.2 Satellite policy principles | |
| | 2.3 Legal framework of satellite communications | |
| | 2.4 Key regulatory and licensing trends | |
| | 2.5 Means of monitoring and controlling the spectrum | |
| LUNCH BREAK | | |
| Session 3: 2.00 PM- 5.00 PM | Network planning and link budget analysis | |
| | 3.1 VSAT Network topologies | |
| | 3.1.1 Point to point links | |
| | 3.1.2 Star networks | |
| | 3.1.3 Mesh networks | |
| | 3.1.4 Broadcast | |
| 3.1.5 Hybrid networks | | |

| DAY 2 (July 11) | | |
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| Session 4: 9.00 AM- 10.30 AM | Network planning and link budget analysis (Cont'd) | |
| | 3.2 Access schemes : SCPC, TDMA, FDMA etc | |
| | 3.3 Frequency bands: C-Band, Ku- Band, Ka-Band | |
| | 3.4 Base band signals | |
| | 3.5 Digital communications techniques | |
| | 3.6 Modulation techniques | |
| | 3.7 Link budget Analysis | |
| HEALTH BREAK | | |
| Session 5: 11.00 AM -1.30 PM | VSAT installation and maintenance | |
| | 4.1 VSAT Installation | |
| | 4.2 VSAT Maintenance | |
| LUNCH BREAK | | |
| Session 6: 2.30 -5.00 PM | VSAT equipment and bandwidth procurement | |
| | 5.1 Define your needs | |
| | 5.2 Acquire the VSAT | |
| END | | |

Facilitator: Eng. Edward