



Spectrum Management Training Programme

Online Training on

Spectrum Management for Satellite Systems

2 – 27 November 2020

TRAINING OUTLINE

COURSE DESCRIPTION

Title	Spectrum Management for Satellite Systems
Method of delivery	Online
Objectives	This module will provide students with an understanding of the management of radio spectrum related to satellite communications systems.
Dates	2 – 27 November 2020
Duration	4 weeks
Registration deadline	30 October 2020
Training fees	USD 200
Course code	200I26126MUL-E
Course Domains	<ul style="list-style-type: none">• Domain 1. Satellite Services• Domain 2. Radio Regulations
Reference	ITU World Radiocommunication Seminar 2016 International Satellite Communication Workshop ITU Handbook on FSS ITU Handbook on Mobile Satellite Communications

LEARNING OUTCOMES

It is expected that upon completion of the training session, participants will be able to:

Have knowledge of

- Basic principles of satellite communications, different types of satellites/satellite networks and Earth Stations.
- Relevant parts of ITU Radio Regulations governing spectrum use by satellite communications systems.

An understanding of

- Understanding of the SM procedures for satellite communications systems
- Understanding of satellite orbital position and frequency assignment plans
- Understanding the respective roles of NRAs, satellite operators and ITU BR in managing spectrum for satellite communications systems

They should have the ability to

- to interpret the provisions of ITU Radio Regulations in respect of satellite communications services
- to use the international and national rules and specifications (e.g. National Frequency Allocation Table)
- to interpret essential business development criteria and trends

TARGET POPULATION

This training is targeted those who are entering the regulatory environment and are interacting with technologies as operators, developers or managers. It is targeted at those aiming to understand workings of various technologies with a view to developing a general overview of trends.

This may include professionals working in the telecommunications industry, lawyers, regulatory staff across all departments.

Besides that, other institutions and individuals that are dedicated to building their capacity related to new technologies are welcome to participate.

TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Eng. Jared Baraza	Email: nyakwarodenge@gmail.com Tel: +254 719 596054
Jonathan Mwakijele	Email: Jmwakijele@afralti.org Tel: +254 718 860 897

EVALUATION

Participants should score an overall mark of 60%. The evaluation is based on:

- Participation in all 4 Forums (5%)
- Participation in all 4 chats (5%)
- Quiz week 1 (10%)
- Quiz week 2 (10%)
- Quiz week 3 (10%)
- Quiz week 4 (10%)
- Written assignment (50%)

TRAINING SCHEDULE AND CONTENTS / AGENDA

Agenda (for online training)

Week / Topic	Activity	Exercises and Interactions
Week 1 Introduction Satellite Communication Services Coverage	Read part 1 Materials and references Participate in 1 chat Make comments on the forum Take a short quiz	Forum topic: Relevance of Satellite Services in the current communications setup Chat: Thursdays at 15:00hrs – 16:30hrs Quiz: Saturday from 16:00hrs – 17:00hrs
Week 2 Frequency Bands used in the FSS for GSO Frequency reuse Different Satellite systems	Read part 2 Materials and references Participate in 1 chat Make comments on the forum Take a short quiz	Forum topic: High data rate Architectures Chat: Thursday at 15:00hrs – 16:30hrs Quiz: Saturday from 16:00hrs – 17:00hrs
Week 3 Earth stations International Regulations ITU BR procedures overview	Read part 2 Materials and references Participate in 1 chat Make comments on the forum Take a short quiz	Forum topic: LEO technologies and propagation models Chat: Thursday at 15:00hrs – 16:30hrs Quiz: Saturday from 16:00hrs – 17:00hrs
Week 4 Notification Software overview	Read part 2 Materials and references Participate in 1 chat Make comments on the forum Take a short quiz	Forum topic: Emerging Architectures Chat: Wednesday at 15:00hrs – 16:30hrs Quiz: Saturday from 16:00hrs – 17:00hrs

METHODOLOGY

- Instructor-Led online learning

TRAINING COORDINATION

<p>Training Coordinator:</p> <p>Jonathan Mwakijele Head of Management, Policy and Regulatory Unit African Advanced Level Telecommunications Institute (AFRALTI)</p> <p>Tel: +254 20 444 0634 Mobile: +254 718 860 897</p> <p>Email: Jmwakijele@afralti.org</p>	<p>ITU Coordinator:</p> <p>Emmanuel Niyikora Programme Officer ITU Area Office for West Africa, Dakar Tel : +250 788312939 Email: (emmanuel.niyikora@itu.int)</p>
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REGISTRATION AND PAYMENT

Registration on ITU Academy Portal

Please note that to be able to register for the course you MUST first create an account in the ITU Academy portal at the following address: <https://academy.itu.int/index.php/user/register>

Course Registration

- When you have an existing account or created a new account, you can register for the course online at the following link: <https://academy.itu.int/training-courses/full-catalogue/sntp-em13-spectrum-management-satellite-systems>
- You can also register by finding your desired course in our training catalogue <https://academy.itu.int/index.php/training-courses/full-catalogue>.

Payment

1. On-line payment

A training fee of USD 200 per participant is applied for this training. It is encouraged to make payment via the online system using the link mentioned above for training registration at: <https://academy.itu.int/training-courses/full-catalogue/sntp-em13-spectrum-management-satellite-systems>

2. Payment by bank transfer

Where it is not possible to make payment via the online system, select the option for offline payment to generate an invoice using the same link as above. Download the invoice to make a bank transfer to the ITU bank account shown below. Then send the proof of payment/copy of bank transfer slip and the invoice copy to Hcbmail@itu.int and copy the course coordinator. **All bank transaction fees must be borne by the payer.**

3. Group payment

Should you wish to pay for more than one participant using bank transfer and need one invoice for all of them, create an account as **Institutional Contact**. **Institutional Contacts** are users that represent an organization. Any student can request to be an institutional contact or to belong to any existing organization.

To do this, head to your profile page by clicking on the **“My account”** button in the user menu. At the bottom of this page you should see two buttons:

- a. If you want to **become an institutional contact**, click on the **“Apply to be an Institutional Contact”** button. This will redirect you to a small form that will ask for the organization name. After you fill the name of the organization you want to represent, click on **“continue”** and a request will be

created. An ITU Academy manager will manually review this request and accept or deny it accordingly.

- b. If you want to **belong to an existing organization**, click on the **“Request to belong to an Institutional Contact”** button. This will redirect you to a small form that will ask you to select the organization you want to join from an organization list. After you select the correct organization, click on **“continue”**, a request will then be created. The Institutional Contact that represents that organization will manually accept or deny your request to join the organization.

Failure to submit the above documents may result in the applicant not being registered for the training.

ITU BANK ACCOUNT DETAILS:

Name and Address of Bank:	UBS SA Case postal 2600 CH 1211 Geneva 2 Switzerland
Beneficiary:	Union Internationale des Télécommunications
Account number:	240-C8108252.2 (USD)
Swift:	UBSWCHZH80A
IBAN	CH54 0024 0240 C810 8252 2
Amount:	USD 200
Payment Reference:	200I26126MUL-E - P.40635.1.01