



# **Spectrum Management Training Programme**

# Online Training on

# OM4-Economic and Market Tools of Spectrum Management

Date: 1-26 March 2021

### TRAINING OUTLINE

### **COURSE DESCRIPTION**

Title	OM4-Economic and Market Tools of Spectrum Management	
Method of delivery	Online	
Objectives	<ul> <li>The aim of this module is to introduce students to the</li> <li>Main Economic Principles of Spectrum Management;</li> <li>Market-based mechanism of Spectrum Management;</li> <li>Available market tools for economic efficiency in the use of spectrum, such as auctions and spectrum pricing;</li> <li>Advanced-level knowledge of Modern Spectrum Management.</li> </ul>	
Dates	1-26 March 2021	
Duration	4 weeks	
Registration deadline	1 March 2021	
Training fees	USD 200	
Course code	210I26485MUL-E	
Course Domains	<ul> <li>Domain 1. Economic Principles of Spectrum Management</li> <li>Domain 2. Market-based Mechanism of Spectrum Management</li> </ul>	

Reference	<ul> <li>Rep. ITU-R SM. 2012-1, Economic Aspects of Spectrum Management, Publication Year 2012;</li> <li>Cave, M., Doyle, C., &amp; W. Webb, Essentials of Modern Spectrum Management, Cambridge University Press Publication Year 2007;</li> <li>Freyens, B., The Economics of Spectrum Management: A Review, available at <a href="http://www.acma.gov.au/webwr/aca_home/publications/reports/spectrum%20-%20final%20draft%20-%203.pdf">http://www.acma.gov.au/webwr/aca_home/publications/reports/spectrum%20-%20final%20draft%20-%203.pdf</a>. Publication Year 2008;</li> <li>Marcus, S., Burns, J., Pujol, F., Marks, P., &amp; Cave, M., Optimising the Public Sector's Use of the Radio Spectrum in the European Union, available at <a href="http://www.plumconsulting.co.uk/pdfs/Plum_Optimising_public_sector_spectrum_use_April_2010.pdf">http://www.plumconsulting.co.uk/pdfs/Plum_Optimising_public_sector_spectrum_use_April_2010.pdf</a>, Publication Year 2008; and</li> <li>Ofcom, The Revised Framework for Spectrum Pricing, available at <a href="http://stakeholders.ofcom.org.uk/binaries/consultations/srsp/statement/srsp-statement.pdf">http://stakeholders.ofcom.org.uk/binaries/consultations/srsp/statement/srsp-statement.pdf</a>, Publication Year 2012</li> </ul>

### **LEARNING OUTCOMES**

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

### Have knowledge of

- Economic principles of Modern Spectrum Management;
- Market-based tools that can be used for efficient Spectrum Management; and
- Major international practices of implementation of a market-based approach for Spectrum Management.

#### An understanding of

- Principles and reasons for using economic/market-based tools for Spectrum Management;
- Economics of the Radio Frequency (RF) Spectrum as a Resource; and
- Modern Spectrum Management and associated economic and market-based tools.

### Special Skills of

- Ability to interpret that the current Spectrum Management is an economic problem in the liberalised and competitive telecommunications markets;
- Ability ro differentiate among various economic and market tools for Spectrum Management; and
- Ability to identify the circumstance where each/ a combination of those tools might be most appropriate.

#### **TARGET POPULATION**

This training is targeted those who have completed successfully the ITU Spectrum Management Training Programme (SMTP) Operation Module (OM) 1, 2 and 3. The training may include professionals working in the telecommunications industry, Economics, Finance, Telecommunications Engineers, lawyers and regulatory staff across all departments. Besides that, other institution, academia and individuals that are dedicated to building their capacity related to Modern Spectrum Management

### **TUTORS/INSTRUCTORS**

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Dr. John Mpapalika	Email: <u>mpapalika2016@gmail.com</u> Tel: +255762545228
Jonathan Mwakijele	Email: <u>Jmwakijele@afralti.org</u> Tel: +254718860897

### **EVALUATION**

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

- Participation in all 4 Forums (10%
- 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 Economic Principles of Spectrum Management	Read Unit 1, 2 & 3 Materials and references  Make comments on the Forum of week 1  Take a short quiz of week 1	Forum topic 1: Economics of Radio Frequency Spectrum as a Resource Quiz 1 covering week 1 contents
Week 2 Economic Principles of Spectrum Management	Read Unit 4, 5 & 6 Materials and references  Make comments on the forum of Week2  Take a short quiz of Week 2	Forum topic 2: Discuss the Current Spectrum Management is an Economic Problem in the Liberalized and Competitive Telecommunications Market Quiz 2 covering week 2 contents
Week 3  Market-based Mechanism of Spectrum Management	Read Unit 7, 8 & 9 Materials and references  Make comments on the forum of Week 3  Take a short quiz of Week 3	Forum topic 3: Give reasons for the need for the Modern Spectrum Management in the liberalized and competitive Telecommunications Markets.  Quiz 3 covering week 3 contents
Week 4  Market-based Mechanism of Spectrum Management	Read Unit 10 & 11 Materials and references  Make comments on the Forum of week 4  Take a short quiz of week 4	Forum topic 4: Discuss major differences between the Current and Modern Spectrum Management  Quiz 4 covering week 4 contents  Assignment submission

FINAL ASSIGNMENT: Discuss the available Market -based tools of Spectrum Management and how your country applied them.

#### **METHODOLOGY**

- Instructor-Led online learning
- Optional live lectures and discussions through ZOOM will be organized every Wednesday from 1500 Hours

#### TRAINING COORDINATION

#### **AFRALTI Coordinator:**

Jonathan Mwakijele Head of Management, Policy and Regulatory Unit African Advanced Level Telecommunications Institute

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### Email: Jmwakijele@afralti.org

#### **ITU Coordinator:**

**Emmanuel Nivikora** Programme Officer

ITU Area Office for West Africa, Dakar, Senegal

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Email: emmanuel.niyikora@itu.int

#### **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/smtp-om4-economic-and-markettools-spectrum-management
- You finding desired can also register by your course in training catalogue our 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/trainingcourses/full-catalogue/smtp-om4-economic-and-market-tools-spectrum-management

### 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 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 Switzerland AG

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: 210I26485MUL-E - P.40635.1.01