



---

## TRAINING OUTLINE

Title	ITU Arab Regional Training Workshop on Spectrum Management System for Developing Countries (SMS4DC)
Modality	Face-to-face, Tunis – Tunisia
Dates	18-21 December 2022
Duration	4 days
Training fees	Free
Description	The purpose of this workshop is to train the staffs from the Arab countries who are using the SMS4DC on spectrum management using Spectrum Management System for Development Countries (SMS4DC Edition 5.1 and above). Noting that there will be a day dedicated to customizing the software for Libyan delegation on 22 December 2022
Registration deadline	15 Dec. 2022
Course code	22BD100089ARB-A

### 1. LEARNING OBJECTIVES

---

To provide participants with spectrum management methods and mechanisms by focusing on the Spectrum Management System for Developing Countries (SMS4DC) and training employees from Arab countries who use this program on spectrum management using the Spectrum Management System for Developing Countries (SMS4DC version 5.1 and above).

### 2. LEARNING OUTCOMES

---

Upon completion of this training, participants will be able to:

- Apply this program on spectrum management using the Spectrum Management System for Developing Countries (SMS4DC version 5.1 and above).
- Apply the methods and mechanisms of frequency spectrum management by focusing on the updated version of the spectrum management system for developing countries (SMS4DC).

### 3. TARGET POPULATION

---

The target audience for this training are engineers working in spectrum managers using the Spectrum Management System for Developing Countries (SMS4DC) software.

### 4. TUTORS/INSTRUCTORS

---

Eng. Yasir Mohammed	<a href="mailto:yasir192@gmail.com">yasir192@gmail.com</a>
---------------------	--

### 5. TRAINING CONTENTS

---

The following topics will be covered in this training:

- Introduction to SMS4DC, Administrative Functions of SMS4DC, Engineering Analysis Functions and Graphical User Interface Functions
- International Table of Frequency Allocations; National Table of Frequency Allocations; SMS4DC Spectrum Allocation Chart
- SMS4DC Frequency arrangement; Channel Arrangements VHF, UHF, SHF using SMS4DC
- Spectrum Licensing; Import from BR IFIC database to SMS4DC
- Frequency Assignments in SMS4DC; Notification of frequency Assignment for recording in the MIFR using SMS4DC
- Propagation Models using SMS4DC; Link budget, visibility and availability calculation in point-to-point systems;
- GE84 and GE06 plans using SMS4DC;
- Country Frequency border coordination using SMS4DC;
- Satellites Introduction; Earth Station Creation in SMS4DC; Import Space Radio-communication Station (SRS) Database into SMS4DC;
- Earth Station Coordination Contours and Earth Stations Inference Calculation using SMS4DC.

## 6. TRAINING SCHEDULE (Tunis Time)

Day 1: Sunday, 18 December 2022	
<b>08:30-09:00</b>	<b>Registration</b>
09:00-09:20	<b>Opening Session</b> <ul style="list-style-type: none"> <li>• ITU Arab Regional office Representative</li> <li>• Host Representative</li> </ul>
09:20-10:45	<b>Session 1</b> <ul style="list-style-type: none"> <li>• Introduction and installation of SMS4DC system</li> <li>• Practical exercises</li> </ul>
10:45-11:00	Coffee break
11:00-12:30	<b>Session 2</b> <ul style="list-style-type: none"> <li>• Creating the national frequency allocation table</li> <li>• Practical exercises</li> </ul>
12:30-13:30	Lunch Break
13:30-14:45	<b>Session 3</b> <ul style="list-style-type: none"> <li>• Frequency arrangements</li> <li>• Practical exercises</li> </ul>
14:45-15:00	Coffee Break
15:00-14:30	<b>Session 4</b> <ul style="list-style-type: none"> <li>• Frequency arrangements</li> <li>• Practical exercises</li> </ul>
Day 2: Monday, 19 December 2022	
09:00-10:45	<b>Session 5</b> <ul style="list-style-type: none"> <li>• Import from BR IFIC database to SMS4DC</li> <li>• Perform engineering functions, coverage calculation and link budget</li> <li>• Practical exercises</li> </ul>
10:45-11:00	Coffee break
11:00-12:30	<b>Session 6</b> <ul style="list-style-type: none"> <li>• Perform engineering functions, coverage calculation and link budget analysis</li> <li>• Practical exercises</li> </ul>
12:30-13:30	Lunch Break

	<b>Session 7</b>
13:30-14:45	<ul style="list-style-type: none"> <li>Licensing, frequency assignments and data migration</li> <li>Practical exercises</li> </ul>
14:45-15:00	Coffee Break
	<b>Session 8</b>
15:00-16:30	<ul style="list-style-type: none"> <li>Licensing, frequency assignments and data migration</li> <li>Practical exercises</li> </ul>
<b>Day 3: Tuesday, 20 December 2022</b>	
	<b>Session 9</b>
09:00-10:45	<ul style="list-style-type: none"> <li>GE84 plan using SMS4DC</li> <li>Practical exercises</li> </ul>
10:45-11:00	Coffee break
	<b>Session 10</b>
11:00-12:30	<ul style="list-style-type: none"> <li>GE06 plan using SMS4DC</li> <li>Practical exercises</li> </ul>
12:30-13:30	Lunch Break
	<b>Session 11</b>
13:30-14:45	<ul style="list-style-type: none"> <li>GE06 plan using SMS4DC</li> <li>Practical exercises</li> </ul>
14:45-15:00	Coffee Break
	<b>Session 12</b>
15:00-16:30	<ul style="list-style-type: none"> <li>Border coordination using SMS4DC</li> <li>Practical exercises</li> </ul>
<b>Day 4: Wednesday, 21 December 2022</b>	
	<b>Session 13</b>
09:00-10:45	<ul style="list-style-type: none"> <li>Satellite Earth Station Creation and coordination contour</li> <li>Practical exercises</li> </ul>
10:45-11:00	Coffee break
	<b>Session 14</b>
11:00-12:30	<ul style="list-style-type: none"> <li>Inference Calculation using SMS4DC</li> <li>Practical exercises</li> </ul>
12:30-13:30	Lunch Break
	<b>Session 15</b>
13:30-14:45	<ul style="list-style-type: none"> <li>Interference Calculation using SMS4DC</li> <li>Practical exercises</li> </ul>

14:45-15:00	Coffee Break
15:00-15:30	<b>Training Wrap-up</b>
	<ul style="list-style-type: none"> <li>- ITU Academy and SM Training Programme- ITU</li> <li>- closing remarks by ITU and MCPT</li> </ul>

## 7. METHODOLOGY (Didactic approach)

---

Practical Exercises.

Discussions: Participants are expected to participate actively in discussion on selected topics throughout the training.

Course materials will be published on the website after the completion of the course.

## 9. EVALUATION AND GRADING

---

Evaluation will be based on quizzes.

**IMPORTANT:** a passing mark of 70% is required for obtaining a completion certificate.

## 10. TRAINING COURSE COORDINATION

---

### ITU Coordinator:

**Ms. Rouda Alamir Ali**

Programme Officer

ITU Arab Regional Office

Tel: +202 3537 1777

Mobile: +201005281908

Fax: +202 3537 1888

Email: [rouda.alamirali@itu.int](mailto:rouda.alamirali@itu.int)

---