

Concept Note

ITU Arab Regional Training Workshop on Spectrum Management System for Developing Countries (SMS4DC)

Tunis-Tunisia, 18-21 December 2022

09:00 to 15:30 Tunis time

By

The ITU Regional Office for the Arab States



1. Background

The Spectrum Management System for Developing Countries (SMS4DC) provides various functionalities for spectrum management activities. Version 5.2 of the software was developed from the contribution of MSIT (Republic of Korea). It contains the revised Article 5 of the Radio Regulations (as per decisions made at WRC- 19), as well as further development on data transfer from other databases to the SMS4DC, such as BR Space IFIC Version 9, and calculations according to the HCM (European cross-border frequency coordination agreement). The SMS4DC also contains monitoring network planning for optimization of spectrum monitoring networks, an interface to the spectrum monitoring software of Rohde & Schwarz and of Thales and a general interface for any other monitoring software (TCI's for example). Self-learning training material can be provided upon request.

The newly updated SMS4DC Edition 5.2 is now available for purchase <https://www.itu.int/en/publications/ITU-D/pages/publications.aspx?parent=D-STG-SPEC-2022-V5.2&media=electronic>

2. Objectives of the ITU Arab Regional Training Workshop on SMS4DC

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 customize the software for Libyan delegation on 22 December 2022.

3. ARAB REGIONAL SMS4DC Workshop

The training workshop aims to provide participants with the methods and mechanisms of frequency spectrum management by focusing on the updated version of the spectrum management system for developing countries (SMS4DC).

Among other issues related to the opportunities and benefits offered by Spectrum Management System for Developing Countries (SMS4DC), the following areas will be covered:

- 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.

Draft agenda (GMT+2 Cairo time):

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

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

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| | <ul style="list-style-type: none"> • Interference Calculation using SMS4DC • Practical exercises |
| 14:45-15:00 | Coffee Break |
| 15:00-15:30 | <p>Training Wrap-up</p> <ul style="list-style-type: none"> - ITU Academy and SM Training Programme- ITU - closing remarks by ITU and MCPT |

For more information, visit the event page at:

<https://www.itu.int/en/ITU-D/Regional-Presence/ArabStates/Pages/Events/2022/SMS4DC/SMS4DC22.aspx>

Registration:

To register, you can complete the online form using the following link:

[To be provided](#)

Date and venue/ How to participate

The event will be held face-to-face via during the period **18-21 December 2022** in Tunis (venue to be communicated later). A circular invite and details will be sent via email to all registered participants closer to the event date.

Event Organizers

ITU Regional Office for the Arab States

Event Coordinator

Contact ITU Regional Office for the Arab States Focal point: *Ms. Rouda AlAmir Ali, Programme Officer* (rouda.alamirali@itu.int)

Social Media

This event will be promoted via ITU Social Media platforms. Follow us and join us to promote this celebration through your network.

[Twitter @ITUArabStates](#)

Visit here: [SMS4DC \(itu.int\)](https://www.itu.int/SMS4DC) for more details about SMS4DC.

We look forward to you joining us for this WORKSHOP.