ITU Centres of Excellence Network for Asia and the Pacific
State Radio Monitoring Center - China
Online Training Course on

SPECTRUM MANAGEMENT AND TECHNOLOGY APPLICATION
9-22 August 2021

TRAINING COURSE OUTLINE (ONLINE)

COURSE DESCRIPTION

Title	Spectrum management and technology application
Objectives	To develop an understanding of the spectrum management and improve technology application.
Dates	9—22 August 2021
Duration	2 weeks
Registration deadline	8 August 2021
Training fees	Free
Course code	21OI26553ASP-E

DESCRIPTION OF THE TRAINING COURSE

This course covers the core functions of spectrum management and spectrum management and technology application and is mainly targeted towards the staff of National Spectrum Management agencies. This course covers the core functions of spectrum management and technology application including 5G spectrum management, IOT implementation, Spectrum management for railway radiocommunication and so on.

LEARNING OUTCOMES

The training course will provide an empowering learning environment through a combination of course content and discussion boards focused on sharing information with the participants.
Upon completion of this course, participants will be able to:

- Understand the core functions of spectrum management
- Understand 5G and IOT
- Be interested in the technique of wireless power transmission
- Basic knowledge of civil aviation spectrum and frequency management
- Understanding of spectrum management for railway radiocommunication.

TARGET POPULATION

This training is designed to address mid to senior level management from policy makers, regulators, corporate and technical executives and managers responsible for spectrum management and technology application, including in the area of power transmission, civil aviation and railway radiocommunication.

ENTRY REQUIREMENTS

None

TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
TBC	ITU
Mr. WANG Tan	SRMC
Mr. LIU Xiaoyong	SRMC
Mr. DU Hao	SRMC
Mr. WANG Kanlin	ICSCC, CAAC
Mr. JIANG Bo	CARS
Ms. XIA Chunli	BEIHANG UNIVERSITY

TRAINING COURSE CONTENTS

The course mainly focus on spectrum management and technology application, such as 5G spectrum management, IOT implementation, Spectrum management for Civil Aviation , railway radiocommunication and so on.

TRAINING COURSE SCHEDULE

Topic	Speaker	Interactive Session
Week 1: The core functions of spectrum management, Internet of Things and 5G **Objective:** • *Understand the core functions of spectrum management* • *Understand 5G and IOT*		
TBD	ITU	10th August 2021
5G Spectrum Practice and future IMT Spectrum Consideration in China *Introduction to the 5G development and spectrum status in China. For current assigned 5G spectrum, some related technical work including sharing and compatibility studies and also a brief review of related work timeline will be introduced.*	SRMC Mr. WANG Tan	11th August 2021
IOT evolution and frequency management *Introduction to the basic concept and trend of Internet of Things , as well as some typical technologies and frequency management.*	SRMC Mr. LIU Xiaoyong	13th August 2021
Quiz #1		14th - 15thAugust 2021
Week 2: Spectrum management and technology application **Objective:** • *Know wireless power transmission* • *Understanding of civil aviation spectrum and frequency management* • *Understanding of spectrum management for railway radiocommunication.*		
Wireless power transmission: Technology developments and Spectrum Application study *Introduction to the technology characteristics and developments of the wireless power transmission (WPT), including non-beam and beam WPT. For spectrum application study, introduce the spectrum impact analyses of non-beam WPT, and development trend of equipment categories and spectrum application. This session will also introduce radio management strategies of some countries and regions.*	SRMC Mr. DU Hao	16th August 2021

International Civil Aviation Frequency Management *Introduction to the international civil aviation spectrum and frequency management in the world and in Asia and the Pacific region.*	ICSCC, CAAC Mr. WANG Kanlin	17th August 2021
Development and Technical Evolution of RSTT（Railway Radiocommunication systems between train and trackside） *Introduction of RSTT, including structure, application and current global usage as railway transportation contributes to global economic and social development, including the technical evolution and the work related to RSTT in ITU from 2015~2019.*	China academy of railway sciences corporation, Lt Mr. JIANG Bo	19th August 2021
General legal framework for international regulation of radiocommunication *Introduction to the general legal framework for regulating radiocommunication in international law, including ITU Radio Regulations. The session will also touch upon regional institutions that formulating common proposals for WRC, the outer space law, law of the sea, WTO law and the law of dispute settlement, etc.*	BEIHANG UNIVERSITY Ms. XIA Chunli	20th August 2021
Quiz #2		21st-22th August 2021

METHODOLOGY (Didactic approach)

This course will be delivered using instructor-led online learning. The course is delivered using power-point slides posted on the course page and selected reference materials that the participants have to study each week, participate in scheduled activities and undertake self-assessments. Students will reinforce their understanding of the topics studied by drawing on their specific environments and are encouraged to consult with experienced colleagues who are working on a relevant topic. The following methods will be used for this course.

The training methodology will be as follows:
- Each module will be studied and discussed over the established time period;
- Training materials will be made available through online learning access page;
- Moderated Interactive discussion forums (60 mins with 15 mins for summary of relevant content and 45 mins for Q&A) will be organized where students are highly encouraged to participate and interact with instructors and other students;
- Quiz tests will be assigned at the end of a given training week;

All announcements for all events (materials, quizzes and forums) will be given prior to the event by the training tutor.

EVALUATION AND GRADING

Below are the evaluation schemes:

Quiz #1:	20%
Quiz #2	40%
Participation	20%
Assignment	20%

TRAINING COURSE COORDINATION

Course coordinator:	ITU coordinator:
Ms. LI Jianxin Tel: +86 10 6800 9073 Fax: +86 10 6800 9073 E-mail: lijianxin@srrc.org.cn	Name: Sean Doral Tel: +66 80 6650213 (Works) Fax: +66 257 535 07 (Fax) Email address: sean.doral@itu.int

REGISTRATION

ITU Academy portal account

Registration and payment should be made online at the ITU Academy portal.
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/user/register

Training 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/spectrum-management-and-technology-application

You can also register by finding your desired course in our training catalogue https://academy.itu.int/training-courses/full-catalogue