



# REG-102 - Spectrum - Managing a Scarce Resource for Maximum Impact

#### Description

A 5-day training course to provide participants with a clear understanding of the radio-frequency spectrum and its management and regulation, to demonstrate how to best allocate and control frequencies, and to present how to deal with future spectrum management decisions to accommodate new technologies as they become available.

### **Learning Outcomes**

At the end of the course, participants will be able to:

- Discuss the impact of the latest technologies and services on spectrum management
- Explain how the spectrum management framework works and how to efficiently implement it
- Apply spectrum management key concepts and best practices in their daily tasks
- Establish an efficient spectrum policy and perform spectrum planning activities
- Grasp the essential technical aspects of spectrum management and standards
- Identify the main approaches to spectrum allocation
- Apply spectrum monitoring and enforcement principles

#### **Topics**

#### Telecom industry outlook

- Telecom industry transformation
- Market evolution and trends
- New telecom players
- New services and offers
- Technology evolution
- Impact and opportunities

Spectrum management framework

- What is spectrum management?
- Spectrum management framework
- Important definitions

# Radio-frequency fundamentals

- Telecommunications technology
- Radio-frequency communications
- Radio communications systems

#### Spectrum management key concepts

- Essential knowledge
- Best practices

### Impact of modern telecom technologies on spectrum

- Fixed broadband
- Fixed wireless technologies
- Mobile wireless technologies: 3G, 4G and LTE
- IP, NGN's and convergence
- Future technologies

### Spectrum policy and planning

- Spectrum policy framework
- Spectrum Management Organization (SMO)
- Examples of spectrum policy statements
- Spectrum planning

# Spectrum engineering and standards

- Introduction to spectrum engineering
- Key spectrum engineering tasks
- Technical standards
- Certification
- Radio system plans and specifications examples

## Spectrum allocation

- Administrative approaches
- Market-based approaches

## Spectrum pricingSpectrum monitoring & enforcement

- Spectrum monitoring and compliance
- Dispute resolution

## Target audience

- Telecommunications managers and personnel of operators, regulators, hardware providers and software providers in positions related to spectrum management issues
- Managers looking to complement their skill-set by gaining a good understanding of spectrum management

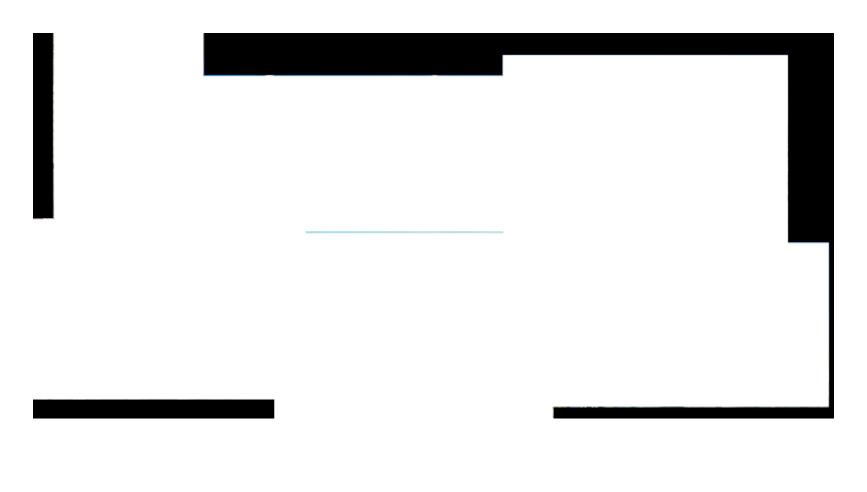
# Methodology

A combination of engaging activities and dynamic presentations to stimulate and maximize participants' learning.



# Location

A selection of Neotelis' training courses is held in various cities around the world. Please contact us at training@neotelis.com for the complete Yearly Training Calendar.



Neotelis can also deliver in-house sessions of this course specifically for your organization. Please contact us at <a href="mailto:training@neotelis.com">training@neotelis.com</a> for more information and a Proposal.

## **About Neotelis**

Neotelis provides training, consulting, conferences and publications to the telecommunications industry worldwide. Its team of senior experts has trained thousands of executives and managers working for operators, regulators, policy-makers and governments in over 120 countries around the world.



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