



## Training course outline

[ITU and African Advanced Level Telecommunications Institute]

Title	<b>Socio-Economic Impact of Spectrum Regulation; Competition and Consumer Protection</b>
Modality	Online Instructor-led
Dates	31 October - 25 November 2022
Duration	4 Weeks
Registration deadline	30 October 2022
Training fees	<b>USD 960</b>
Description	<p>This teaching module will cover advanced issues in spectrum management that are currently being considered and/or implemented in regions and countries around the world ;</p> <p>The emphasis will be on how spectrum policies are articulated with broad concerns regarding changing radio technologies, relations to global growth and innovation, and their social and economic impacts ; and</p> <p>An introduction to issues of competition and consumer protection related to spectrum management will be presented.</p>
Course code	22OI27995AFR-E

### 1. LEARNING OBJECTIVES

- Introduces students advanced issues in Spectrum management that are currently being considered and/or implemented in regions and countries around the world;
- Introduces the students knowledge on how Spectrum Policies are articulated with broad concerns regarding changing radio technologies, relations to global growth and innovation, and their social and economic impacts ; and

- Introduces the students to issues of competition and consumer protection related to spectrum management.

## 2. LEARNING OUTCOMES

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

### ***Get knowledge of the following:***

- High level implications of spectrum management and assessment of its socio-economic impacts ;
- Current debates and pace of implementation of spectrum reforms around the world ; and
- Forward looking considerations on spectrum management: future of flexible spectrum use technologies and their implications, role and limits of market mechanisms.

### ***Get understanding of the following:***

- High-level considerations on the role of radio spectrum in society and the economy ;
- Competition and consumer protection general principles and how they apply to radio spectrum ;
- Distinctions to be made in assessing the socio-economic impacts in wireless markets/clusters ;
- The rationale for spectrum policies: public vs. commercial spectrum, efficiency vs. Effectiveness ;
- Assessment of current spectrum policies, including market mechanisms: costs-benefits and SWOT ; and
- Socio-economic impacts of the diverse spectrum management regimes and policies.

### ***Acquire special skills of the following:***

- Knowledge of the foundation, rationales, impacts and implications of existing and future spectrum management paradigms ;
- Spectrum management reform and innovation promotion skills ; and
- Ability to expose to broader audiences the implications of spectrum management methods, their evolutions and impacts.

### ***Get assessment criteria of the following:***

- Understanding and use of the knowledge communicated during the course ;
- Ability to professionally manage the radio spectrum and implement evolving policies based on extensive impact considerations ; and
- Quality of individual work. Ability to participate constructively to team exercises on spectrum policy decision-making.

### 3. TARGET POPULATION

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This training is targeted professionals working in the telecommunications industry including 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

### 4. ENTRY REQUIREMENTS

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Basic knowledge of economics, finance, marketing, telecommunications engineering, laws and regulations.

### 5. TUTORS/INSTRUCTORS

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NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Dr. John Mpapalika	Email: <a href="mailto:mpapalika2016@gmail.com">mpapalika2016@gmail.com</a> Tel: +255762545228
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### 6. TRAINING COURSE CONTENTS

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Topic 1: Spectrum Management Impact Assessment: general Background

Topic 2: About Impact Assessment Rationale and Methodology-Comparing Regional Approaches

Topic 3: Impact Assessment of Overall Spectrum Policies-Implementing a Comprehensive Framework

Topic 4: Competition and Consumer Protection- Impact Assessment Related Issues

Topic 5: Impact Assessment applied to Overall Regional and National Spectrum Policies Examples

Topic 6: Impact Assessment of the Future Radio Broadcasting Scenario

Topic 7: Impact Assessment of Assignment Methods

Topic 8: Future Trends in Spectrum Management and their Impacts-Licensed Shared Access and Cognitive Radio.

## 7. TRAINING COURSE SCHEDULE

Week / Session	Topic	Exercises and interactions
<b>Week 1</b>	<p><b>Topic 1:</b> Spectrum Management Impact Assessment: General Background</p> <p><b>Topic 2:</b> About Impact Assessment Rationale and Methodology- Comparing Regional Approaches</p>	<p><b>Forum Topic 1:</b> Discuss impact of explosive growth of wireless communications services and emerging technologies like 5G in Spectrum Management.</p> <p><b>Exercise 1:</b> Give benefits of technology and service neutral Spectrum Management.</p>
<b>Week 2</b>	<p><b>Topic 3:</b> Impact Assessment of Overall Spectrum Policies- Implementing a Comprehensive Framework</p> <p><b>Topic 4:</b> Competition and Consumer Protection- Impact Assessment Related Issues</p>	<p><b>Forum Topic 2:</b> Discuss Impact Assessment Related Issues of Competition and Consumer Protection in Spectrum Management.</p> <p><b>Exercise 2:</b> Spectrum hoarding – i.e. when a market player manages to get a dominant share of spectrum - is problematic for competition reasons.</p> <p>Please discuss whether there are any methods from the perspective of spectrum management to reduce potential spectrum hoarding.</p>
<b>Week 3</b>	<p><b>Topic 5:</b> Impact Assessment applied to Overall Regional and National Spectrum Policies- Examples</p> <p><b>Topic 6:</b> Impact Assessment of the Future Radio Broadcasting Scenario</p>	<p><b>Forum Topic 3:</b> Discuss your current National Spectrum Policy</p> <p><b>Exercise 3:</b> What are the main strengths and weaknesses of your current National Spectrum Policy?</p>
<b>Week 4</b>	<p><b>Topic 7:</b> Impact Assessment of Assignment Methods</p> <p><b>Topic 8:</b> Future Trends in Spectrum Management and their Impacts- Licensed Shared Access and Cognitive Radio</p>	<p><b>Forum Topic 4:</b> Discuss the current Radio Frequency (RF) Spectrum Assignment methods used in your country.</p> <p><b>Exercise 4:</b> Which RF Spectrum Assignment method do you recommend?</p> <ul style="list-style-type: none"> <li>• RF Spectrum Assignment on up-front fees payment or</li> </ul>

		<ul style="list-style-type: none"> <li>• RF Spectrum Assignment on yearly fees payment? Give reasons.</li> </ul>
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**Written Final Assignment:** Discuss Socio-economic impact of the RF Spectrum assignment in your country in terms of contribution to Gross Domestic Product (GDP) of the country.

## 8. METHODOLOGY (Didactic approach)

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This course will be conducted online through ITU Academy and ZOOM. Participants will have opportunity to interact with ITU Academy in Forum Discussions, Exercises and Written Final Assignment. **Live lectures and discussions** will be conducted every week on **Tuesday and Thursday through ZOOM from 1500 Hours to 1700 Hours EAT.**

## 9. EVALUATION AND GRADING

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Each candidate has to participate in the following assessments online:

- Attempt all the four (4) Forums (10%)
- Exercise week 1 (10%)
- Exercise week 2 (10%)
- Exercise week 3 (10%)
- Exercise week 4 (10%)
- Written Final Assignment (50%)

A candidate will be required to attain at least a grade of 60% to receive ITU certificate.

## 10. TRAINING COURSE COORDINATION

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<p><b>AFRALTI COORDINATOR</b></p> <p>Jonathan Mwakijele, Head of Management, Policy and Regulatory Unit, AFRALTI, Nairobi, Kenya. Tel: +254718860897 Email: <a href="mailto:Jmwakijele@afralti.org">Jmwakijele@afralti.org</a></p>	<p><b>ITU coordinator:</b></p> <p>Emmanuel Niyikora, Programme Officer, ITU Area Office for West Africa, Dakar, Senegal. Tel : +250 788312939 Email: (<a href="mailto:emmanuel.niyikora@itu.int">emmanuel.niyikora@itu.int</a>)</p>
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