## ITU Regional Workshop on

# "5G, IoT, m-Payment – Emerging Technologies, Eco-Systems, and Regulatory Aspects"

St. John's, Antigua and Barbuda, 17-19 October, 2018

### DESCRIPTION

Title	5G, IoT, m-Payment – Emerging Technologies, Eco-Systems, and Regulatory Aspects		
Method of delivery	Face-to-face		
Objectives	The aim of this workshop is to give a thorough introduction to the emerging technologies and eco-systems of 5G and Internet of Things (IoT), starting to become a reality and expected to roll out broadly by 2020. The workshop covers the next major phase of wireless and mobile telecommunications standards beyond the current 4G/IMT-Advanced standards, introducing the most dominant technologies and architectures. An important, and often overlooked aspect, is regulation. Issues related to the regulation of these new eco-systems will be discussed in this training. Finally, and since these emerging eco-systems are offering a diverse set of applications that will/may be culture-changing, in this workshop, we will be illustrating the example of m-Payment. We discuss its technological landscape, regulatory aspects, and inherent challenges.		
Dates	17-19 October 2018		
Duration	3 Days		
Registration deadline	October 1, 2018		
Training fees	– USD		
Course code	<u>ccccccccccc</u>		

### **LEARNING OUTCOMES**

The workshop sessions will allow executives from telecom operators, service providers, and regulators to get deeper insight about the challenges to face in the immediate and the near future.

For operators and service providers:

- 1 Be able to analyze the existing opportunities in these emerging eco-systems.
- 2 Be able to motivate the shareholders and decision makers about future investments.

For regulators:

1- Be able to understand the new services and the expected challenges.

2- Be able to envision the regulatory framework adaptation based on these new challenges and services to come.

3- Be able to follow the debate on these challenges at both national and international levels.

#### **TARGET POPULATION**

This workshop is targeting executives, technical managers, and technical staff from telecom operators, service providers, and regulators.

It may also benefit all institutions and individuals interested by these evolutions.

#### **FACILITATOR/EXPERT**

The experts for the training include Dr. Mustapha Benjillali and other invited experts (To be confirmed).

#### **EVALUATION**

The assessment of the participants shall be based on the time spent on the training and other parameters including:

- Pre and Post- tests;
- Dedication in attending the sessions;
- Active interaction in the group and discussions;
- Planned Q&A periods.

Day 1 The Evolution Towards 5G					
	Time	Topics/Activities			
	08:00-09:30	<ul> <li>Registration.</li> <li>Opening remarks.</li> <li>Ground rules.</li> <li>ITU Representative/</li> </ul>			
	09:30-10:45	Session 1: Evolution of Mobile technology from 2G to 4G (Background)			
		<b>Objective:</b> This first introductory session aims to introduce the mobile technology from a macroscopic point of view, and allows to level up all participants from different backgrounds.			
	10:45-11:00	Coffee Break			
Oct. 17, 2018	11:00-12:15	<b>Session 2: 5G Enabling Technologies</b> <b>Objective:</b> The goal of the session is to explain the 5G enabling technologies, to show the new potential the technology offers in comparison with the previous generations.			
	12:30-14 :00	Lunch Break			
	14:15-15:30	<b>Session 3: Regulation Aspects for the 5G Era</b> <b>Objective:</b> The session will discuss the 5G era enabled eco- systems, the new challenges they raise, and the resulting regulatory aspects to be considered.			
	15:30-15:45	Coffee Break			
	15:50-16:20	Quizz			
	16:30-17:00	General discussion of Day 1			

Day 2 Internet of Things (IoT)					
Oct. 18, 2018	Time	Topics/Activities			
	09:00-9:30	<b>Opening remarks</b> ITU Representative/			
	09:30-10:30	<b>Session 5: IoT – A Technology Overview</b> <b>Objective:</b> Internet of Things is a large panoply of technologies. The goal of the session is to shed light on the different classes of technology, its evolution and future.			
	10:30-10:45	Coffee Break			
	10:45-12:00	Session 4: IoT – New Paradigms for Operators and Regulators Objective: The session will discuss the emergence of IoT based solutions and eco-systems, along with the new paradigms that operators and regulators will be adopting in the near future.			
	12:30-14:00	Lunch Break			
	14:15-15:30	Session 6: IoT – Standards and Regulation Objective: This session will provide a platform to discuss standardization trends with regard to IoT ecosystem. It will also provide an opportunity to exchange views on open source, big data, semantic technologies and IoT.			
	15:30-15:45	Coffee Break			
	15:45-17:00	<b>Session 7: IoT – Security and Privacy</b> <b>Objective:</b> This session is aimed at raising awareness about security, privacy, trust, data protection and the techniques and policies to mitigate processes that guarantee privacy and trust in Smart Cities.			
	17:00-17:30	General discussion of Day 2			

# Day 3

### **m-Payment**

Oct. 19, 2018	Time	Topics/Activities
	08:30-9:00	<b>Opening remarks</b> ITU Representative/
	09:00-09:50	Session 8: Mobile Payment – A Technological Landscape Objective: The session will go through the different mobile payment technological solutions, from the mobile technology to the network and security levels.
	09:50-10:10	Coffee Break
	10:10-11:05	<b>Session 9: Mobile Payment in the 5G/IoT Era</b> <b>Objective:</b> This session will investigate the enabling aspects of 5G/IoT technologies and eco-systems for a wide adoption of m-payment solutions
	11:05-12:00	Session 10: Mobile Payment – Regulation Challenges Objective: The session will discuss the regulatory challenges that m-payment adoption involves. Policy actions and best practices from existing experiences will be also discussed.
	12:30-14:00	Lunch Break
	14:30-15:00	Post-test
	15:00-15:30	Closing

#### **METHODOLOGY**

- Facilitator-Led Class Lectures and Presentations Notes & Slides.
- Reviews and Revisions.
- Q&A Case Studies.
- Group Assignments and Discussions.