



TRAINING OUTLINE

ITU CENTRES OF EXCELLENCE NETWORK FOR ASIA PACIFIC REGION

Traffic engineering and advanced wireless network planning

17-19 October 2018 – Suva, Fiji Islands

Supported by



Australian Government

Department of Communications and the Arts

COURSE DESCRIPTION

Title	Traffic engineering and advanced wireless network planning
Method of delivery	Face-to-face training
Objectives	<ul style="list-style-type: none">• To build knowledge of policy makers, regulators and telecom operators in the areas of 4G, 5G and IoT ecosystem and related network planning.• To share best practices on traffic engineering and network planning in evolving scenario.• To build skills on how to develop a roadmap for 5G and IoT.
Dates	17-19 October 2018
Duration	3 days
Registration deadline	30 September 2018
Training fees	Free with support from PITA, and DoCA
Course code	

LEARNING OUTCOMES

Upon completion of this training, participants will be able to

- Understand what are the key policies, regulations, spectrum, technologies and standards driving 4G, 5G and IoT networks, particularly with NB-IoT.
- Acquire skills for planning 4G, 5G and IoT networks in the country.

TARGET POPULATION

Staff from policy makers, regulators, telecom operators, and academia responsible for wireless networks.

FACILITATOR/EXPERTS

The training will be conducted by ITU experts.

EVALUATION

The assessment of the participants shall be based on the - time spent on the training and the following parameters:

Evaluation Parameter	Weightage (in %)
Quizzes and presentations	60 %
Attendance	10 %
Participation	30 %

The minimum passing requirement for certificate is 60%.

DRAFT TRAINING SCHEDULE AND CONTENTS / AGENDA

(Updated information will be available at <http://www.itu.int/itu-d/asp>)

DRAFT AGENDA

17 October 2018 (Day-1)

0800-0900	REGISTRATION
0900-1030	Opening Session: Group Photo
1030 – 1115	Session 1: Where are we now: 4G, 5G and IoT Ecosystem and ITU Objective: To provide an overview of wireless broadband ecosystem including drivers, policy, regulations, business, technology others.
1115-1145	Coffee Break
1145 – 1230	Session 2: 4G to 5G networks and standard releases Objective: To provide an overview of various technologies and standards of 4G
1230-14:00	LUNCH
14:00-15:00	Session 3: IoT standards Objective: To provide the main characteristics and features of IoT services and present IoT present systems and standards.
1500-1530	Coffee Break
1530-1700	Session 4: Working Group Exercise Objective: To identify the IoT services to fit with the country needs. Elaborate a proposed business model for introducing IoT.

18 October 2018 (Day-2)

0900-1030	Session 5: NB-IoT Networks Objective: To present the evolution of LTE towards LTE-M and NB-IoT for IoT services introduction.
1030-1100	COFEE BREAK
1100-1230	Session 6: Fixed IP core and backbone architecture and evolution towards IoT and 5G networks Objective: Explore how the evolution of fixed IP and backbone networks and interconnects has progressed to be able to support MMTC and CMTC features and constraints.
1230-1400	LUNCH BREAK
1400-1500	Session 7: 5G networks and 3GPP Release 15 Objective: Present 5G networks architecture and main technologies (radio interface, cloud and virtualization etc.).
1500-1530	COFEE BREAK
1530-1700	Session 8: Working Group exercise Objective: Which technology and which regulatory framework for IoT and 5G transition. Elaborate a proposal for developing an digital ecosystem in the country based on these networks and services.
1700-1730	QUIZ 1

19 October 2018 (Day-3)

0900-1030	Session 9: IoT network dimensioning and planning Objective: Present the parameters and methodology for planning an IoT network, starting from the expected services to be proposed.
1030-1100	COFEE BREAK
1100-1230	Session 10: IP core network and backbone dimensioning and planning Objective: Discuss the planning of IP network with focus on the core.
1230-1400	LUNCH BREAK
1400-1530	Session 11: IP core network and backbone dimensioning and planning (continued) Objective: Discuss the planning of IP network with focus on IXP, peering and interconnect
1530-1600	COFEE BREAK
1600-1700	Session 12: IoT network development roadmap – Working Group Presentations Objective: To present the IoT roadmap developed by working groups in Session 11 and Session 12. CLOSING

METHODOLOGY

The face-to-face programs will include

- Instructor-led presentations,
- Case studies,
- Group exercises

TRAINING COORDINATION

ITU coordinator:

Mr. Ashish Narayan

Program Co-ordinator

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REGISTRATION

Registration on ITU Academy Portal

Registration can be done through <http://www.itu.int/itu-d/asp> or <http://www.pita.org.fj/>

Please note that online registration should be done **before 30 September 2018**.