



**ITU ASIA-PACIFIC CENTRES OF
EXCELLENCE**
Distance Learning Course
“BROADBAND QUALITY OF SERVICE –
REGULATORY PERSPECTIVE”



COURSE DESCRIPTION

Course Title	Online course on "Broadband quality of service – regulatory perspective" for the Asia-Pacific Region
Course Description	This course will focus on Broadband Quality of Service (QoS) from technology and regulation aspects. It will cover fundamentals concept of Quality of Service (QoS) Key Performance Indicators (KPIs) of fixed as well as mobile broadband and its measurement/testing procedure.
Course Date	25 November 2014 to 19 December 2014
Course Duration	4 weeks
Registration Deadline	17 November 2014
Course Code	14DL141531ASP E&&1

COURSE TUTOR/INSTRUCTORS

The course will be tutored by:

Dr. Syed Ismail Shah, Chairman, Pakistan Telecommunication Authority,
Email: chairman@pta.gov.pk

Mr. Yawar Yasin, Director General , Pakistan Telecommunication Authority,
Email: yawar@pta.gov.pk

Mr. Muhammad Shafique, Director, Pakistan Telecommunication Authority,
Email: mshafique@pta.gov.pk

Mr. Muhammad Ali, Deputy Director, Pakistan Telecommunication Authority,
Email: muhammadali@pta.gov.pk

Mr. Abbas Khan, Deputy Director, Pakistan Telecommunication Authority,
Email: abbaskhan@pta.gov.pk

TARGET POPULATION

ANNEX 1: DISTANCE LEARNING COURSE ON WIRELESS SECURITY PRACTICES FOR POLICY MAKERS AND REGULATORS

This course is targeted at managers, engineers and employees from regulators, government organizations, telecommunication companies and academia, who are interested in understanding, measurement and regulation of Broadband Quality of Service (QoS).

COURSE OBJECTIVES

- Understand Broadband Networks and Technologies
- Understand the concept and importance of Quality of Service (QoS) in Broadband Networks.
- Understand the Key Performance Indicators (KPIs) of QoS.

METHOD OF TEACHING

PDF documents will be made available each week. These will constitute the main source of material for the Course. Each week discussion topics will be provided and a discussion forum opened for participants to participate to exchange views and share information. All participants are expected to participate in the discussion forum.

Online chat sessions with the Tutor will take place every Wednesday from 1100- 1200 Hrs. Pakistan Time. All participants are expected to join the chat sessions as they will be graded.

Review Quizzes will be held twice during the course. Each quiz would have ten (10) multiple choice questions.

One individual assignment will be assigned to each participant.

IMPORTANT:

During the course, participants are expected to check their mailboxes for new messages on a daily basis.

EVALUATION

Besides the weekly quiz and their assignment score, participants will be evaluated according to their substantive posts on the discussion forum, active participation in the online chat sessions and other course activities, reflecting both the quantity and quality of time spent on the course. Below are the evaluation schemes:

Quiz #1:	20%
Quiz #2	20%
Individual Assignment:	20%
4 Chat Sessions (5% per session)	20%
4 Discussion Forum (5% per forum)	20%
otal Evaluation:	100%

IMPORTANT:

A passing mark of 35% is required for obtaining a completion certificate.

ANNEX 1: Distance Learning Course On Broadband quality of service – regulatory perspective**COURSE SCHEDULE AND CONTENT**

WEEK	MODULE TITLE	TOPICS
1	Module 1: Broadband Technology & Networks	<ul style="list-style-type: none"> • Introduction • Basic Definition and Terminology • Overview of Broadband Technologies & Networks
		Discussion / Forum
		Chat Session
2	Module 2: Quality of Service Key Performance Indicators & Testing Methodology	<ul style="list-style-type: none"> • Importance of Quality • Quality as Indicator of Excellence • Concept of Key Performance Indicators • Technology Specific Indicators • Customers' Care Specific Indicators • Testing Methodology
		Discussion / Forum
		Chat Session
3	Module 3: International Experiences	<ul style="list-style-type: none"> • International Experiences
		Discussion / Forum
		Assignment
4	Module 4: Mobile Broadband Quality of Service	<ul style="list-style-type: none"> • Introduction to Mobile Broadband • QoS in Mobile Broadband • QoS Traffic Classes • QoS KPIs • KPIs Testing
		Discussion / Forum
		Quiz

METHODOLOGY

Course materials: Each week one module will be discussed and the relevant course material will be made available on the website.

Online Discussion Forums: Participants are expected to participate actively in discussion forums on selected topics throughout the week.

Chat sessions: Chat sessions will be conducted in real time every week where discussions would be held with the instructor (s) on a particular topic. Participants are encouraged to join the discussion and exchange points of view.

Quizzes: Two mandatory quizzes will be held during the course

Course evaluation and feedback would be done at the end of the course and is a part of the mandatory activity.

ANNEX 1: DISTANCE LEARNING COURSE ON WIRELESS SECURITY PRACTICES FOR POLICY MAKERS AND REGULATORS

COURSE COORDINATION

The course will be coordinated by Mr. Ashish Narayan (ashish.narayan@itu.int)
ITU Academy coordination will be carried out by Mr. Boris Williams (boris.williams@itu.int)

PARTICIPATION FEES

The ITU and PTA are offering this course free of charge to participants. The participants (or their entities) will have to cover their own internet access costs for participation.

REGISTRATION

Application to participate in this course should be made at "<http://academy.itu.int>" by following the steps:

Skip STEP 1, if you already have a username and password

Step 1: Create a new account on the ITU Academy (<http://academy.itu.int/moodle/login/index.php>) by clicking on **Create new account** in the section Login on the right. After completing the registration form, a message will be sent to your e-mail address with detailed information and with link to complete the registration to the ITU Academy.

Step 2: After having registered by using the link sent to your e-mail address, click on the Course button. Please note that to continue you have to be logged in. To log in to the ITU Academy, use the Login link available on the top of your screen.

Step 3: When you are logged in, you will come back to Course Categories. Continue to **Policy and Regulation** and choose "**Broadband quality of service – regulatory perspective**" (the title of the course).

Step 4: When the new window appears, please use this course code to access the website of the online exchange: 14DL141531ASP E&&1.

Step 5: To access the course page, please use your username and password.

Please note that online registration should be done before 17 November 2014. The course coordinator will confirm the acceptance of the candidates and will supply with the relevant instructions for participation.