



**ITU Centres of Excellence Network for CIS
Institute of Electronics and Telecommunication (IET)
under Kyrgyz State Technical University (KSTU) named after I.Razzakov**

**Face-to-face training on Technical Organization of Broadband Access
Bishkek, Kyrgyzstan, 3 – 6 May 2016**

TRAINING OUTLINE

COURSE DESCRIPTION

Title	Technical Organization of Broadband Access
Method of delivery	Face-to-face
Objectives	<ul style="list-style-type: none">• To equip participants with understanding of technical organization of broadband access, relating in particular to the construction of modern broadband networks and development of wireless broadband wireless systems.• The training will enable participants to contribute to further development of broadband access.
Dates	3 – 6 May 2016
Duration	4 days
Registration deadline	18 April 2016
Workshop fees	<ul style="list-style-type: none">• Face-to-face participation – USD 100• Remote participation – USD 50
Course code	16WS17084CIS-R

LEARNING OUTCOMES

Upon completion of this training, participants will be able to:

- Be aware of the experiences and plans of modern BBA network construction around the world and WCDMA and LTE BBA access network implementation in Kyrgyz Republic;
- Be aware of radio communication system development in light of WRC-15 decisions;
- Use different solutions of the implementation of BBA equipment;
- Understand BBA network planning and electromagnetic compatibility;
- Understand 5G system development and standardization methods of in ITU-R.

TARGET AUDIENCE

This training is targeted at technical staff, senior and mid-level management staff of communications service providers, telecommunication and broadcasting companies. It is also of interest to employees of Communication Administrations dealing with the issues of digital television, audio and multimedia broadcasting. Participants are expected to have understanding of communication and broadcasting technical principles.

TUTORS/INSTRUCTORS

NAME OF TUTOR(S)/INSTRUCTOR(S)	CONTACT DETAILS
Mr. Rinat Bakytov Professor, Radioelectronics Department, IET under KSTU	Email: rinat.bakytov@gmail.com
Ms. Anna Tutlis Leading Specialist, Training Department, IET under KSTU	Phone/Fax: +996 312 54 29 42 Phone: +996 709 22 61 81; Email: a.tutlis@mail.ru

EVALUATION

Besides the final assignment score, participants will be evaluated according to their substantive posts on the discussion forum, active participation in sessions and other course activities, reflecting both the quantity and quality of time spent on the training.

TRAINING SCHEDULE AND CONTENTS / AGENDA

Agenda

3 May 2016, Tuesday	Time; Start time	Topics/Activities
03/05/2015	08:30-09:00	Registration
09:00-12:30	Morning Session	<ul style="list-style-type: none">Lecture 1: Experience and plans for the construction of modern broadband networks in countries around the worldLecture 2: implementation Experience of WCDMA and LTE broadband networks in the Kyrgyz Republic
13:30-15:30	Afternoon Session	<ul style="list-style-type: none">Practical training on models of systems and their components (not accessible for remote participants)Testing (for remote participants. Tests will send by email)
4 May 2016, Wednesday	Time; Start time	Topics/Activities
09:00-12:15	Morning Session	<ul style="list-style-type: none">Lecture 3: New opportunities for the development of radio communication systems including broadband wireless

		<p>access, in light of the decisions of WRC-15 (Dzhlyshbaev Maksat)</p> <ul style="list-style-type: none"> • Lecture 4: LTE and LTE-advanced – new challenges (Dzhlyshbaev Maksat)
13:30-15:30	Afternoon Session	<ul style="list-style-type: none"> • Analysis of traffic in broadband access networks (practical class) • Testing (for remote participants Tests will send by email)
5 May 2016, Thursday	Time; Start time	Topics/Activities
09:00-12:15	Morning Session	<ul style="list-style-type: none"> • Lecture 5: Broadband nodes and solutions for the implementation of broadband access equipment • Lecture 6: The problems of planning and electromagnetic compatibility of broadband access networks
13:30-15:30	Afternoon Session	<ul style="list-style-type: none"> • Protection of information in broadband wireless networks (practical class) • Testing (for remote participants. Tests will send by email)
6 May 2016, Friday	Time; Start time	Topics/Activities
09:00-12:15	Morning Session	<ul style="list-style-type: none"> • Lecture 7: The development and standardization of 5 G systems in ITU-R • Lecture 8: Examples on introduction of broadband networks and organization of services
12:15-13:15	Afternoon Session	<ul style="list-style-type: none"> • Final test (for remote participants. Tests will send by email) • Closure ceremony

METHODOLOGY

The workshop will include Instructor-led presentations, case studies, group exercises and assignments.

All announcements for all events (materials, quizzes and forums) will be given several days prior to the event by the training tutor.

TRAINING COORDINATION

<p>Training coordinator: Ms. Anna Tutlis Leading Specialist, Training Department, IET under KS TU Email: a.tutlis@mail.ru</p>	<p>ITU coordinator: Mr. Farid Nakhli Email: farid.nakhli@itu.int</p>
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REGISTRATION AND PAYMENT

Registration on ITU Academy Portal

Please note that to be able to register for the course you MUST first create an account in the ITU Academy portal at the following address:

https://academy.itu.int/index.php?option=com_hikashop&view=user&layout=form&Itemid=559&lang=en

Training Registration

Registration and payment should be made online at <http://academy.itu.int/>

When you have an existing account or created a new account, you can register for the training online at the following

link: https://academy.itu.int/index.php?option=com_joomla&view=coursecategoryextended&cat_id=:&course_id=997:workshop-on-technical-organization-of-broadband-access&Itemid=478&lang=en

You can also register by following the steps below:

- Go to ITU Academy website home page
- On the upper hand corner, you will find search option
- Type the name of the course in the space provided and search
- When the course appears, select “book this course” and follow easy instructions to register.

Payment

1. On-line payment

A training fee of USD 100 for face-to-face participation and USD 50 for remote participation is applied for this training. Payment instructions can be found at the afore mentioned link.

It is encouraged to make payment via the online system using the link mentioned above for training registration at https://academy.itu.int/index.php?option=com_joomla&view=coursecategoryextended&cat_id=:&course_id=997:workshop-on-technical-organization-of-broadband-access&Itemid=478&lang=en.

However, please note that only the fee of USD 100 can be issued on-line. The training fee **USD 50 will have to be made by bank transfer** by following the instructions at point 2 below.

2. Payment by bank transfer

Where it is not possible to make payment via the online system, a bank transfer may be done on the ITU Bank account shown below. In this case, the participant should select the offline payment option using the link mentioned above: https://academy.itu.int/index.php?option=com_joomla&view=coursecategoryextended&cat_id=:&course_id=997:workshop-on-technical-organization-of-broadband-access&Itemid=478&lang=en .

The participant will be redirected to a page where an invoice is generated. On the basis of such invoice, the participant will transfer the training fees to the ITU bank account. When the bank transfer has been made, it is IMPERATIVE that the applicant uploads the proof of payment to the ITU Academy, under the “Offline Invoices” tab in the main menu. The participant is advised to notify the Human Capacity Building (HCB) Division at hcbmail@itu.int after he/she has uploaded the proof of payment.

ITU BANK ACCOUNT DETAILS:

Name and Address of Bank:	UBS Switzerland AG Case postale 2600 CH 1211 Geneva 2 Switzerland
Beneficiary:	Union Internationale des Télécommunications
Account number:	240-C8108252.2 (USD)
Swift:	UBSWCHZH80A
IBAN	CH54 0024 0240 C810 8252 2
Amount:	USD 100 (face-to-face) or USD 50 remotely
Payment Reference:	CoE-CIS 17084 P.40594.1.03

3. Other method of payment

If due to national regulations, there are restrictions that do not allow for payment to be made using options 1 & 2 above, please contact the ITU coordinator for further assistance.