ITU Centres of Excellence Network for Asia-Pacific Region
Advanced Level Telecom Training Centre
E-Learning Training Course on
Digital Infrastructure
Ghaziabad (Near Delhi), India
12th-23th Oct, 2020

COURSE OUTLINE

COURSE DESCRIPTION

Title	ITU CoE E-Learning Training Programme on "**Digital Infrastructure**"
Objectives	- To understand the various elements of digital infrastructure in the digital economy, including telecom networks, digital governments, industry verticals, platforms, and devices. - To understand the policy and regulatory ecosystem necessary to support national digital infrastructure planning and implementation; - To understand the smart cities concept, smart power requirements i.e. Industry 4.0; - To understand SDN/NFV; - To understand Transport Requirement in Digital Infrastructure: core and access network; - To understand the infrastructure of core data network:eMNGT: and security aspects; 3GPP Technology: Recommendations & Standards; - IMT spectrum management for wireless broadband& 5 G deployment; and - Digital Infrastructure in India: A case study
Dates	12th- 23th October 2020
Duration	2 Weeks
Registration deadline	9th October 2020
Training fees	The applicable fee for this training is @ 100 USD per participant
Course code	20OI24874ASP-E

LEARNING OUTCOMES

Upon completion of this training, participants will be able to understand:
- Different types of basic technologies available to support and supplement the Digital Infrastructure.
- Challenges and limitation with Contemporary Technological Eco-system towards futuristic Digital Infrastructure Development in different fields which, by combining together, support the evolution of Futuristic Digital infrastructure.
- development in different fields which, support the evolution of Futuristic Digital infrastructure
- latest development available especially in wireless and transportation domain to further support the development of Digital Infrastructure
- Administrative and regulatory framework needed to successfully implement Digital Infrastructure.

TARGET POPULATION

This training is primarily targeted at executives, managers, engineers and technical staff from regulators, policymakers, telecom operators, academia and government organizations.

TUTORS/INSTRUCTORS

S.No.	NAME OF TUTOR(S)/ INSTRUCTOR(S)	Position	CONTACT DETAILS
1.	Mr. M. K. Seth	Chief General Manager, ALTTC, BSNL, Ghaziabad, India	cgm_alttc@bsnl.co.in +91 9401844444
2.	Mr. Subhash Chand	PGM, ALTTC, BSNL Ghaziabad, India	subhash.iitr83@gmail.com +91 9868202123
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7.	Mr. Anand Kumar	Assistant General Manager, ALTTC, Ghaziabad, India	anandkumarbsnl21@gmail.com +91 9412739248
8.	Mr. Nitin Kumar Garg	Assistant General Manager, ALTTC, Ghaziabad, India	nitinkumargarg@yahoo.com +91 94120 00810
9.	Mr. Nikunj Goel	Assistant General Manager, ALTTC, Ghaziabad, India	nikunjgoelin@yahoo.com +91 9412739309
10	Mr. Naresh Singh	Assistant Director, ALTTC, Ghaziabad, India	nareshsingh@bsnl.co.in +91 9412000939

11	Mr.AlockTyagi	Junior Telecom Officer, ALTTC, Ghaziabad, India	tyagi.alock@gmail.com +91 9412000928
12	Mr. Jai Bacchani	AD(Mobile),	jai_bsnl2002@gmail.com

EVALUATION

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

Quiz # 1	**25%**
Quiz # 2	**25%**
Individual Assignment:	**20%**
2 Chat Sessions (10% per session)(each Thursday)	**20%**
2 Discussion Forum (5% per forum)	**10%**
Total Evaluation:	**100%**

The minimum passing requirement for certificate is 60%

TRAINING SCHEDULE AND CONTENTS / AGENDA

(Updated information will be available at http://www.itu.int/itu-d/asp or https://academy.itu.int)

Agenda (for on-line trainings)

Week	Module Title	Topics
1	**Module 1: Digital Infrastructure: Basic Technology prospects**	• Why Digital Infrastructure: Need, and Benefits. • Overview of Emerging Digital Technologies (Fibre-based access technologies) • Core Data Network and Services: eMNGT • Ultra High-Speed Fiber Network Design: Fiberhome • Concept of Smart Cities in Digital Infrastructure: Smart Power • Industry 4.0, SDN/NFV
		Discussion / Forum
		Chat Session Quiz 1

2	Module 2: Digital Infrastructure: Advance technology and Regulatory Perspective	• Digital Infrastructure Policy and Regulatory Aspects • 3GPP Standardisation & Evolution • Mobile broadband technologies: LTE, LTE- A and LTE-Pro • 5G Network Architecture • Spectrum Management and standards for Wireless Broadband • Mobile ultra-broadband with 5G-NR
		Discussion / Forum
		Chat Session
		Quiz 2

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.

COURSE COORDINATION

Institute Head:
Mr. MK Seth
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Institute Coordinator:
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Training coordinators:
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ITU coordinator:
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+66 257 535 07 (Fax)

REGISTRATION AND PAYMENT

ITU Academy portal account

Registration and payment should be made online at the ITU Academy portal. 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/user/register .

Training registration:

When you have an existing account or created a new account, you can register for the course online at the following link: https://academy.itu.int/training-courses/full-catalogue/digital-infrastructure

You can also register by finding your desired course in our training catalogue https://academy.itu.int/index.php/training-courses/full-catalogue .

Payment:

1. On-line payment

A training fee of USD 100 per participant is applied for this training. Payments should be made via the online system using the link mentioned above for training registration at https://academy.itu.int/training-courses/full-catalogue/digital-infrastructure

2. Payment by bank transfer

Where it is not possible to make payment via the online system, select the option for offline payment to generate an invoice using the same link as above. Download the invoice to make a bank transfer to the ITU bank account shown below. Then send the proof of payment/copy of bank transfer slip and the invoice copy to Hcbmail@itu.int and copy the course coordinator. **All bank transaction fees must be borne by the payer**. **Failure to submit the above documents may result in the applicant not being registered for the training.**

3. Group payment

Should you wish to pay for more than one participant using bank transfer and need one invoice for all of them, create an account as Institutional Contact**. Institutional Contacts** are users that represent an organization. Any student can request to be an institutional contact or to belong to any existing organization.

To do this, head to your profile page by clicking on the **"My account"** button in the user menu. At the bottom of this page you should see two buttons:

   a. If you want to **become an institutional contact**, click on the "**Apply to be an Institutional Contact"** button. This will redirect you to a small form that will ask for the organization name. After you fill the name of the organization you want to represent, click on **"continue"** and a request will be created. An ITU Academy manager will manually review this request and accept or deny it accordingly.

   b. If you want to **belong to an existing organization**, click on the **"Request to belong to an Institutional Contact"** button. This will redirect you to a small form that will ask you to select

the organization you want to join from an organization list. After you select the correct organization, click on **"continue"**, a request will then be created. The Institutional Contact that represents that organization will manually accept or deny your request to join the organization.

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
Payment Reference:	CoE-ASP-24874 - P.40593.1.04

*Please note that online registration should be done on or **before 9th Oct 2020**. The course coordinator will confirm the acceptance of the candidates and will supply with the relevant instructions for participation.*