AFRICAN ADVANCED LEVEL TELECOMMUNICATIONS INSTITUTE (AFRALTI)

TRAINING WORKSHOP OUTLINE

Title: BROADBAND ACCESS
Dates: 5th -9th October 2015
Duration: 5 Days
Venue: AFRALTI- NAIROBI
Tuition Fees: US$1,200 per participant from AFRALTI member states and
US$1,440 per participant from Non-AFRALTI Member States

Target Audience:
Technical personnel work with mobile and Internet service providers, and IT professionals working in the field.

Pre-requisite/s:
The applicant must have a minimum of diploma in Telecommunication or its equivalent or at least five years experience in IT industry.

Course Overview:
During the course students will learn about the evolution of access network technologies and concepts applicable to current access network requirements. They will learn about adaptation of access network to IP platform, various topologies, physical and logical architectures used. The course also covers radio and fibre based technologies used for broadband access. In addition the course will cover design and deployment strategies used. Students will also learn about services that are supported by various technologies.
Finally there will be a case study depicting the material learnt during the training to demonstrate deployment strategies of broadband access technologies for new generation networks.

Methodology:
There will be classroom presentations, group discussions and case studies including simulations of real time operations. Students will be given exercises to work through in order to enhance understanding of subject matter.

Workshop Objectives:
After the course students will be able to:

- Understand evolutionary trend of access technology
- Understand how broadband access concepts

- Determine features of an appropriate broadband access technology for specific situations.
- Design and device a required deployment strategy
- Know how to match services and broadband access technologies
- Determine the required technology mix for broadband access technologies
- Determine the technical parameters for specific business cases for providing broadband access technologies.

Workshop Contents/Topics:

1. Introduction
2. Evolution paths in access networks
3. Requirements for new generation access technologies
4. IP platform Architecture and application to access methods
5. Application of Layered Network Design to access networks
6. Physical versus Logical Architecture
7. Logical Architecture – wired networks
8. Application of VLANs in access network
9. Broadband access technologies
   - Evaluation and comparison of broadband technologies
   - Wireline Broadband Technologies
   - FTTx Standards
   - Wireless Broadband Technologies
   - LTE and G4
   - Evolved packet switched system
   - Data over TV Cable
   - Satellite Broadband Technologies
10. Design issues in access networks
11. Implementation strategies
12. Coexistence of multiple technologies
13. Testing and maintenance of access networks
14. Services provided using access technologies
    - Home network issues
    - Access network and ISP architecture
    - Adaptation of access technology for VoIP
    - Video on demand
    - Integration of digital broadcast and access
15. Case study of Broadband deployment process.

For more information, please contact us on
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