Course ID	Course Title
BROADREG	**Broadband: Technologies, Policy , Regulation, NBP**
Course Duration	
5 days	

Related Courses

- Spectrum Management: Planning, Monitoring, Licensing, and Economics (2-3 day(s), SPECMGT)
- Spectrum Monitoring Workshop: Principles and Practice (3-5 day(s), SPECMON)
- Radio Measurements Equipment: Principles and Operation (2-3 day(s), RMEQUIP)
- Spectrum Monitoring: Principles of Vector Network Analysis, Procedures, and Key Results (3-5 days, VECTOR)

Aimed At

Telecommunications regulators, service providers, equipment makers and others with technical or non-technical background who wish to study the broadband technologies, their regulation, and their impact on the telecommunications market and the subscribers.

Prerequisites

- Basic knowledge of telecommunications

Course In a Nutshell

This course is one of a series of Eogogics courses aimed at those who need to study in one place the various broadband technologies, both wireless and wired, from the standpoint of broadband access technologies, their implementation, policy/regulation, and market/subscriber impact.

Customize It!

We can customize this course to your specific needs at little to no additional cost. The course duration, indicated as five days, may be shortened or lengthened based on the desired depth of coverage. The specific technologies selected for discussion and the technical level (whether more or less technical) can also be adjusted to suit the needs of your audience.

Course Outline

- **Introduction and Course Overview**

- **Broadband Trends**

  - Definition of broadband access
  - Where the broadband is present in telecommunication networks
  - Importance of broadband
    - Societal benefits
    - Individual benefits
    - Examples of broadband benefits

- ° Current state of the broadband in the region and worldwide
- ° *Broadband trends: A summary and discussion*

- **Wireless Broadband Technologies Overview**

  - ° UMTS and GSM
    - Development of the technology
    - Radio access network and core network architecture
    - Throughput in the access network
    - Available services
    - Service usage models
    - Future development
  - ° EV-DO and CDMA2000
    - Development of the technology
    - Radio access network architecture
    - Throughput in the access network
    - Available services
    - Service usage models
    - Differences compared to UMTS
    - Future perspectives
  - ° WiMAX
    - Development of the technology
    - Fixed and mobile WiMAX standards (IEEE 802.16)
    - Radio access network architecture
    - Throughput in the access network
    - Available services
    - Service usage models
    - Future perspectives
  - ° Satellite Access
    - Specific elements of the satellite access
    - Overview of available technologies
    - Usage scenarios
    - Future perspectives
  - ° Overview of digital video broadcasting
    - Specific elements of DVB and DAB
  - ° 4G LTE
    - Development of the technology
    - Current status of the deployment
    - Throughput in the access network
    - Available services
    - Service usage models
    - Differences with respect to the existing technologies
  - ° *Wireless broadband technologies overview: A summary and discussion*

- **Wired Broadband Technologies Overview**

  - ° Cable networks
    - Network architecture
    - Overview of DOCSIS standard

- Existing and future services
- Usage scenarios
- Future perspectives
  - ° xDSL access
    - Network architecture
    - Overview of ITU and regional standards
    - Network limitations and crosstalk
    - Existing and future services
    - Usage scenarios
    - Future perspectives
  - ° Fiber access networks
    - Network architectures (active and passive)
    - Overview of ITU standards
    - Existing and future services
    - Usage scenarios and infrastructure renting
    - Service oriented infrastructure
    - Future perspectives
  - ° *Wired broadband technologies overview : A summary and discussion*

- **Regulation of Broadband**

  - ° National regulatory agency role in broadband deployment
    - Stimulating broadband access in different areas
    - Controlling and not preventing broadband access
    - Strategic plans for broadband deployment
  - ° Experience from countries with developed broadband access
  - ° Regulatory aspects of broadband access
  - ° Technology and services conversions
  - ° Importance of radio spectrum in providing broadband access
  - ° Most important spectrum segments for providing broadband services
  - ° Radio spectrum control and monitoring system
  - ° Wired networks control
  - ° Future challenges for the NRA
  - ° Regulatory aspects of broadband: A summary and discussion

- **Overview of Broadband Services and Economic Feasibility**

  - ° Protocols in broadband network
  - ° Examples of architectures and service providing
  - ° Examples of pricing models
  - ° *Overview of broadband services and economic feasibility: Session review and discussion*

- **Course Recap and Conclusion**

How You Will Learn

- You will learn from an instructor who's well versed in a number of broadband wireless technologies and broadband deployment strategies.
- Along with the lecture, we will use interesting group activities to enrich the instruction and drive home the key points.
- If you already know something about any of the issues dealt with in this course, we will build on that base. We'll compare and contrast what's familiar with what's new, making the new ideas easier to learn as well as more relevant.
- If your background is less technical, we will use suitable examples and analogies to reduce the subject matter complexity.
- The Participant Handbook will provide you with a framework to which you can add the information and insight provided in real-time, turning it into a valuable reference resource you can take back to your job.

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