



## ENG-518 - 5G & IoT Technical and Regulatory Perspective (Virtual Classroom)



### Description

Current Telco architecture will transform from comprising vertically integrated discrete network elements, to being cognitive, cloud optimized and seamless in operation. Such next-generation networks will not be server-centric, but instead focus on data and content requirements. Data and the applications that use it will be decoupled.

The new network architecture will support easy scalability, have security and privacy built-in, enable energy efficient operation, offer the lowest Operational Expenses (OPEX), and flexibly support an extremely wide range of uses.

Neotelis proposes a 3-day virtual classroom training (1/2 day x 6 sessions) to provide participants with an overview of 5G and the Internet of Things (IoT), from a technical perspective. The course will also discuss some key regulatory challenges associated with the technologies.

### Learning Outcomes

At the end of the course, participants will be able to:

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Identify 5G and IoT technology enablers and the features of both technologies

- Understand the detailed technical architecture and components of a 5G network
- Discuss the challenges of migration to 5G and some use cases of this new type of network
- Describe the applications and advancement of 5G, assess security considerations and the role of analytics and applications
- Understand what is IoT and describe the relationship between IoT and 5G
- Explain the architecture, layers and stack for IoT and assess the features and requirements
- Discuss key regulatory challenges and regulator's role in facilitating the rollout of 5G and setting the standards and regulations for IoT implementation
- Explain the new business models needed for this new generation of technology and how operators can shift smoothly to 5G and pave the way towards industry 4.0
- Analyze the situation of telecom operators and regulators and the challenges facing the shift to 5G and IoT in the LAC (Latin America and the Caribbean) Region

## Topics

The training course covers the following topics: **Session 1**

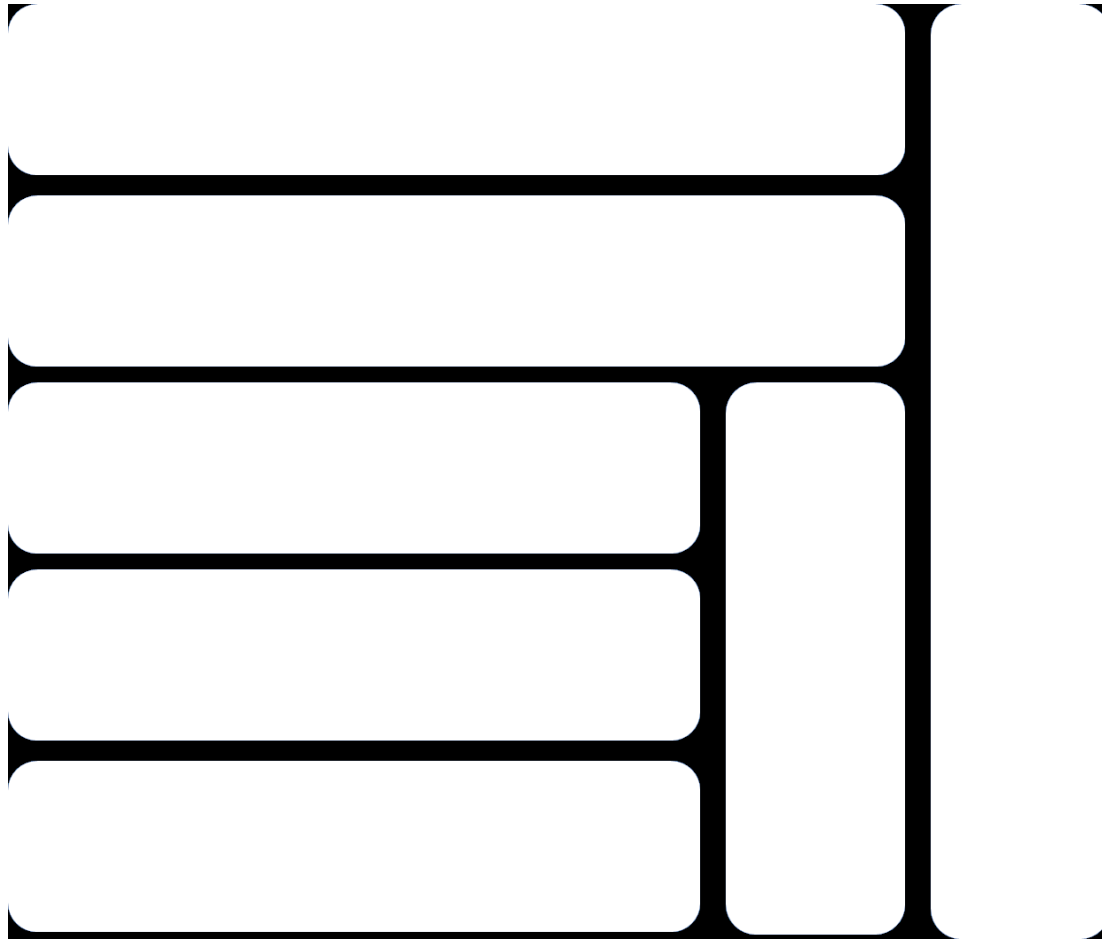
- 5G and IoT Technology Enablers
- 5G Introduction
- *Workshop: Discussion Around Technology Enablers for 5G*

## Session 2

- 5G Architecture
- QoS Assessment in 5G
- 5G Advancement
- *Workshop: 5G Technology Readiness in CALA Region (Caribbean & Latin America)*

### Session 3

- IoT Architecture and Layers



- IoT stack
- Overview of IoT connectivity Methods and technologies
- *Workshop: The Technologies Behind IoT*

### Session 4

- Migration to 5G
- Key Considerations for Rolling out 5G
- 5G in Latin America and the Caribbean
- *Workshop: Key Considerations for Rolling Out 5G - in Costa Rica*

- *Workshop: Encouraging the Take-Up of Device Connectivity*

## **Session 5**

- Likely 5G Deployment Scenarios
- The Role of Regulators in the Deployment of 5G
- Operators Roles, Risks and Revenue Streams in the 5G Era
- 5G Use Cases and Economic Opportunity
- *Workshop: Comparison of Different Operators' Approaches to Rolling Out 5G*
  
- *Case Study: Why 5G is so Important for Healthcare Use Cases*

## **Session 6**

- Security Considerations Surrounding 5G
- IoT and 5G
- Considerations in regulating the IoT
- *Case Study: 5G Rollout Implications in the UK*
- *Workshop: IoT in the LAC Region (Latin America and the Caribbean) and 6 Key Regulatory Debates*

## **Target Audience**

- Strategic or technical managers, consultants, communications professionals, network professionals and others who plan on using, evaluating or working with 5G wireless networks, applications and services, including IoT.
- Telecom professional who need to understand the technical aspects of 5G and IoT and have an understanding of the associated regulatory considerations.

## **Methodology**

Neotelis Virtual Classroom Trainings combine real-time (live) Virtual Classroom sessions on a web-based videoconferencing platform with an expert trainer and off-line activities in-between live sessions. Presentations, workshops, case studies, and discussions on real-life situations faced by participants, as well as videos, whiteboards, quizzes and questionnaires are all used to engage participants and enhance their learning experience.

The training material is designed to provide practical tools which can be immediately applied in a work environment, and the complete material is provided to all participants for future reference and follow-up action plans.

Access to Neotelis Virtual Classroom Trainings requires a computer, a webcam, a headset and microphone and a stable internet connection.

## Location

## About Neotelis

Neotelis provides training, consulting, conferences and publications to the telecommunications industry worldwide. Its team of senior experts has trained thousands of executives and managers working for operators, regulators, policy-makers and governments in over 120 countries around the world.



4802 de Verdun St, Office #1, Montreal, QC, H4G 1N1 Canada  
Tel: +1 514 281 1211 Fax: +1 514 281 2005  
[info@neotelis.com](mailto:info@neotelis.com)