A FINANCE TRAINING COURSE

BEST PRACTICES IN
TELECOM COST MODELING AND LRIC

Description

Setting cost–based interconnection and access pricing is one of the main concerns of regulators even as telecom transitions from being voice–based to broadband driven. For operators, responding to regulatory requirements for cost–based pricing requires significant effort to build, maintain and defend regulatory cost models. For both regulators and operators, understanding telecom cost models is essential.

This 5–day practical course provides participants with best practices to understand, develop and implement successful LRIC costing models for voice and data using top–down, bottom–up and hybrid approaches.

Learning Outcomes

At the end of the Training Course, participants will be able to:

▪ Discuss interconnection and access regulation and the key concerns of regulators in evaluating the adequacy of cost methodologies
▪ Recognize fundamental cost concepts and explain principles of cost accounting
▪ Explain “Weighted Average Cost of Capital” (WACC), how to use and optimise it
▪ Recognize different types of cost modelling methodologies from Fully Allocated Costs (FAO) to Long Run Incremental Costing (LRIC) top–down (TD) and bottom–up (BU) models

Neotelis can also deliver an in–house session of this course specifically for your organization. Please contact us at training@neotelis.com for more information and a Proposal.
Topics
*Note: the course structure may be subject to change as trainings are updated on a regular basis.

DAY 1

- Global telecom trends and impacts
  - Market evolution & trends
    - The data tsunami, connected consumer, digitization, disruptive competition & OTT
  - New & evolving players
    - Convergence/M&A, global operators, non-telecom OTT players, niche providers
  - Key Services
    - Social media, multiplay offers, VoWiFi & VoLTE, cloud, IoT, streaming video
  - Challenges & opportunities for operators, regulators & governments

- Interconnection regulation
  - Relevance of interconnection
    - Why is it still a regulatory issue?
    - The interconnection fees
    - Access and interconnection
    - Competition and essential facilities
  - Types of interconnection
    - Unbundling – copper & fibre
    - Mobile network sharing
  - Regulator’s role
    - Why regulate at all?
    - Market-based regulation
    - Regulator’s functions
- Interconnection best practices
  - Content and application regulations
  - Ladder of investment
  - Reference interconnection agreements (rios)
- Interconnection trouble spots
  - Mobile termination rates
  - Mobile roaming
  - Broadband focus

- Workshop: What is a cost?
- Workshop: Duct access and costing
- Workshop: Impacts, challenges and opportunities of market evolution
- Workshop: Infrastructure sharing

DAY 2

- Cost definitions, economics & economic concerns
  - What is a cost re–visited
  - Discounting logic
  - WACC
    - Sources of investment and risk
    - Debt versus equity
    - WACC optimization
    - WACC set by the regulator
  - Annuity based costs
    - Annuities defined
    - Tilted annuity
    - Use of annuities
  - Cost based pricing – LRIC
    - Why is LRIC a sensible price basis?
    - Regulator – guiding principles
    - LRIC and LRIC+ defined
    - LRIC+ and the ‘economic death spiral’
    - Incremental costs are key measures
    - LRIC versus LRAIC versus TSLRIC
  - Top down costing
    - Understanding financial statements
    - Management accounts
- Fully allocated costing
- Treatment of fixed and common costs
- Cost nomenclature

- Workshop: WACC usage - how WACC is used in different countries
- Workshop: Are high or low termination rates best?
- Workshop: Copper and broadband access costing

**DAY 3**

- The “real world” & modelling of an operator
  - Types of costs and costing analyses
    - FAC Historic or Current Cost Accounting (HCA/CCA), revised HCA/CCA, LRIC
    - TD/BU, hybrid TD & BU
  - Depreciation methodologies
    - Annuity, straight line, economic/economically rational method, CCA
    - Depreciation methodologies compared
  - Costing options – actual versus a hypothetical operator

- Top Down (TD) and Bottom Up (BU) Costing Models
  - The routing table – the heart of a costing system
  - TD & BU model comparisons
    - Hybrid models
    - TD & BU reconciliation
  - Some real BU models – Sweden, Belgium
  - TD models and Activity–Based–Costing (ABC)
  - TD LRIC using Current Cost Accounting (CCA) and Cost–Volume Relationship (CVR)
    - Making TD costs forward looking
    - CCA principles
    - Modern Equivalent Asset (MEA)
    - Limitations of CCA
  - LRIC conclusions

- Excel Demo: The routing table
- Workshop: Allocating network element costs to products
DAY 4

- **Workshop: Long term costs and price decisions**
- **Workshop: MEA decisions can get radical**

**Other considerations in cost models**
- Geotypes
  - Accounting for geography, local loop zones, street profiles
  - Scorched earth/scorched node/modified scorched node
  - Mobile geotypes
- Debatable/tricky cost items in cost models
  - Spares, redundancy, overhead capacity, design horizon, modularity, unused elements, working capital, falling demand
- Opex and efficient costs
  - Opex costs – the weakest part of most cost models
  - Using data from other countries
- Network capacity
  - Capacity costing in real models

**IP network & services costing**
- Busy period usage drives costs
- Key cost factors for IP networks
- Calculating average bit rate per customer
- Creating the route table for an IP network
- Dealing with voice traffic on an IP network
- Dealing with quality of service on an IP network

- **Workshop: IP network route table**
- **Workshop: time-based factors**
- **Workshop: country-specific cost factors for ‘efficient’ operators**
- **Workshop: reconciliation of FAC and LRIC**

DAY 5

- **Regulatory accounts & accounting separation**
- **Costs and prices**
  - Understanding commercial price setting
- **Modeling shared costs: dealing with PSTN, broadband and TV access costs**
● Dealing with common costs
  ● ‘heroic assumptions’

- Modeling bitstream services
  - Customer and volume drivers

- Modeling unbundled local loops (LLU)
  - Key considerations for copper access
  - Linkages to fibre access

- Workshop: Case study – EU move to pure LRIC and low mobile termination rates
- Workshop: Unexpected outcomes

**Target Audience**

- Telecommunications managers and personnel responsible for cost analysis, financial analysis, financial modeling, costing and/or pricing
- Managers looking to complement their skill-set by gaining a good understanding of the LRIC methodology in the telecommunications environment

**Methodology**

A combination of engaging activities and dynamic presentations to stimulate and maximize participants' learning.
**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, policymakers and governments in over 120 countries around the world.