



INTERNATIONAL TELECOMMUNICATION UNION
Telecommunication Development Bureau
and
University of the West Indies, Jamaica
Mona School of Business
Telecommunications Policy and Management Programme
and
ITU-EC HIPCAR Project

ITU Centres of Excellence Expert-Level Training Workshop on
Network Cost Modelling for Countries in the Caribbean Region
4 – 8 October 2010, Kingston, Jamaica

Agenda

Brief Description

This training workshop is organized jointly by the Telecommunication Development Bureau, ITU-EC HIPCAR Project and the Telecommunications Policy and Management Programme of the Mona School of Business at the University of the West Indies in Jamaica - one of the Nodes of the ITU Centres of Excellence Network for the Caribbean region.

The focus of this training is to provide participants with concrete exercises and hands-on practice so that they can develop their own cost models. At the end of the course, participants are expected to be able to:

- ✓ Analyze and describe in detail the different costing methodologies applicable to
- ✓ telecommunications/ICT (e.g. LRIC, LRAIC, FDC, ABC, etc.) and showcase alternative methods of price regulation (such as benchmarking, price cap, accounting separation, etc.);
- ✓ Provide a detailed presentation of existing cost models;
- ✓ To determine, with a step-by-step check list, which method and methodology to apply in accordance with their national context;
- ✓ Explain the importance of the data collection process: how to collect the data;
- ✓ Explain development of a cost model, including a step-by-step approach (definition of the telecommunication services; traffic estimation; cost elements: calculation of network costs; direct, indirect, common and special costs, amortizations, depreciation; cost of capital; routing table and cost distribution matrix; comparison with current tariffs; analysis and interpretation of results);
- ✓ To test the model using different market environments, taking into consideration the number of operators (fixed and mobile), and the different telecommunications services, such as fixed, mobile, voice, SMS, roaming, internet, VoIP, Mobile TV, etc.;
- ✓ Offer a look forward in adapting cost models to NGN overview.

4 October (Monday)	
	<i>Price Regulation and Costs</i>
8.30 – 9.00	Registration
9.00 – 9.20	Opening Ceremony Welcome Remarks –International Telecommunication Union ITU/BDT Opening Remarks – UWI representative
9:20 - 9:30	Tea / Coffee Break
9:30 – 10:30	Welcome and introductory session Session 1: Course Overview <ul style="list-style-type: none"> • Cost Modeling – The big picture • Course Objectives and Methodology • Learning Outcomes • Workshop style • Self-introductions
10:30 – 11:15	Session 2: Price regulation and costs Objective: To examine the circumstances under which regulators seek to determine prices for services in telecommunications markets and the basis on which they do so. After this session workshop participants will understand the alternative ways in which prices may be established, and when each approach is appropriate.
11:15 – 12:00	Session 3: Cost standards and their use Objective: To provide a high level overview of the various approaches that may be applied to costing for telecommunications services pricing including FDC, LRIC, LRAIC etc. At the end of the session participants will have a clear idea of the different situations in which the various cost standards might be best applied.
12:00 – 13:30	Lunch
13:30 – 14:30	Session 4: The nature of modeling Objective: To clarify what it is to build models in the context of telecommunications network services. Alternative approaches will be discussed in contrast to modeling.
15:00 – 15:30	Tea / Coffee Break
15:30 – 16:30	Session 5: Group Work Exercise A Objective: To review key aspects of the day’s presentations, and, in the process, to become accustomed to working within the assigned groups.
Summary Day 1	<ul style="list-style-type: none"> • Understand the relationship between price regulation and costs • Understand the various cost standards and their areas of useful application in telecommunications

5 October (Tuesday)	
	<i>Network Cost Modeling</i>
9:00 – 10:00	<p>Session 6: Top Down and Bottom Up Models and Benchmarking</p> <p>Objective: To distinguish between top down and bottom up models and benchmarking and to understand when each might be appropriate for determining network service prices.</p>
10:00 - 10:30	Tea / Coffee Break
10:30 – 12:00	<p>Session 7: Weighted Average Cost of Capital (WACC) – Theory and Practice</p> <p>Objective: To explain the theory behind the various elements that forms the Weighted Average Cost of Capital, and to detail the methodologies for estimating them in practice.</p>
12:00 – 13:30	Lunch
13:30 – 15:00	Session 8: Introduction into the Training Model to be used for the Exercises
15:00 - 15:30	Tea / Coffee Break
15:30 – 17:00	<p>Session 9: Group Work Exercise B - Selecting Suitable Model Approaches</p> <p>Objective: To examine situations described in handouts and to report back to the plenary workshop on findings and recommendations.</p>
Summary Day 2	<ul style="list-style-type: none"> • Understand the types of models, their advantages and disadvantages, and how they are used • Understand the role and challenges of benchmarking • Understand by inspection and interaction how each type of model works • Understand how to enter data

6 October (Wednesday)	
	<i>Network Cost Modelling Process</i>
8:30 – 10:00	<p>Session 10: Accounting Standards and Accounting Separation</p> <p>Objective: To understand the key accounting standards in place and the principles and practices of accounting separation employed by regulators to segregate costs of services.</p>
10:00 - 10:30	Tea / Coffee Break
10:30 – 11:30	<p>Session 11: Data Inputs, Building and testing the model</p> <p>Objective: To understand the issues that arises in the course of building the model and making it robust. The latter process will include discussion on whether and how there should be public consultation on a model.</p>

11:30 – 12:00	Session 12: Briefing on Group Work Exercise D Objective: To brief all Groups on the exercise and how they should structure themselves to best complete it as a team, with responsibilities allocated to each team member.
12:00 – 13:30	Lunch
13:30 – 15:00	Session 13: Group Work Exercise D continues
15:00 - 15:30	Tea / Coffee Break
15:30 – 16:45	Session 14: Group Work Exercise D continues
16:45 – 17:00	Session 15: Reporting on Progress
Summary Day 3	Understand how to find and enter data in the cost model

7 October (Thursday)	
	<i>The Limitations of Network Cost Modelling</i>
8:30 – 10:00	Session 16: Limitations of Network Cost Modelling Objective: To understand the circumstances where care or judgment is required before implementing the calculations from Network Cost Models, including the intrinsic issues associated with models themselves and the complexities of the market environment.
10:00 - 10:30	Tea / Coffee Break
10:30 – 12:00	Session 17: Group Work Exercise D continues
12:00 – 13:30	Lunch
13:30 – 15:00	Session 18: Group Work Exercise D continues
15:00 – 15:30	Tea / Coffee Break
15:30 – 16:30	Session 19: Group Work Exercise D continues
Summary Day 4	Understand how to make the necessary enquiries, choices and judgments to do the whole of a cost modeling project.

8 October (Friday)	
	<i>Regional experiences and future issues</i>
8:30 – 10:00	Session 20: Group Work Exercise D – Reporting Results Each Group will report its results for key service costs and give reasons for the options they took and choices made on the way.
10:00 - 10:30	Tea / Coffee Break
10:30 – 12:00	Session 21: Cost modeling in practice – country cases Brief description from participant countries on their experience on cost modeling and determination of tariffs.
12:00 – 13:30	Lunch
13:30 – 15:00	Session 22: Overview other cost models available on the market
15:00 – 15:30	Tea / Coffee Break
15:30 – 16:30	Session 23: Modeling in an NGN Environment Objective: This session will provide important appreciation on how NGN networks and related cost models differ from current networks and models.
16:30 – 17:30	Session 24: Wrap Up & Closing

Profile of Experts:

Professor Heinrich Otruba from the University of Economics and Business Administration of Vienna (Wirtschaftsuniversität Wien), he was former Head of the Austrian Regulatory Authority for Telecommunication (RTR) and Advisor of the Director General for the Information Society, European Commission.

Mr. Jim Holmes, Director of Incyte Consulting Pty Limited, he is developer of several cost models for telecommunication services, and provided assistance on costing issues to numerous countries in the world.