

INTERCONNECTION-ACCESS AND COMPETITION IN TELECOMMUNICATIONS

1.0 INTRODUCTION AND DESCRIPTION OF THE COURSE

This course includes material from courses in regulatory economics, business management, telecommunications and strategic planning. A wide array of material has been selected with the purpose of introducing the participants to the several complex issues and facts involved in understanding the aspects of interconnection in theory as well as in practice. The course has been designed in such a way as to provide the participants with the fundamental tools in order to analyze, understand and evaluate the aspects involved in the development of an interconnection contract and how it can affect the business performance.

2.0 OBJECTIVE OF THE COURSE

The objectives of the course can be summarized as follows:

- a) To provide the concepts and definition related with telecommunications and specifically with aspects of access, interconnection and competition.
- b) To provide an introduction to related to interconnection contracts such as different charges.
- c) To familiarize the participants with all the aspects related to different costs and prices normally used in telecommunications
- d) To familiarize the participants with the most important analytical tools normally used by regulatory agencies to estimate interconnection prices.
- e) To familiarize the participants with the international practices and prices and the criteria normally used by regulatory agencies for evaluating interconnection contracts.
- f) To review some specific international experiences about interconnection
- g) To teach students how to design and develop interconnection contracts.
- h) To teach participants how to negotiate an interconnection contract
- i) To provide an overview of the critical issues and future challenges in interconnection, access and competition.

3.0 AUDIENCE

This course is directed at students, the personnel of regulatory and antitrust agencies, international operators, consultants, manager and professionals involved in the industry of telecommunications.

4.0 REQUIREMENTS

Basic knowledge of some microeconomics and calculus is highly desirable.

5.0 DURATION

The length of this course is 18 hours of classes. It is offered in 3 consecutive days of classes.

6.0 COURSE OUTLINE (PROGRAM)

1.0 Introduction

- 1.1 Course description
- 1.2 Topics of the course
- 1.3 Overview of the telecommunications industry and recent changes

2.0 Concepts and Definition

- 2.1 Basic Concepts about Players and Market Structure
 - 2.1.1 What is an LEC, CLEC, ILEX, IXC, CAP (ALT), ISP, etc.
 - 2.1.2 Market structure, rules and competition
- 2.2 Concepts and definitions related with interconnection and access
 - 2.1.1 What is an ISR (international simple resale)
 - 2.1.2 Local interconnection
 - 2.1.3 Access
 - 2.1.4 Termination and origination
 - 2.1.5 Transit
 - 2.1.6 International accounting rate
 - 2.1.7 Settlement rate
- 2.3 Charges Related to an Interconnection Contract
 - 2.3.1 Interconnection charge
 - 2.3.2 Interconnection charge to a mobile terminal
 - 2.3.3 Interconnection charge to central office
 - 2.3.4 Inter-city interconnection charge
 - 2.3.5 International interconnection charge

3.0 Review of Different Costs and Prices Applied in Telecommunications

- 3.1 Type of Cost and Its Application in Industrial Economics of Telecommunications
 - 3.1.1 Average cost
 - 3.1.2 Sunk cost
 - 3.1.3 Fixed and variable costs
 - 3.1.4 Fully distributed cost
 - 3.1.5 Marginal cost and incremental cost
 - 3.1.6 Long-run incremental cost (LRIC)
 - 3.1.7 Long-run incremental cost plus contribution
 - 3.1.8 Stand alone cost
- 3.2 Prices
 - 3.2.1 Ramsey prices
 - 3.2.2 Marginal prices
 - 3.2.3 Average prices

4.0 Theory and Techniques for Estimating Interconnection Prices

- 4.1 The efficient component rule (Baumol-Willig Rule)
- 4.2 Fully distributed cost estimation
 - 4.2.1.1 Investment and expenses allocation for FDC
- 4.3 Demand rule (Ramsey Prices)
- 4.4 Economic cost approaches
 - 4.4.1.1 Long-run incremental cost (LRIC)
 - 4.4.1.2 Incremental cost plus contribution (LRIC+C)
- 4.5 Benchmarking

- 4.6 Others techniques (no costs based, e.g. revenues sharing)
- 5.0 Review of International Evidence of Interconnection Estimation**
 - 5.1 International evidence of different techniques applied for interconnection
 - 5.2 International evidence of interconnection prices
- 6.0 Interconnection Estimation and Critical Assumptions**
 - 6.1 Cost of capital
 - 6.2 Investment
 - 6.3 Estimating cost
 - 6.4 Others
- 7.0 The Fixed-Mobile Interconnection Issues and Challenges**
 - 7.1 The fixed-mobile case
 - 7.2 Interconnection, access and competition
 - 7.3 Critical issues and main challenges
 - 7.4 What is next
- 8.0 Review of International Specific Cases**
 - 8.1 The case of Mexico
 - 8.2 Databases and information
 - 8.3 Data collection strategy
- 9.0 The Latin America Experience**
 - 9.1 Review of the Latin American experience in Interconnection-Access
 - 9.2 Interconnection-Access Rules and Latin American challenges
- 10.0 Interconnection Contract**
 - 10.1 Contract, competition and efficiency(international evidence)
 - 10.2 Contract flexibility
 - 10.3 The key issues for writing an interconnection contract
 - 10.4 Review of some international interconnection contracts
 - 10.5 The optimal interconnection contract
- 11.0 Critical Issues, and Industry Challenges**
 - 11.1 The international revenues settlement subsidy and call termination charges
 - 11.2 Moving beyond international accounting rates
 - 11.3 Informal markets and interconnection
 - 11.4 Other issues
 - 11.5 Summary and conclusions