



Central America: COSITU and its application to CAFTA

“Costs, tariffs and interconnection rates”



Havana, 20 and 21 February 2007

COSITU Project in Central America and Dominican Republic



- Tegucigalpa Office and Market, Economics and Finance Unit (MEF) Action plan (IsAP 2006)
- In coordination with COMTELCA
- FTA Impact Study on:
 - costs and tariffs of telecommunication services
 - the regulatory environment and its adjustment to the FTA
- Seminar for the presentation and discussion of the results of this study
- Workshop on the COSITU model and its application in the context of the FTA

COSITU Project in Central America and Dominican Republic



- Discussion on the validation of the model within the framework of the FTA
- Meeting of the Board of Directors of COMTELCA for adoption of the model as a reference tool for the calculation of costs and tariffs
- Elaboration of the work plan
- Contribution Agreement between COMTELCA and the ITU

Free Trade Agreement (FTA)

United States, Central America
and Dominican Republic



CAFTA (General):

- Obvious main advantages:
 - ❖ **Central America and DR:** US concessions for agricultural exports.
 - ❖ **United States:** services and intellectual property
- 22 chapters, general and specific, with country exceptions.
- Dispute settlement: consultations, conciliation, arbitral panel (1+1+1), compensation.

Free Trade Agreement (FTA)

United States, Central America
and Dominican Republic



CAFTA (Telecommunications):

- Chapter 13, with three annexes, plus *Annex 13*, which applies specifically to Costa Rica.
- Applies to:
 - ❖ Access to and use of public services
 - ❖ Obligations of public services providers
 - ❖ Other measures relating to public networks or services
 - ❖ Measures relating to information services
- Does not apply to broadcasting or television

Free Trade Agreement (FTA)

United States, Central America
and Dominican Republic



CAFTA (Telecommunications):

- Emphasis on the obligations of dominant operators, and of the regulator/government
- Classification of services:
 - ❖ Public (including leased circuits and mobile)
 - ❖ Information services
- Classification of providers:
 - ❖ Major (dominant)
 - ❖ (Non-major)

Free Trade Agreement (FTA)

United States, Central America
and Dominican Republic



CAFTA (Telecommunications)

COST and TARIFF requirements:

- General: equitable, transparent and non-discriminatory tariffs
- Tariff regulation only for dominant parties (with exceptions)
- “Reasonable” tariffs:
 - ❖ Resale
 - ❖ Leased circuits
 - ❖ Use of poles, ducts and rights-of-way

Free Trade Agreement (FTA)

United States, Central America
and Dominican Republic



CAFTA (Telecommunications)

COST and TARIFF requirements:

- “Cost-oriented” rates:
 - ❖ Unbundled network elements
 - ❖ Interconnection, in general
 - ❖ Leased circuits
 - ❖ Co-location
- There is no requirement for a specific cost and tariff methodology; there are ambiguities!!

Free Trade Agreement (FTA)

United States, Central America and Dominican Republic



Tariff and cost methodologies

- Different approximations for different objectives: efficiency, funding, redistribution, social objectives, etc.
- The current focus is on efficiency with funding
- A variety of methodologies to that end, many of them “cost-based”
- Need to decide between options: **there is no automatic, universally-accepted system**

Free Trade Agreement (FTA)

United States, Central America and Dominican Republic



Tariff and cost methodologies

- For example, incremental costs by service
- Objective: efficiency. An adjustment must be introduced in order to achieve financing
- Problem 1: Allocation of overheads?
- Problem 2: Historical values, replacement values, LP prospects, etc.?
- Problem 3: Better technological alternative? Optimum network design? Future demand? Capital cost? Etc.
- All of the above being “cost-based”

Free Trade Agreement (FTA)

United States, Central America and Dominican Republic



CAFTA (Conclusions):

- New regulations, but uncertainties remain.
- Positive effects:
 - ❖ Increased services and investment (content).
 - ❖ Better use of economies of scale.
 - ❖ Increased competition and better mechanisms for its promotion.
- Possible negative effects:
 - ❖ Displacement of domestic companies.
 - ❖ Less employment growth within the sector.
- Telecommunication specialists on the roster for the **arbitral panel**.
- Harmonization of CAFTA, sectoral regulation and regulation of competition.

Free Trade Agreement (FTA)

United States, Central America
and Dominican Republic



CAFTA (Recommendations):

Applicability of COSITU

- Need for a cost and tariff model for the regulators, under domestic legislations, of competition and CAFTA.
- Also for operators, in parallel to the regulator, and to determine their effective costs by service.
- The CAFTA requirements are not particularly strict in the area of tariffs and costs.
- COSITU appears to be fully applicable under CAFTA



Central American
WORKSHOP
on the COSITU model
and its application to
CAFTA
ITU, COMTELCA, TELCOR

Managua, Nicaragua
24-28 July 2006





During this workshop, the results of the CAFTA study were reviewed and a presentation was made of the COSITU model and its use. A fictitious case study was used to facilitate understanding of the model.

Presentations may be found on the website:

<http://www.itu.int/ITU-D/finance/work-cost-tariffs/events/tariff-seminars/nicaragua-06/presentations.html>



COSITU

An ITU-designed software for calculating telephone service costs, tariffs and interconnection rates, based on principles of enhanced fully distributed costs, using activity-based costing (ABC) principles, as adopted in ITU-T's D-series recommendations.

**Telecommunication Development Bureau
(BDT)**



Costed services

- Policy-making bodies
- Regulators and public authorities
- Fixed and/or mobile telephony operators



Main users

Basic telephone services

- Local/urban
- Trunk/interurban
- International outgoing
- International incoming
- Subregional outgoing
- Subregional incoming



Main users

Transit services

- International to international traffic
- International to subregional traffic
- Subregional to international traffic
- Subregional to subregional traffic

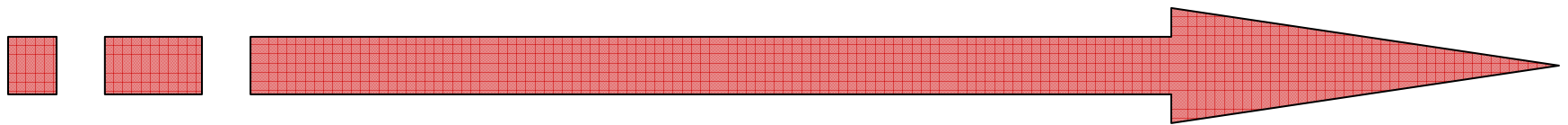


Main users

Interconnection services

- International to national traffic
- National to international traffic
- Outgoing national traffic
- Incoming national, single transit traffic
- Incoming national, double transit traffic
- National to national traffic

Stages of cost-orientated charging



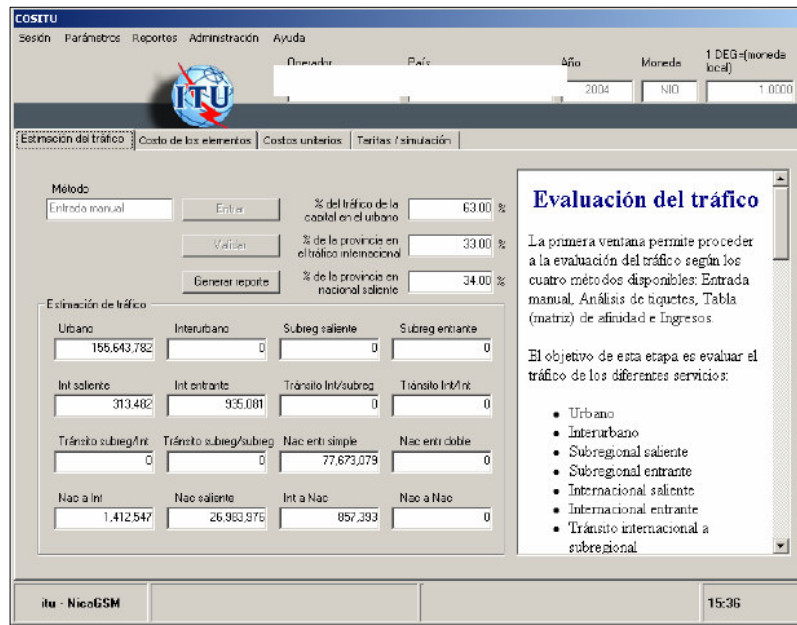
<ul style="list-style-type: none">•Cost of network components•Operational and maintenance costs•Service traffic	<ul style="list-style-type: none">•Amortization rules•Equipment price trends•Cost of capital	<ul style="list-style-type: none">•Cost of functional support•Identifiable direct and indirect costs•Other common costs•Routing table•Cost distribution	<ul style="list-style-type: none">•Unit endogenous cost of services•Tax components•Universal service obligations	<ul style="list-style-type: none">•Cost-orientated endogenous tariffs•Tariff rebalancing•USO simulation
---	--	---	--	---



CASE STUDY

Learning by doing

Implementation sequence



Estimación del tráfico

Método: Entrada manual

Costo de los elementos: 63.00 %

Costos unitarios: 33.00 %

Tariffes / simulación: 34.00 %

Estimación de tráfico:

Urbano	Interurbano	Subreg saliente	Subreg entrante
155,643,782	0	0	0
Int saliente	Int entrante	Tránsito Int/subreg	Tránsito Int-Int
313,482	9,35,081	0	0
Tránsito subreg/Int	Tránsito subreg/subreg	Nac entr simple	Nac entr doble
0	0	77,673,079	0
Nac a Int	Nac saliente	Int a Nac	Nac a Nac
1,412,547	26,963,976	857,293	0

Evaluación del tráfico

La primera ventana permite proceder a la evaluación del tráfico según los cuatro métodos disponibles: Entrada manual, Análisis de tickets, Tabla (matriz) de afinidad e Ingresos.

El objetivo de esta etapa es evaluar el tráfico de los diferentes servicios:

- Urbano
- Interurbano
- Subregional saliente
- Subregional entrante
- Internacional saliente
- Internacional entrante
- Tránsito internacional a subregional

Creation of new session for a specific year

Inputing of reference data

Selection of methods for traffic evaluation and cost estimation

Inputing of data required for traffic estimation and calculation

Inputing of accounting data for cost estimation and calculation

Inputing of current tariff data

Calculation of tariffs and use of simulation module



Reports

Cost estimate report	
Cost allocation	This report shows a matrix with the allocation of cost elements among the different services. It gives the total costs by network segment and the total costs by service.
Cost data evaluation	This report shows the consolidated data required for calculating costs: amortization, by segment, adjustments for asset revaluation, maintenance and operational costs, amortization period (actual and desired) and net fixed assets.
Unit costs	This report presents the unit cost data by type of service, including access network.



REPORTS

Report of results

Tariffs

This report presents the cost-based or cost-oriented tariffs, profitability and loss compared with the current tariffs and calculation parameters, as well as relevant USO policy information, monthly rental fee, connection charges, etc. It is useful for simulating tariffs, and allows for the comparison of different scenarios.



As a result of the Managua workshop, the Executive Board of COMTELCA **agrees** to carry out a mission with ITU for the installation and bringing into operation of COSITU in Central America and the Dominican Republic.



PROGRAMME

Installation and bringing into operation of COSITU in the countries of Central America and the Dominican Republic

ITU/BDT, COMTELCA
joint programme

Installation and bringing into operation of COSITU

Central America and the Dominican Republic



OBJECTIVE

Training, installation and fine-tuning of the COSITU model, including regulators and operators, through its application to the solution of a specific set of problems, with the aim of seeking to harmonize costs and tariffs for the telephone service and interconnection.



Overall plan

COSITU can be installed, in association with COMTELCA, over a period of three weeks, as follows:

- 1 week of consultant mission in each country
- 1 week of consultant work at home
- 1 week of consultant work in each country with the regulatory body and operators



Breakdown of activities

- **First week**

- General presentation of the model
- Guidance for regulators and operators on gathering of the data to be sent to the consultant at his/her home

- **Second week**

- Processing and analysis of the information gathered and received

- **Third week**

- Implementation and fine-tuning of COSITU within the regulatory body and operators. Development of the first set of tariffs generated by COSITU.

Participating countries



Costa Rica

El Salvador

Honduras

Nicaragua

Panama

Dominican Republic





Project costs

- **Approximate cost of consultant assistance for the region (7 countries): USD 70 000.00**
- **ITU contribution: USD 35 000.00**
- **Regional contribution (COMTELCA):
USD 35 000.00**



CASE OF COSTA RICA

6-10 November

Consultant
Miguel Felipe Anzola

WORK PLAN



- Presentation of general aspects and analysis of the COSITU model.
- Review of the telecommunication environment and structure of the regulator. Review of the legislation, regulations and standards in force.
- Definition, together with the regulator and operators, of their participation in and commitments to the project.
- Definition of case study and definition of methodology to be used.
- Review of available information and data and of formats currently used for information-gathering and analysis of the information needed for the application of COSITU.
- Definition of the information required and preparation of formats and guidelines for the preparation of information. Definition of the work plan, project methodology and schedule.
- Presentation of mission results.

Successful application of COSITU



- 30 participants
- Presence of the regulator
- Setting-up of a multidisciplinary team
- COSITU is currently used for the purpose of contrasting data with the ABC business cost model
- The network element costs are drawn up in detail
- A model was designed to allocate costs to each of the services



Full-time multidisciplinary team

Area	Role
Senior members	Committee director. Group leader
Planning	Provides key information on the company's business: strategic importance of the business.
Marketing	Provides market information: service supply and demand, market segmentation, tariffs, elasticity of demand and market studies.
Invoicing	Provides information on invoicing of services.
Accounting	Provides counting and cost information. Advises on the interpretation of accounting information.
Network engineering	Provides information on network structure, architecture and utilization, technology solutions for networks and the feasibility of service implementation.
Traffic engineering	Provides traffic measurements, studies and forecasts for different services.



SITUATION IN OTHER COUNTRIES



COSTITU

“Costs, tariffs and interconnection rates”