Productivity-Based Tariff Scheme for the Mexican Ports

Mr. Reyes Juarez Del A., General Manager
Mr. Rafael Gomez Lara, Project Manager

Certified Company
ISO 9001-2000
In Integrity

FOA Consulting, S. C.
May, 2006
The Recent Past

The Mexican ports applied a tariff scheme in the past with the following characteristics:

- It is a static model that considers the value of the port infrastructure but does not consider the future development of the ports and their infrastructure (New investments involved)

- Likewise, it considers the costs and the current expenses, but it does not consider their evolution over time.

- Consequently, it does not include the port assets profitability.

- It considers the costs and investments incurred to render the services as well as the criterium to determine the maximum tariffs.

- It does not consider the competitiveness of the port tariffs, since it disregards the tariffs of competitive ports in the analysis.
Towards a New Tariff Scheme

Due to the limitations that the previous scheme has, it was necessary to develop a new tariff model that will consider the following in order to determine the tariffs:

- Not only the current reality of investments in the ports, but also the perspective of a future development. This development comes from investments as well as from operations and management described in the port planning.
- Port productivity criteria.
- The profitability of port assets.
- Equilibrium tariffs that do not allow that the ports have losses and that consider at the same time the market tariffs, this is competitiveness.
Objectives of the New Tariff Scheme

1. Strengthen the financial self-sufficiency of the Port Management.

2. Achieve the profitability of port assets in a medium and long term.

3. Encourage the competitiveness of the Mexican ports.

4. Consider the future development of ports.

5. Have flexible mechanisms for updating tariffs.
The tariff model considers the operative and financial reality of the ports, their development perspectives and the market.

It gives:
- Productivity, efficiency and profitability parameters
- The scenarios of port development with decisions of quality investment.

It Identifies and dimensions:
- The potential demand
- The competitive advantages
- The benchmarking with other ports
General Considerations

The model is a tool that allows and facilitates the Port Management to elaborate its proposal regarding the infrastructure tariffs, in such a way that:

1. The tariffs are based on:
   - Financial self-sufficiency
   - Possibilities that the market offers
   - Productivity and competitiveness

2. A greater certainty is generated through structuring a realistic viewpoint based on the current situation and on feasible scenarios of development.

3. The decision making is improved through the evaluation of decisions that are described in the port planning (Master Plans)
The model recognizes that the port management involves other businesses.

In this sense, the financial feasibility of the ports is determined by that of each individual business and by that of all in general (global management).

The model according to the costs, expenses and investments that will be made in a planning horizon determines:

- Equilibrium Tariffs, that constitute the minimum collections of reference in order to not incur losses.
- Maximum Tariffs, determined according to the collections of competitive ports, a reasonable profitability or the tariffs currently collected.

The tariffs susceptible of collection by the ports must be in the range defined by the equilibrium tariff and the maximum tariff.

It is responsability of the port management and of the board of directors to determine the tariffs that are actually collected and that include the promotionals.
Tariff Scheme

Based on Competitive Ports or Maximum Profitability

Equilibrium Tariff Formulation

\[ TIP = \frac{\sum_{J=0}^{n} (\text{Cost}_J + \text{Inv}_J)/(1+r)^J}{\sum_{J=0}^{n} \text{Operated Vol}_J/(1+r)^J} \]

Maximum Tariff

Minimum Tariffs to recover expenses and investment

Where the Tariffs are placed

Where the Tariffs are placed

Financial Information

Master Plan

Parametric and Management Indicators

Tariffs of Competitive Ports

Maximum reasonable profitability

Integral Logistic Costs

Commercial Reality of the Port

Allocation Criteria

Equilibrium Tariff
Tariff Scheme

Maximum Referential Tariffs
Reference Based on Competitive Ports or Maximum Profitability

- Benchmarking (Tariffs of Competitive Ports)
- Integral and Intermodal Logistic Costs
- Economic value of the cargo
- Profitability based on an scenario with efficient costs of the system (constant cargo)
- Tariffs and negotiations in force
- Tariffs currently collected

Competitive Tariffs

Maximum Reasonable Profitability

Commercial Reality of the Port

Maximum Tariff

Range

Where the tariffs are placed
Equilibrium Tariffs

Referential Equilibrium Tariff (Financial Self-Sufficiency)

Tariff that recovers costs

Validated Programatic Scenario
- Efficient Costs of the Port System
- Management, Productivity and Efficiency Indicators of the System (Balance Score Card)
- Parametric Costs for Investments
## Allocation Criteria

### Concepts to be collected

<table>
<thead>
<tr>
<th>Concepts to be collected</th>
<th>Port Fixed Collection</th>
<th>Port Variable Collection</th>
<th>Dockage</th>
<th>Wharfage</th>
<th>Unloading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management expenses</td>
<td>% 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection works</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maritime signaling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dredging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dockage and Wharfage</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Maintenance and Insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urbanization¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Passenger Terminal ¹</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ Includes: Capital, maintenance and insurance.

2/ The loading / unloading that recovers maintenance and insurance expenses of the dockage and wharfage works related to the operation of cruises and capital costs, maintenance and insurance of the passenger terminal and the urbanization works related to the operation of cruises.

3/ The percentage of distribution is proportional to the tariffed income related to the total income of the port.
Costs and Investments that The Tariffs Recover

1. Costs and Expenses
   All the Operative and Management Costs related to the operation of the port.

2. Existing Investments
   It is assumed that the tariffs recover only the capital income and the maintenance cost of the infrastructure, considering that they are transfers of the Federal Government.

3. Future Investments
   It is assumed the capital recovery and its income that corresponds to the assessment period of these investments.

4. Allocation of Expenses and Investments
   It is considered that the costs and investments that each tariff recovers are payed by the beneficiaries, the vessel or the cargo.
Structure of the Model

Input Formats:
- F1: Operations (unit)
- F2: Costs and expenses (Current and projected)
- F3: Income
- F4-8: Investments (Current and projected)

Process:
- Methodological Application

Results:
- Statement of earnings Net funds flow Productivity, profitability indicators
- Infrastructure tariffs Collected tariffs Equilibrium tariffs Proposed tariffs
- Comparative analysis of port tariffs$/tons, regarding competitive ports for different vessels (Mode, average, maximum)
- Statistics to support the analysis of the main variables for the projected scenario. Investments, costs, amount of vessels, GRT, LOA-Hour, tons
- Sensitivity of the main variables of the projection: Investments, costs, amount of vessels, GRT, LOA-Hour, tons
## Tariffs determined by the Model

<table>
<thead>
<tr>
<th>Port</th>
<th>Fixed Collection and Variable Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Container Cargo</td>
</tr>
<tr>
<td></td>
<td>• General Cargo</td>
</tr>
<tr>
<td></td>
<td>• Agricultural bulk cargo</td>
</tr>
<tr>
<td></td>
<td>• Mineral bulk cargo</td>
</tr>
<tr>
<td></td>
<td>• Vehicles</td>
</tr>
<tr>
<td></td>
<td>• Fluids</td>
</tr>
<tr>
<td></td>
<td>• Oil and by-products</td>
</tr>
<tr>
<td></td>
<td>• Cruises</td>
</tr>
<tr>
<td></td>
<td>• Others</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dockage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Specialized</td>
</tr>
<tr>
<td></td>
<td>• Non specialized</td>
</tr>
<tr>
<td></td>
<td>• Cruises</td>
</tr>
<tr>
<td></td>
<td>• Others</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Wharfage</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Container Cargo</td>
</tr>
<tr>
<td></td>
<td>• Agricultural Bulk Cargo</td>
</tr>
<tr>
<td></td>
<td>• Mineral Bulk Cargo</td>
</tr>
<tr>
<td></td>
<td>• General Cargo</td>
</tr>
<tr>
<td></td>
<td>• Oil and by-products</td>
</tr>
<tr>
<td></td>
<td>• Fluids</td>
</tr>
<tr>
<td></td>
<td>• Vehicles</td>
</tr>
<tr>
<td></td>
<td>• Others</td>
</tr>
<tr>
<td></td>
<td>• Cruises Loading / Unloading</td>
</tr>
</tbody>
</table>
## Structure of the Model...

**Productivity-Based Tariff Scheme for the Mexican Ports**

### Input Formats with Projections Regarding Operations, Investments, and Costs and Expenses

(Asimilable structure to the elaboration of the Master Plan)

<table>
<thead>
<tr>
<th>Year</th>
<th>Actual</th>
<th>2025</th>
<th>2030</th>
<th>2035</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td>1,987</td>
<td>1,967</td>
<td>1,937</td>
<td>1,907</td>
</tr>
<tr>
<td>Cargo Handling</td>
<td>1,927</td>
<td>1,907</td>
<td>1,887</td>
<td>1,867</td>
</tr>
<tr>
<td>Cargo Expansion</td>
<td>1,887</td>
<td>1,867</td>
<td>1,847</td>
<td>1,827</td>
</tr>
<tr>
<td>Maintenance</td>
<td>1,847</td>
<td>1,827</td>
<td>1,807</td>
<td>1,787</td>
</tr>
</tbody>
</table>

The table above represents the structure for operations and contains columns for different years with actual figures. The projections for 2025, 2030, and 2035 show how these values are expected to change. The table is designed to assimilate with the elaboration of the Master Plan, providing a comprehensive view of operational dynamics in the Mexican ports.
### Structure of the Model...

**Productivity-Based Tariff Scheme for the Mexican Ports**

#### Valuation

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Evaluación Infraestructura ($)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puertos</td>
<td>26,320,520</td>
<td>30,929,582</td>
<td>35,762,914</td>
<td>40,782,666</td>
<td>45,416,081</td>
<td>46,313,400</td>
<td>46,313,400</td>
<td>47,731,305</td>
<td>48,134,707</td>
</tr>
<tr>
<td>Ingresos</td>
<td>26,320,520</td>
<td>30,929,582</td>
<td>35,762,914</td>
<td>40,782,666</td>
<td>45,416,081</td>
<td>46,313,400</td>
<td>46,313,400</td>
<td>47,731,305</td>
<td>48,134,707</td>
</tr>
<tr>
<td><strong>Indicadores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRR aprox.</td>
<td>7.12%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VPV</td>
<td>11,298,256</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tasa de Descuento (% Anual)</td>
<td>7.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Costos Infraestructura / Terceirizadas</strong></td>
<td>10.36</td>
<td>8.11</td>
<td>6.76</td>
<td>5.45</td>
<td>4.59</td>
<td>4.50</td>
<td>4.50</td>
<td>4.50</td>
<td>4.50</td>
</tr>
<tr>
<td><strong>Ingresos Inmobiliarios</strong></td>
<td>2.03</td>
<td>2.75</td>
<td>2.57</td>
<td>2.42</td>
<td>2.27</td>
<td>2.25</td>
<td>2.25</td>
<td>2.25</td>
<td>2.25</td>
</tr>
</tbody>
</table>

#### Global Statement of Earnings

**Net Funds Flow Infrastructure**

**Profitability Indicators (IRR, NPV), Productivity, etc.**

**Infrastructure Tariffs, Collected Tariff, Equilibrium Tariff, Proposal.**

**Sensitivity of the Main Variables of Projection:** Investments, Costs, Nº of Vessels, GRT, LOA-Hour, Tons.
### Comparative Analysis of Port Tariffs, Costs per Tons, regarding the Competitive Ports for Different Vessels (Mode, Average, Maximum)

#### Structure of the Model

<table>
<thead>
<tr>
<th>Type of Cargo</th>
<th>Controversies</th>
<th>Tariffs Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Buque Típico (bagua)</strong>&lt;br&gt;Bagu</td>
<td><strong>7,590.00</strong></td>
<td><strong>25,390.00</strong></td>
</tr>
<tr>
<td><strong>Bagu</strong></td>
<td><strong>6,300.00</strong></td>
<td><strong>25,390.00</strong></td>
</tr>
<tr>
<td><strong>Arquero Bravo</strong></td>
<td><strong>56,000.00</strong></td>
<td><strong>48,000.00</strong></td>
</tr>
<tr>
<td><strong>Estero (min)</strong></td>
<td><strong>26,000.00</strong></td>
<td><strong>26,000.00</strong></td>
</tr>
<tr>
<td><strong>Horas estabilizadas en mar</strong></td>
<td><strong>6,000.00</strong></td>
<td><strong>6,000.00</strong></td>
</tr>
<tr>
<td><strong>Toneladas cargadas/copadas</strong></td>
<td><strong>4,000.00</strong></td>
<td><strong>4,000.00</strong></td>
</tr>
</tbody>
</table>

#### Costos Comparativos (Buque Promedio)

<table>
<thead>
<tr>
<th>Concepto</th>
<th>Yerenteza Típica</th>
<th>Yerenteza Típica Publicada</th>
<th>Yerenteza Típica Cargada</th>
<th>Brownneville</th>
<th>Suton</th>
<th>Gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Fio (Bagu)</td>
<td><strong>34,500.00</strong></td>
<td><strong>32,000.00</strong></td>
<td><strong>30,000.00</strong></td>
<td><strong>28,000.00</strong></td>
<td><strong>26,000.00</strong></td>
<td><strong>24,000.00</strong></td>
</tr>
<tr>
<td>Pro Yar (MHI)</td>
<td><strong>70,000.00</strong></td>
<td><strong>68,000.00</strong></td>
<td><strong>66,000.00</strong></td>
<td><strong>64,000.00</strong></td>
<td><strong>62,000.00</strong></td>
<td><strong>60,000.00</strong></td>
</tr>
<tr>
<td>Attacca (MMI)</td>
<td><strong>80,000.00</strong></td>
<td><strong>78,000.00</strong></td>
<td><strong>76,000.00</strong></td>
<td><strong>74,000.00</strong></td>
<td><strong>72,000.00</strong></td>
<td><strong>70,000.00</strong></td>
</tr>
</tbody>
</table>

#### Costos Comparativos (Buque Promedio)

<table>
<thead>
<tr>
<th>Concepto</th>
<th>Yerenteza Típica</th>
<th>Yerenteza Típica Publicada</th>
<th>Yerenteza Típica Cargada</th>
<th>Brownneville</th>
<th>Suton</th>
<th>Gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Fio (Bagu)</td>
<td><strong>45,000.00</strong></td>
<td><strong>42,000.00</strong></td>
<td><strong>40,000.00</strong></td>
<td><strong>38,000.00</strong></td>
<td><strong>36,000.00</strong></td>
<td><strong>34,000.00</strong></td>
</tr>
<tr>
<td>Pro Yar (MHI)</td>
<td><strong>90,000.00</strong></td>
<td><strong>88,000.00</strong></td>
<td><strong>86,000.00</strong></td>
<td><strong>84,000.00</strong></td>
<td><strong>82,000.00</strong></td>
<td><strong>80,000.00</strong></td>
</tr>
<tr>
<td>Attacca (MMI)</td>
<td><strong>100,000.00</strong></td>
<td><strong>98,000.00</strong></td>
<td><strong>96,000.00</strong></td>
<td><strong>94,000.00</strong></td>
<td><strong>92,000.00</strong></td>
<td><strong>90,000.00</strong></td>
</tr>
</tbody>
</table>

#### Costos Comparativos (Buque Promedio)

<table>
<thead>
<tr>
<th>Concepto</th>
<th>Yerenteza Típica</th>
<th>Yerenteza Típica Publicada</th>
<th>Yerenteza Típica Cargada</th>
<th>Brownneville</th>
<th>Suton</th>
<th>Gallon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pro Fio (Bagu)</td>
<td><strong>55,000.00</strong></td>
<td><strong>52,000.00</strong></td>
<td><strong>50,000.00</strong></td>
<td><strong>48,000.00</strong></td>
<td><strong>46,000.00</strong></td>
<td><strong>44,000.00</strong></td>
</tr>
<tr>
<td>Pro Yar (MHI)</td>
<td><strong>100,000.00</strong></td>
<td><strong>98,000.00</strong></td>
<td><strong>96,000.00</strong></td>
<td><strong>94,000.00</strong></td>
<td><strong>92,000.00</strong></td>
<td><strong>90,000.00</strong></td>
</tr>
<tr>
<td>Attacca (MMI)</td>
<td><strong>110,000.00</strong></td>
<td><strong>108,000.00</strong></td>
<td><strong>106,000.00</strong></td>
<td><strong>104,000.00</strong></td>
<td><strong>102,000.00</strong></td>
<td><strong>100,000.00</strong></td>
</tr>
</tbody>
</table>

### Comparative Analysis of Port Tariffs, Costs per Tons, regarding the Competitive Ports for Different Vessels (Mode, Average, Maximum)
Projection Statistics

Statistics that Support the Analysis of the Main Variables of the Projected Scenario: Investments, Costs, N° of Vessels, GRT, LOA-Hour, Tons.
Sensitivity

The tariff model includes the sensitivity analysis to the planning scenario, assuming variations in its basic variables, reflecting the impacts in the profitability, equilibrium tariffs, tariffs in force and tariff proposal.

Sensitivity variables to determine the Equilibrium Tariff:
- Volume of Port Operations
- Investments
- Operative and Management Costs

Factors that determine the Competitiveness of the Port Tariffs (1):
- Market Tariff susceptible of collection
- Equilibrium Tariff

Competitiveness Condition of the Tariffs

Market Tariff susceptible of collection > Equilibrium Tariff
Sensitivity and Competitiveness Analysis

The competitiveness of the port tariffs, besides other factors, is given by the capacity to compete with regard to the prices of the competitive ports. This capacity could be measured considering the relationship between the equilibrium tariff of the ports and the levels of competitive prices in the referential market or the hinterland.
1. Personnel Training of API
   - Financial Basic Principles of the Model
   - Analysis of the source information and congruence with the port planning
   - Structure of the model
   - Incorporation of the information
   - Calibration of the model and the final results

2. Port Planning
   - Master Program of Development
   - Annual Operative Program

3. Determination of Basic Figures for the Model
   - Arrivals (GRT, ton.)
   - Costs and Expenses
   - Investments
   - Value of the Infrastructure

4. Incorporation of Information to the Model

5. Port Behavior
   - Equilibrium Tariff
   - Current Tariff Collected
   - Tariff with Market Profitability
   - Compared to Competitive Ports
   - Analysis Vessel per Vessel

6. Determination of the Tariff Proposal by Port Administration

7. Analysis of the Tariff Proposal
   (Port Administration and Central Authority)

8. Authorization of the Tariff Proposal by the Board of Directors

9. Auth/Registry of the Tariff Proposal by Central Authority

10. Determination of tariffs that will be collected approved by the Board of Directors
The Model allows to calibrate the tariffs according to the commercial conditions and allows to achieve the required profitability.

Some ports, as a consequence of the past investments and the perspectives of future movements of cargos, present little profitability and shall be treated as exceptions.

The abovementioned is achieved with the design and the fundament of a feasible panorama, which considers the value of the port infrastructure that can be recovered by the tariffs determined by the model.

The tariff model, besides allowing the estimation of a tariff range, constitutes an element that establishes in a formal and structured way an indissoluble relationship among the Port Planning, the Management of Businesses in the Port and the Tariff.
For further information please contact:

**FELIPE OCHOA Y ASOCIADOS, S.C.**

Ricardo Castro 54-PH, Guadalupe Inn
01020 México, D.F.
Phone: (52 55) 5662 3569, 5662 5585
Fax: (52 55) 5662 0422

E-mail FOA: foa@foaconsulting.com
E-mail Mr. Reyes Juárez: rjuarez@foaconsulting.com
E-mail Mr. Rafael Gómez: rgomez@foaconsulting.com
FELIPE OCHOA Y ASOCIADOS, S.C., has rendered administrative, technical and financial consulting services since 1973. For 32 years, the company has carried out more than 1,000 studies for a selected group of continuous clients of the Federal Government, Institutions and Private Companies, we have focused on different areas of planning at a local, regional and sector level.

FOA constitutes a group of professional Mexican advisors that renders consulting services to private and public entities with the aim of assessing and improving their operations, likewise, it plans and implements its new developments or expansion projects. Multidisciplinary teams of FOA advisors have continuous meetings to develop each project, by doing so, the relevant factors of the studies are included in the analysis, as well as the recommended solutions.

The Company’s experience in Port Development includes its participation in the design of structuring schemes for Integral Port Management of Mexican Ports and the elaboration of the corresponding documents, these documents included the Master Programs of Development and Business Plans for different ports (Salina Cruz, Coatzacoalcos, Lázaro Cárdenas, Puerto Madero, Dos Bocas, Frontera, Puertos de Campeche); as well as the participation in the bidding for specialized terminals (Lázaro Cárdenas, Veracruz, Altamira and Manzanillo). Development of the studies for the Corridor Med-Mex to strengthen the relationship between Mexican ports and the Valencia Port in Spain.

Recently, the study for a New Productivity-Based Tariff Scheme was carried out, as well as the Training and Implementation of the Model in the 15 Federal APIs of the Mexican Government.
Mr. Reyes Juárez Del Angel

Mr. Juarez studied Engineering in the Autonomous University of Tamaulipas, his Master’s degree in Investigation on Operations in the National Autonomous University of Mexico, and his PhD in Investigation on Operations in the same University, he graduated with honors. Mr. Juárez has participated in the planning of the Mexican Transport Sector, he has 25 years of experience in the consulting area. As a partner and General Director of FELIPE OCHOA Y ASOCIADOS, and before as Technical Director, he has directed more than 500 studies and projects regarding strategic planning of transport, transport modelling, demand studies, economic, financial and environment impact evaluation. He has participated in the privatization processes of the most important Mexican communication and transport sectors, such as Teléfonos de México (1991), APIs and Port Terminals (1994-1996), Railroads (1997-1998), Airports (1998-1999) and in more than 50 urban road and toll highways processes and their technical, economic, financial and financing structural evaluation (1991-2003). He coordinated the Work Team of FOA Consultores for the structuring of the suburban train concession process of the Metropolitan Area of Mexico City (1998-2000) and in the option assessment to select the new Mexico City International Airport (2000). He has wide experience in evaluating projects, processes to attract capital and methodologies to assess external factors in the transport area paying special attention to the user.

Mr. Rafael Gómez Lara

Mr. Gómez is an Industrial Engineer, he studied his degree in the Tecnológico de Veracruz and his Master’s degree in Engineering in the National Autonomous University of Mexico. Mr. Gómez has 25 years of professional experience, mainly focused on project development regarding transport areas, logistic of Intermodal Terminals, organizational reengineering projects and studies in the maritime-port activities. Recently, he participated in the Determination of a New Productivity-based Tariff Scheme, as well as the Training and Implementation of said model in the APIs of Lázaro Cárdenas, Manzanillo, Mazatlán, Topolobampo, Guaymas, Progreso, Dos Bocas, Coatzacoalcos, Veracruz, Tuxpan, Tampico, Altamira, Ensenada, Salina Cruz and Puerto Chiapas. The model allows to determine profitable port tariffs according to the commercial conditions.