Comparative analysis of the legal framework that regulates the port concession scheme in Colombia and Chile with emphasis on the regulatory functions of the port authority

Simdy Calderon
Reynaldo Rojas

Follow this and additional works at: https://commons.wmu.se/all_dissertations

Part of the Admiralty Commons, and the Transportation Commons

Recommended Citation
Calderon, Simdy and Rojas, Reynaldo, "Comparative analysis of the legal framework that regulates the port concession scheme in Colombia and Chile with emphasis on the regulatory functions of the port authority" (2019). World Maritime University Dissertations. 1162.
https://commons.wmu.se/all_dissertations/1162

This Dissertation is brought to you courtesy of Maritime Commons. Open Access items may be downloaded for non-commercial, fair use academic purposes. No items may be hosted on another server or web site without express written permission from the World Maritime University. For more information, please contact library@wmu.se.
COMPARATIVE ANALYSIS OF THE LEGAL FRAMEWORK THAT REGULATES THE PORT CONCESSION SCHEME IN COLOMBIA AND CHILE WITH EMPHASIS ON THE REGULATORY FUNCTIONS OF THE PORT AUTHORITY

By

SIMDY MARCELA CALDERON CIFUENTES
Colombia

REYNALDO ARTURO ROJAS TRILLOS
Colombia

A dissertation submitted to the World Maritime University in partial fulfillment of the requirements for the award of the degree of

MASTER OF SCIENCE
In
MARITIME AFFAIRS
(PORT MANAGEMENT)

2019

Copyright Simdy Marcela Calderón Cifuentes, 2019
Reynaldo Arturo Rojas Trillos, 2019
Declaration

We certify that all the material in this dissertation that is not our own work has been identified, and that no material is included for which a degree has previously been conferred on us.

The contents of this dissertation reflect our own personal views and are not necessarily endorsed by the University.

(Signature): __________________________
(Signature): __________________________
(Date): 24 September 2019

Supervised by: Associated Professor Dr. Carolina Romero Lares
Supervisor’s affiliation: Maritime Law and Policy
Acknowledgements

First and foremost, we want to express our gratitude to God, who always guides our path and our beloved family for always being present.

We would like to express our deep gratitude to the Colombian Navy for giving us the opportunity to carry out this academic program that has strengthened our professional and personal development.

We especially thank the Nippon-Sasakawa Peace Foundation for their valuable support and their dedicated effort in the leader's empowerment worldwide.

We want to give special recognition to our professors of the World Maritime University, who guided us with their valuable knowledge, becoming better human beings and professionals in Maritime Affairs.

We would like to express our greatest and sincere thanks to our research supervisor Dr. Carolina Romero Lares, who with her direction, knowledge and collaboration allowed the development of this research work.

We are especially grateful to our teacher Inger Battista for sharing with us her expert linguistic teachings and the library staff who made sure to create an appropriate study environment.
Abstract

Title of Dissertation: **Comparative Analysis of the Legal Framework that regulates the Port Concession Scheme in Colombia and Chile, with emphasis on the Regulatory Functions of the Port Authority**

Degree: Master of Science

In this study, it was observed that Latin America had a period of port reforms which aimed to eliminate the state monopoly that had high levels of inefficiency and create a new model in which they yielded the port operation to private companies through concession contracts. Colombia and Chile were the only countries that carried out these reforms entirely. However, based on the results obtained, it is observed that Colombia presents shortcomings in the scheme of port concessions and the regulatory function of the authority compared to the results obtained by Chile.

For this reason, this dissertation aims to legally compare the Colombian and Chilean systems, based on the legal framework, to identify the similarities and differences in the port concession scheme and the attributions that the port authority has in this matter.

The legal framework of the concession scheme and the regulatory function of the port authority in Colombia and Chile were legally compared, similarities and differences were identified, as well as some recommendations were suggested to be considered in a future reform, in order to contribute to the improvement of the process.

**Key Words:** Port Concession Contracts, Port Authority, Legal Framework, Regulatory function
# TABLE OF CONTENTS

Declaration ..................................................................................................................................... ii  
Acknowledgements ...................................................................................................................... iii  
Abstract ......................................................................................................................................... iv  
LIST OF TABLES ........................................................................................................................ vii  
LIST OF FIGURES ...................................................................................................................... viii  
LIST OF ABBREVIATIONS ........................................................................................................ ix  
1. CHAPTER ONE: INTRODUCTION ....................................................................................... 11  
   1.1. Background of the Topic ............................................................................................ 11  
   1.2. Research Problem ....................................................................................................... 14  
   1.3. Objectives of the research .......................................................................................... 17  
   1.4. Research questions ...................................................................................................... 17  
   1.5. Research Methodology ............................................................................................... 17  
   1.6. Scope of the Research ................................................................................................ 20  
   1.7. Relevance of the Research ......................................................................................... 20  
   1.8. Limitations of the Research ....................................................................................... 22  
2. CHAPTER TWO: LITERATURE REVIEW ......................................................................... 23  
3. CHAPTER THREE: Port Concession Scheme and Regulatory Function of the Port Authority in Colombia .............................................................................................................. 34  
   3.1. Description of the Port Sector ..................................................................................... 34  
      3.1.1. Caribbean Port Area ............................................................................................ 37  
      3.1.2. Pacific Port Area .................................................................................................. 40  
   3.2. Integral Port Management Plan ................................................................................ 40  
   3.3. Port Authority ............................................................................................................. 43  
   3.4. Port Concession Scheme ............................................................................................. 46  
      3.4.1. Legal Framework ................................................................................................. 47
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Port Reforms Compliance in Latin America</td>
<td>13</td>
</tr>
<tr>
<td>Table 2</td>
<td>Countries Classification by Port Authority Regulation</td>
<td>16</td>
</tr>
<tr>
<td>Table 3</td>
<td>Classification of Port Authorities</td>
<td>24</td>
</tr>
<tr>
<td>Table 4</td>
<td>Responsibilities of Port Authorities</td>
<td>28</td>
</tr>
<tr>
<td>Table 5</td>
<td>Structure of Concession Contract</td>
<td>32</td>
</tr>
<tr>
<td>Table 6</td>
<td>Colombian Port Areas</td>
<td>35</td>
</tr>
<tr>
<td>Table 7</td>
<td>Port Concession Scheme in Colombia</td>
<td>46</td>
</tr>
<tr>
<td>Table 8</td>
<td>State Port Areas of Chile</td>
<td>62</td>
</tr>
<tr>
<td>Table 9</td>
<td>Port Concession Scheme in Chile</td>
<td>72</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1  Colombian Port Throughput (2000-2018) ................................................................. 14
Figure 2  Port Competition Index in Latino America ............................................................... 15
Figure 3  Colombian Exports statistics .................................................................................... 21
Figure 4  Colombian Imports statistics .................................................................................... 21
Figure 5  Combinations of Port Ownership and Port Operations ........................................... 31
Figure 6  Chilean State Port Companies Location ................................................................. 63
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANI</td>
<td>Infrastructure National Agency of Colombia</td>
</tr>
<tr>
<td>BOT</td>
<td>Build Operate and Transfer Concession Contracts</td>
</tr>
<tr>
<td>BOOT</td>
<td>Build, own, operate and transfer Concession Contracts</td>
</tr>
<tr>
<td>CAN</td>
<td>Andean community</td>
</tr>
<tr>
<td>CARICOM</td>
<td>Caribbean Community</td>
</tr>
<tr>
<td>COLPUERTOS</td>
<td>State company ports of Colombia</td>
</tr>
<tr>
<td>CONPES</td>
<td>National Council of Economic and Social Policy of Colombia</td>
</tr>
<tr>
<td>DIAN</td>
<td>Directorate of National Taxes and Customs</td>
</tr>
<tr>
<td>DIMAR</td>
<td>General Maritime Directorate</td>
</tr>
<tr>
<td>DIRECTEMAR</td>
<td>The General Directorate of the Maritime Territory and Merchant Marine</td>
</tr>
<tr>
<td>DNP</td>
<td>National Planning Department of Colombia</td>
</tr>
<tr>
<td>EFTA</td>
<td>European Free Trade Association</td>
</tr>
<tr>
<td>EMPORCHI</td>
<td>Port Company of Chile</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>ECLAC</td>
<td>Economic Commission of United Nations for Latin America and the Caribbean</td>
</tr>
<tr>
<td>FTA</td>
<td>Free trade Agreement</td>
</tr>
<tr>
<td>GATT</td>
<td>General Agreement on Tariffs and Trade</td>
</tr>
<tr>
<td>INVIAS</td>
<td>National Roads Institute of Colombia</td>
</tr>
<tr>
<td>IMCO</td>
<td>Inter-Governmental Maritime Consultative Organization</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>IMO</td>
<td>International Maritime Organization</td>
</tr>
<tr>
<td>Acronym</td>
<td>Full Form</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-Governmental Organization</td>
</tr>
<tr>
<td>MERCOSUR</td>
<td>Southern Common Market</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PA</td>
<td>Port Authority</td>
</tr>
<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>TEU</td>
<td>Standard Unit of measurement, equivalent to a container of 20 feet</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>USA</td>
<td>United States of America</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
1. CHAPTER ONE: INTRODUCTION

1.1. Background of the Topic

Historically, seaports have been gateway of international trade of nations. Currently, about 90 percent of the world trade has a port as its point of origin and destination. Therefore, the efficient operation of these infrastructures has a decisive impact on economies’ competitiveness (Suárez-Alemán, Sarriera, Serebrisky, & Trujillo, 2016). It also contributes to the well-being of the communities since most of the consumer goods and food that people consume have been imported through seaports; Therefore, all citizens directly or indirectly are port users.

The port definition given by UNCTAD, clearly shows this multifunctional nature:

Ports are interfaces between different modes of transport and are typically combined transport centers. In sum, they are multifunctional, commercial and industrial areas where goods are not only in transit, but also handled, manufactured and distributed. Indeed, ports are multifunctional systems, which, to function properly, must be integrated into the global logistics chain. An efficient port requires not only adequate infrastructure, superstructure and equipment, but also good communications and, especially, a dedicated and qualified management team with motivated and trained workforce (Goode, 2007, p. 215).

On the other hand, the European Union (EU) defines a port as “an area of land and water equipped with works and equipment that mainly allow the reception of ships, their loading and unloading,
and the storage, reception and delivery of goods, as well as the embarkation and disembarkation of passengers” (Tsinker, 2004, p. 78).

Those definitions highlights 3 key aspects:

- First, ports are strategic assets of nations, so their management is of public interest; Therefore, the regulation and supervision are responsibilities of the States.

- Second, the relevance of the seaport as a fundamental node of international trade requires a high level of logistic integration.

- Third, it is the responsibility of the state to design the appropriate port governance model and establish a legal framework that facilitates efficient and active regulation in order to adjust market imperfections contributing to the improvement of port performance.

The port governance models in the Latin America region defined as “The set of systems, structures and processes as well as the legislation, regulatory action and public policy objectives” (Sanchez-Pinto, 2015) were reformed in almost all countries in the 90s. Based on the studies carried out by the Economic Commission of United Nations for Latin America and the Caribbean (ECLAC), the countries designed their port reforms in order to address the following aspects:

- Decentralization of Port Governance
- Labor Market Liberalization
- Elimination of the State Monopoly
- Port Concession with BOT (Build, Operate and Transfer) and BOOT (Build, own, operate and transfer) contracts.
Port reforms were carried out gradually and covered many laws, decrees, and regulations in each country. However, Colombia and Chile were the only countries that carried out the port reform completely as shown in Table 1.

**Table 1 Port Reforms Compliance in Latin America**

<table>
<thead>
<tr>
<th>Country (Reform year)</th>
<th>Total Compliance Reforms</th>
<th>Decentralization of Port Governance</th>
<th>Labor Market Liberalization</th>
<th>Elimination of the State Monopoly</th>
<th>Port Concession BOT-BOOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peru (2003)</td>
<td>Partially</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Brazil (1993)</td>
<td>Partially</td>
<td>Partially</td>
<td>Partially</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Colombia (1991)</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Chile (1997)</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Mexico (1993)</td>
<td>No</td>
<td>Partially</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Panama (1990)</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

**Source**: Inter-American Development Bank (2019)

In the Colombian case, the Law 001 of 1991 determined the liquidation of the state's port company (COLPUERTOS) and three years after, all state ports were transferred to private companies (Regional port societies) concentrating the role of the State in planning and regulation. In the same way in 1997, the Chilean government eliminated the state port company (EMPORCHI) and created state port companies that assumed the functions of port administration.
This led to the change of the port governance model in both countries, from a service port model, in which the state is the owner and operator of the terminals, to a landlord port model, in which the port authorities maintain ownership of the land-infrastructure and the operation is on charge of private companies, using (BOT-BOOT) concession contracts. (Guasch, Laffont, & Straub, 2008).

1.2. Research Problem

Despite having fully implemented the port reforms, the expected results have not been achieved in the Colombian case since port performance remains low compared to other countries in Latin America, in terms of cargo volume operated (TEU). Figure 1 shows the evolution of the Colombian port throughput during the last 18 years, in which it has occupied the last position compared to other countries in the region.

![Evolution of Colombian Port Throughput TEUs (2000-2018)](image)

**Figure.** 1 Colombian Port Throughput (2000-2018) **Source:** Own elaboration based on data [www.cepal.org](http://www.cepal.org)

Additionally, there is a monopolistic trend produced by intra port concentration because several port terminals in the same area have been granted to a single private operator through concession contracts. As a consequence, the study developed by the Inter-American Development Bank (BID,
2019), evaluates Colombian concession schemes in the last place of the port index in Latin America. In contrast, Chile is presented as a reference country for its good practices in this matter (see Figure 2).

Based on the evaluation of the following aspects:

- Participation of the port authority in bidding process
- Selection of private concessionaries
- Promotion of port competition
- Regulation of port integration (vertical and horizontal)

![Port Competition Index in Latin America](Source: BID (2019)](image)

Another factor that demonstrates the shortcomings of the Colombian concession scheme compared with that of the Chilean scheme, is the lack of participation of the port authority in the regulation process. This generated abuses by private operators such as excessive tariffs and restriction of the service provision, according to the Organization for Economic Co-operation and Development (OECD, 2016).
Table 2 shows the countries’ classification with respect to the participation level of the port authorities in the port sector regulation, in which Colombia is presented with a medium level and Chile is shown as the country that has the best conditions to ensure that its port authority exercises effective regulation of the port sector.

**Table 2** Countries Classification by Port Authority regulation

<table>
<thead>
<tr>
<th>Port authorities with a high level of port concessions regulation</th>
<th>Port authorities with a medium level of port concessions regulation</th>
<th>Port authorities with a low level of port concessions regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>Argentina</td>
<td>Ecuador</td>
</tr>
<tr>
<td>Mexico</td>
<td>Brazil</td>
<td>Uruguay</td>
</tr>
<tr>
<td></td>
<td>Colombia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Peru</td>
<td></td>
</tr>
</tbody>
</table>

*Source: OECD (2016)*

Based on the exposed results, it is evident that the port concessions scheme and the regulator role of the port authority in Colombia presents deficiencies compared with Chile, despite they were the only countries in the region, that carried out the port reforms completely and implemented the same model of port governance (Landlord).

For this reason, this dissertation aims to legally compare the Colombian and Chilean systems, based on the legal framework, to identify what the similarities and differences are in the port concession scheme and the attributions that the port authority has in this matter. Additionally, because 28 years have passed since the last legislative reform to the Colombian ports law, it is possible to find elements that can be recommended to be considered in a future reform concerning the port concession scheme or the role of the port authority.
1.3. Objectives of the research

To achieve the main objective of this dissertation, the following specific objectives were established:

- Identify the similarities and differences between the legal frameworks governing the port concessions scheme in Colombia and Chile with special emphasis on the regulatory role of the port authority

- Suggest modifications, if the analysis yields elements that would suggest or imply possible legal modifications, which could be a hint of improvement that could be suggested in the Colombian legal framework and in the role that the Colombian port authority has.

1.4. Research questions

- Are there similarities or differences between the legal framework that regulates the port concession scheme in Chile and in Colombia?

- Are there similarities or differences between the regulatory role of the port authority of both countries regarding port concessions, if so, in which indicator variables, and what would be the legal implications of the presence of these similarities and differences?

1.5. Research Methodology

The methodology to be employed in this dissertation is a legal comparative analysis with a qualitative approach. In order to carried out this legal comparative analysis involving Colombia and Chile, the elements of the legal framework that regulate port concession scheme in both
countries, and the regulatory function carry out by the port authority, will be identified and compared through the presence of similarities and differences, according to the variables listed below.

The variables selected to be legally compared related to the port concession scheme are the following:

- Concession contract use
- Duration of the concession contract
- Port terminal use and provision of port services
- Bidder qualifications
- State protectionism

The variables selected to be legally compared related to the regulatory function of the port authority on port concessions are the following:

- Planning phase of the port concessions
- Structuring of the concession contracts
- Evaluation and adjudication of the concession contracts
- Control and supervision of the concession contracts
- Penalty for breach of the concession contract

The primary and secondary sources used in the present study are the following:

- Official reports of Colombian and Chilean Ministry of Transport and Port Authorities.
- Port Management Plan of the Colombia and Chile.
To carry out the study the dissertation has been structured in six chapters, as detailed below:

- **Chapter One: Introduction**

  This chapter presents the background of the case study, the problem statement, the aim of the research, the research objectives, the research questions, the scope defined by the authors, and the research methodology.

- **Chapter Two: Literature Review**

  This chapter develops the literature review (state of art) of the study, presenting a critical synthesis of the main concepts determined by other authors, in order to establish a theoretical framework that allows to discover the concepts, characteristics, models and trends that conceptualize this field of study and that have already been developed in previous research.

- **Chapter Three: Port Concession Scheme and Regulatory Function of The Port Authority in Colombia**

  The port concession scheme and the regulatory role of port authority in Colombia are identified.

- **Chapter Four: Port Concession Scheme and Regulatory Function of the Port Authority in Chile**

  The port concession scheme and the regulatory role of port authority in Chile is identified.
- Chapter Five: Legal Comparative Analysis

Following the research methodology, the legal comparative analysis of the port concession scheme in Colombia and Chile is developed, with emphasis on the regulatory function of the port authority.

- Chapter Six: Conclusions and Recommendations

The conclusions and recommendations obtained with this study are presented.

1.6. Scope of the Research

- The research will be limited to the legal comparative analysis of the port concession scheme in Colombia and Chile, with emphasis on the regulatory function of the port authority.

- The study does not cover the liberalization of the labor market associated with the role of the port authorities.

- Some port competitions rules are mentioned, but they are not the main focus of this research.

- Some port indicators are mentioned (Port throughput -TEUs), but they are not the main focus of this research.

1.7. Relevance of the Research

This study is relevant because it can contribute to the improvement of port concession schemes and the regulatory role that the port authority has, in order to increase port productivity. Deficient port performance directly affects the country's international trade since more than 98% of the country's exports (see Figure 3) and 90% of the country’s imports (see Figure 4) are carried out by maritime transport, using the seaport interface. (DANE, 2019).
Figure 3 Colombian Exports statistics Source: Own elaboration based on data of Ministry of Transport

Figure 4 Colombian Imports statistic Source: Own elaboration based on data of Ministry of Transport
1.8. Limitations of the Research

Although it is true that in Colombia, it was one of the so-called pioneer countries on the subject of port reforms in 1993 in Latin America and the Caribbean, there is no extensive literature about the concession policy and their implications on the role of the port authority.

Another limitation found in the development of the investigation is that the official website of the port authority in Colombia (Superintendence of Transportation) has its access blocked in Sweden.
2. CHAPTER TWO: LITERATURE REVIEW

This chapter presents the literature review (State of the Art), where a theoretical framework based on the discussion that other authors have previously made about the object of study is carried out.

Port authority Concept

The concept of port authority has been raised by several authors. In 1977 the European Commission (EU) defined it as “State, Municipal, public, or private body, which is largely responsible for the tasks of construction, administration and sometimes the operation of port facilities and in certain circumstances, for security.” This concept has evolved since in the last three decades the global trend is that governments have delegated these functions to third parties in many cases private operators in order to increase efficiency and reduce costs.

Ng & Pallis defined Port Authorities (PA) as the institutions that have the responsibility for the management and development of seaports, introducing strategies, such as collaboration, integration, internationalization, network management and cluster management. This concept introduces new management elements that are created in order to face the new challenges that port activities have, and that are undoubtedly shared by the port authorities that must to adjust to the needs of the sector they regulate, creating a synergy between growth of the port industry and the regulatory function (Ng & Pallis, 2010).

On the other hand, Porter and Kramer introduced a new approach in the PA concept, as “an organization combining aspects from private and public institutions, as such representing a shared value organization”. This concept is closer to the institutional framework that port authorities currently have, which combines public policy compliance with private management systems.
This generates a high level of interdependence between public and private entities involved in the sector (Porter & Kramer, 2002, p. 298).

**Classification of Port Authorities**

Taking into account the above, the Inter-American Development Bank (2011) classified the port authorities in the Latin American region into 4 types, depending on the degree of autonomy they have with respect to the central government (Cullinane, 2011). The classification is presented in Table 3.

**Table. 3 Classification of Port Authorities**

<table>
<thead>
<tr>
<th>Port Authority Type</th>
<th>Description</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Government Port Authorities</td>
<td>Port authorities are managed directly by the Ministry of Transport or the regional government</td>
<td>México</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ecuador</td>
</tr>
<tr>
<td></td>
<td></td>
<td>El Salvador</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Guatemala</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Honduras</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jamaica</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Panamá</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perú</td>
</tr>
<tr>
<td>2. Semi-autonomous Port Authorities</td>
<td>Port Authorities are managed by a council composed of representatives of multiple government entities.</td>
<td>Chile</td>
</tr>
<tr>
<td>3. Port Authorities owned by Stakeholders</td>
<td>The government is the largest shareholder and the board of directors consists of three representatives from different ministries: A representative of minority actors, a representative of private companies and a representative of the labor force.</td>
<td>Argentina</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brasil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Republica Dominicana</td>
</tr>
</tbody>
</table>
4. Mixed port authorities

Port authorities are owned by associations of stakeholders and managed by them but awarded and supervised by the central government.

Source: Adapted from BID data (2019)

Roles of the Port Authority

To discuss the role of port authorities it is important to consider the current context, where constant growth of competitiveness in global markets and the demands in the port industry have forced the port authorities to focus their efforts on being more efficient and agile, in order to facilitate port throughput increase. For this reason, the discussion regarding the role of the port authorities has gained great relevance and has been defined from different approaches.

Heaver (2000), addresses the role of the authorities from the perspective of their interaction with the port stakeholders, given the dimensions covered by the port activities and which currently has three main actors (Heaver, Meersman, Moglia, & Van de Voorde, 2000).

The first stakeholder is the government, who has transferred port management to the port authorities and therefore requires them to comply regulation and government policies with transparency and efficiency. It is demanded that they guarantee the obtaining of income from the port activity for the state and for the cities in which the ports have influence.

The second stakeholder is the market players (carriers, terminal operators and logistics operators) who have a focus on increasing profits; Therefore, they associate port authorities as bureaucratic entities that produce bottlenecks in commercial operations. Consequently, these companies press for the role to be aimed at facilitating regulatory procedures and solving problems.

The third stakeholder is the social groups that make up civil society, (NGo, unions, media, citizens) who demand from the port authority the attention to their requests regarding compliance with the rights and penalization for the impact caused by the port activities to society and the environment.
Subsequently, the World Bank published "Port Reform Toolkit" in 2007, where the role of the port authority was addressed depending on the port governance model, whether it is a public (port authority) or private entity responsible for carrying out port activities (World Bank, 2007). Under this approach, four models of port governance were defined: Public port, Tool port, Landlord port and Private port, and depending on the characteristics of the model, the functions of the port authority were established.

Service Port

This model is characterized by active public participation in all activities of both the managerial and operational positions, as well as a very little or no participation of private entities. This was a widely applied model in the decade of the 90s in South American ports. All the responsibility here is at the head of a single port entity, and its most significant shortcomings are based on the fact that it can generate an inefficient administration and operation and there is a lack of innovation as well as a strong dependence on the government for infrastructure investment. It lacks a market orientation, making it uninteresting and attractive to customers.

Tool Port

In this governance model, there is a division of functions. Despite the fact that all the infrastructure and superstructure of the terminal are owned by the port authority, as well as its maintenance and modernization, some cargo handling operations are developed by third parties, generally private firms. These firms, generally of medium and small size, do not have the financial muscle to leverage significant investments that a port infrastructure requires. The main challenge of this model is the lack of investment or the slow response in equipment renovation and modernization as it is linked to the government budget.

Landlord Port

This model is undoubtedly the most blurred and frequently used in the world. It is characterized by the fact that even when the property is maintained in the port authority, it is delivered for the
use and usufruct of a third party through a concession figure. This allows and forces the port to make significant investments in equipment and superstructure necessary for competitiveness and proper operation of the terminal. The terminal works with the freedoms and flexibility of a private company, with a clear market orientation. There are risks of overcapacity. However, the results in the end have led to seeing how ports formerly managed by the state, with low levels of efficiency become leading ports in their region and position themselves in the top positions in lists of the rankings of ports in the world.

Private Port

The second wave of port reforms was a widespread trend in the world. In Latin America it occurred in the late 80s, as in the case of Chile and the early 1990s in other countries, like the case of Colombia in 1993 (Hoffmann, 2001). The antecedents to this reform were port terminals were administered by the governments, which assumed this role intending to achieve economic success and yearned development; however, the results were very opposite to the goals and expectations. On the other hand, there was too much inefficiency in port operations, both in cargo handling, storage as well as entry and exit of goods through the gate. This inefficiency and ineffectiveness contrast with high rates and excessive bureaucracy, coupled with a heavy workload with an excessive number of workers, in the Colombian case, protected by favorable labor and union benefits.

This model is the opposite case of the service port tool, in which the state passes from a state involved in all the port operation activities, to delegating everything to a private one. This generally, generates all the infrastructure and superstructure ownership and the land included to a private party. Here the state loses all control and possibility of regional planning in port aspects; a clear example of this is case in the United Kingdom (Cullinane & Song, 2002). The main strength of this model is that it is market-oriented, but does not have control of the state. It may cause problems if the private party decides to sell the land for activities that are more lucrative than the port activity, which can also generate monopolistic activities.
Table 4 shows that depending on the port governance model, the role of the port authority is determined, with respect to infrastructure, superstructure, port labor and other administrative functions. The public port model, covers all functions whereas, the role of the private port model is completely regulatory in matters of security, safety and environmental matters. Currently the most common model is the landlord port, therefore, the most common role played by the port authority (PA) is landlord port authority.

Table 4 Role of Port Authorities

<table>
<thead>
<tr>
<th>PORT GOVERNANCE MODEL</th>
<th>INFRASTRUCTURE</th>
<th>SUPERSTRUCTURE</th>
<th>PORT LABOUR</th>
<th>OTHER FUNCTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC PORT TOOL PORT</td>
<td>Public (PA)</td>
<td>Public (PA)</td>
<td>Public (PA)</td>
<td>Majority public</td>
</tr>
<tr>
<td>LANDLORD PORT</td>
<td>Public (PA)</td>
<td>Private</td>
<td>Private</td>
<td>Mixed (public/private)</td>
</tr>
<tr>
<td>PRIVATE PORT</td>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>Majority private</td>
</tr>
</tbody>
</table>

Source: Adapted from World Bank Port Reform Tool Kit.

The approach that will be taken into account in this study, was proposed by Verhoeven in 2010, which established the role of the port authority from the functional approach, considering that traditionally the functions of the port authority have been defined as three (Landlord, Regulator and Operator) and are linked to its legal status. However, the changes and permanent evolution of the ports within the logistic supply chain, has led to a new category called community manager or cluster manager (Verhoeven, 2010).

Port Authority as Landlord

Whatever the role of the port authority as a landlord, usually as the owner of the land, it presents one element and functions such as the management, maintenance, and development of the port state. In addition, it provides the facilitation of infrastructure and facilities for the development of the port activity, as well as the implementation of state policies and strategies for usufruct and exploitation in favor of the state that it represents. This function is called by some authors as the
main functions of the port authorities. The governance system is the most commonly used in the world. In addition, this governance system is included within the value generation channel.

Port Authority as Regulator

This function as a regulatory entity is closely linked to the role of port authority against negative externalities. It commonly refers to the activities of control, supervision, and police functions. Its objectives are focused on managing aspects, such as safety, security, environmental protection for ships and port facilities, without neglecting the protection of regulatory and labor law, as well as to guarantee reduction in the environmental impact and protection. This generates some internal regulations of each country in order to enforce these requirements, and for these, it also uses the elements of the state for compliance, verification, and control (Tongzon & Heng, 2005).

Port Authority as Operator

The operator functions initially go with the primary function of the port as a node within the logistics chain, where there is an exchange of goods, or passengers between water and land. It is a necessary point of connection as an interface to connect and as part of the extensive network of international trade and maritime transport. Another aspect is all the related services that are necessary to carry out this activity depend on the type of ship, cargo and port among others. These nautical services will be the services of pilotage, mooring, tugs and stevedores among many others. In recent years the role of the port authority has changed since with the concession process, it is more frequent that the port operation and maritime services are offered by third parties, so the role of the port authority has been relegated to a role different from for some specialized services (Rodrigue & Notteboom, 2006).

Port Authority as Community Manager

The community manager, who is in charge of solving the problems that arise both inside and outside the port area, primarily fulfils coordination functions. Some aspects covered within this new function can be defined as the bottlenecks in the gear and chain logistics, training needs and training
of the cluster's community, marketing activities and everything related to innovation and development among others (Verhoeven & Vanoutrive, 2012).

**The Port Concession Contract**

After establishing what the concept of port authority is and what its role is depending on the function it performs, the focus is on the concession contract, considering that proper design of concessions contracts is one of the most effective factors to improve the standards of efficiency, innovation and productivity of the port sector (Guash, Suarez Aleman, 2016).

The landlord model is the most used in the ports of Latin America. In this model the port authority authorizes the land use (infrastructure) and the port operation to a private operator through the legal figure of a concession contract, in exchange for infrastructure investment and the fees payment agreed between the parties. The port authority is created and empowered by national laws to fulfill the following functions with respect to concessions: Guarantee the application of the legislation governing concessions, regulate aspects related to port areas, faculty of terminate the concession contract for breach of the agreed terms (Notteboom, 2006).

In 2004, Brooks defined the concession contract as an association in which the state or port authority makes an agreement with a private company, for making investments in equipment and superstructure, in exchange for the use and exploitation of port facilities. This agreement is conditioned, so that at the end of the concession the assets return to state ownership, even those that were acquired during the concession period (Brooks, 2004).

The World Bank (2007, p. 271) defined the concession contract as

An arrangement whereby a private party (concessionaire) leases assets from an authorized public entity for an extended period and has responsibility for financing specified new fixed investments during the period and for providing specified services associated with
the assets; in return, the concessionaire receives specified revenues from the operation of
the assets; the assets revert to the public sector at expiration of the contract.

Tei Alessio, stated that the concession contract is the most effective tool available to the landlord
port authority, in order to counteract the growing power not only of the shipping companies but
also of the terminal operators. Therefore, through these contracts, the port authority imposes
restrictions and limits to the terminal operators, to achieve the proposed objectives of a social and
economic nature (Ferrari, Parola, & Tei, 2015).

There are different concessions schemes established between the port authorities and the operators
depending on the established port governance model. For the purposes of this study the Public
Ownership-Private operation (POPO) model will be taken into account using the concession
contract BOT( Build, Operate and Transfer) and BOOT(Build, own, operate and transfer) to
exercise the regulator function of the port authority (see Figure 5).

Figure. 5 Combinations of Port Ownership and Port Operations Source: Adapted from Notteboom (2006)
Drewry Shipping Consultants (2002), established the concession contract design, starting with the rights and obligations of the concessionaire (private operator) within the landlord port authority model (see Table 5).

**Table 5. Structure of concession contract**

<table>
<thead>
<tr>
<th>Structure Contract</th>
<th>Terms Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General Background</td>
<td>- Definitions</td>
</tr>
</tbody>
</table>
| 2. Description of Business | - General Description  
- Promotion of the business  
- Nature of terminal (common user, dedicated) |
| 3. Overall Scope | - Technical description of the facility (Berths, Container yard, container handling, equipment) |
| 4. General Conditions | - Services to be provided by license  
- Ownership and maintenance stipulations (land, non-land assets, assets of licensor, maintenance of assets)  
- Rights of licensor and licensee with respect to licensed premises |
| 5. Prices | - Setting of prices by the license  
- Regulation and review of prices  
- Currency adjustments |
| 6. Major commercial terms | - Initial payment for bidders  
- Royalty payment (e.g. per TEU)  
- Performance indicators (cf. minimum average crane productivity) |
| 7. Termination Provisions | - Clauses |
| 8. General provisions | - Confidentiality  
- Permits  
- Amendments |

Source: Drewry Shipping Consultants (2002)
In 2016 Guash and Trujillo, argue that “The success of privatizations through concessions is highly dependent on how they are established according to their terms and conditions, and especially, how they are implemented and regulated” (Guasch, José Luis, Suárez-Alemán, & Trujillo, 2016, p. 269).

This approach directly relates the fulfillment of the objectives in terms of productivity with the supervisory work carried out by the regulatory body (Port Authority) in the previous stage, through an appropriate design of the concession contracts, and in the subsequent stage in the work of supervision. It also proposes a partnership relationship between the concessionaire and the regulatory body, being dependent.

The role of the port authority is creating proper conditions for the development of the port industry. In this case, it guarantees that the concession schemes are constructed with criteria that protects public interests optimizing the regulation of the private sector.

Taking into account the concepts identified in the literature review, there are many approaches with which the role of port authorities and port concession contracts have been analyzed. However, the Colombian port concession scheme with a special emphasis on the regulatory function of the port authority has not been analyzed. Therefore, this is the aim of this dissertation.
3. CHAPTER THREE: Port Concession Scheme and Regulatory Function of the Port Authority in Colombia

3.1. Description of the Port Sector

Colombia is located in a strategic geographical position in northwestern South America, delimited by two of the most important oceans on the planet. To the north, it borders the Atlantic Ocean through the Caribbean Sea and to the west with the Pacific Ocean, which makes the country a vital connection node within the different international shipping routes. It is located strategically near the Panama Canal, both in the Pacific and in the Caribbean, allowing the port of Cartagena to be a key point for container transshipment in that region. In addition, the main port of Colombia, located on the coast of the Pacific Ocean, Buenaventura, is equidistant between Vancouver and Valparaiso (Mosquera, Gil, & Triana, 2018). It also offers a strategic position to connect with Asian routes and ports.

According to the Geographical Institute Agustín Codazzi, Colombia has a total area of 2,070,408 km², spread over a continental area of 1,141,748 km² and a maritime area of 928,660 km². The country could be considered to be 55.14% continental land and 44.86% maritime area (CCO, 2015).

The jurisdiction of the port authority in Colombia is delimited by the Integral Port Management Plan (PIOP), which has defined 11 port areas; 9 located on the Atlantic coast and 2 on the Pacific coast (see Table 6).
The second wave of port reforms was a widespread trend in the world and in Latin America which was initiated in the late 80s, in the case of Chile, and the early 1990s for other countries in the region, like the case of Colombia in 1993 (Song & Cullinane, 2002). What preceded this reform were port terminals were administered by the governments, which assumed this role intending to achieve economic success and yearn development; however, the results were the very opposite to the goals and expectations. Adding to this, inefficiency was to be found in port operations, both in cargo handling, storage as well as; entry and exit of goods through the gate. This inefficiency and ineffectiveness mentioned above contrast with high rates and excessive bureaucracy, coupled with a heavy workload with an excessive number of workers, in the Colombian case, protected by favorable labor and union benefits. (Wilmsmeier, Monios & Pérez-Salas, 2014a).

In Colombia, there are three types of terminals: private terminals, specialized terminals, and regional port societies. Private terminals are those that are operated by private, national, or international companies and are responsible for foreign trade activities, such as importation and exportation according to the sector in which they are located.

### Table 6: Colombian Port Areas

<table>
<thead>
<tr>
<th>Atlantic Coast</th>
<th>Pacific Coast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guajira</td>
<td>Buenaventura</td>
</tr>
<tr>
<td>Santa Marta</td>
<td>Tumaco</td>
</tr>
<tr>
<td>Ciénaga</td>
<td></td>
</tr>
<tr>
<td>Barranquilla</td>
<td></td>
</tr>
<tr>
<td>Río Magdalena</td>
<td></td>
</tr>
<tr>
<td>Cartagena</td>
<td></td>
</tr>
<tr>
<td>Golfo de Morrosquillo - Coveñas</td>
<td></td>
</tr>
<tr>
<td>San Andrés</td>
<td></td>
</tr>
<tr>
<td>Turbo</td>
<td></td>
</tr>
</tbody>
</table>

35
The specialized terminals are those that are in charge of traditional products and generally are only dedicated to the transport of a single type of product, their derivatives or the like. An example of this would be oil and its derivatives, like Ecopetrol docks of the Colombian state oil company. Another example is Puerto Bolivar’s terminal in the department of the Colombian Guajira through which exclusive carbon exports from the Cerrejón mine is extracted. The turbo dock in Antioquia is another good example through which banana exports from the Colombian banana zone are carried out (Viloria-de-la-Hoz, 1998a).

Finally, there are regional port societies, which are a fundamental part of the study of Colombian port governance. These regional docks located in the main ports are used to transport the products that require either importation or exportation. Within this category, there has been a kind of specialization of the terminals since, in the case of Cartagena, it has specialized in the transshipment of containers. These containers are temporarily in the country and have a determined time of stay in a container yard. They will be picked up by another ship that will take the containers to the final destination, which is not Colombia. In the case of Santa Marta, it has specialized in the transport of solid bulk and coal, as well as Roro cargo entry, which has specialized in the transport of vehicles (Viloria de la Hoz, 2006a). Barranquilla and Buenaventura have become multipurpose terminals (Palma & Coronado, 2015). However, if considering that Buenaventura is the only port on Colombia’s Pacific coast dedicated to cargo activities, it is the location where most of the coffee and sugar are exported given the proximity to the production area of these elements.

Colombia's port policy framework has tried to remain very dynamic since the first recent port reform in 1993. Colombia is the only country in South America that applied the entire reform, and since then a series of documents have come, for example laws and regulations aimed at improving and implementing maritime and port policies in the country. These have been framed within the regional and national development plans. However, it is also a reality that these policies have not been as effective in practice, even more if taking into account that in Colombia a legalistic approach has prevailed. This legalistic approach is quite entrenched and fosters the belief that these are simple issues that the rule of law can solve.
However, to carry out policies framed within national needs, global trends and challenges for ports worldwide can not be forgotten. Over time, it has become increasingly easier to note that a port in South America has similar equipment provisions and infrastructure to that of a developed country, making the ports increasingly similar. As gigantism becomes more and more common, bigger ships appear, a blatant case is evidenced in container ships, which increase their size annually. Therefore, ports increasingly feel the pressures of having deeper channels, deeper ports and more giant dock cranes. Another challenge today is the route and the impact of these by the chokepoint points, such as the Panama Canal and the Suez Canal. The creation of new routes, such as the Arctic Sea route can vary the demand and change the routes and ports called by the ships in a particular area, within the hub and spoke scheme (Talley, 2017).

Some additional challenges to be taken into account are communications and technologies, allowing different stakeholders to communicate transparently and efficiently, promoting global competence. However, this is achieved by eliminating documentation, especially those related to operations; standardization of information and information technologies, aimed at avoiding duplication of information, generating unnecessary delays and reprocesses (Ferretti & Schiavone, 2016); use of modern information technologies supported on more robust and protected platforms against possible attacks by current threats, which is why cybersecurity and cyber defense becomes a bigger need (Urciuoli, Männistö, Hintsa, & Khan, 2013; DiRenzo, Goward, & Roberts, 2015).

The Colombian Pacific and the Caribbean have had a very different evolution throughout Colombia’s history dating back to the days of the conquest. Simultaneously a few years later, the first beginnings of the port of Buenaventura arose even though the Spanish conquerors never initially thought of making a city in that region due to the weather conditions and the strong indigenous resistance of the moment, among other causes (Pérez-Valbuena & Pérez-Valbuena, 2007).

3.1.1. Caribbean Port Area

Today, market forces encourage customers and transport users to use those ports that are the most productive and efficient according to their needs and requirements. This can be a differentiating
factor that generates an advantage or disadvantage according to the development and infrastructure of a country's ports. The differentiating factor that ports can provide are not only the available logistic networks they have at their disposal, it is but also the multimodal transport offer they bring to the table. Ports may only be one node within an extensive network, but value generation becomes a preponderant factor that makes the difference.

Ports currently suffer strong influences from different market players, especially from shipping companies that are increasingly larger, more powerful and achieve higher geo-negotiation power (Cullinane & Khanna, 2000). A port does not attract loads by itself any longer. More and more of these large companies manage to impact the growth and market share in a specific area, country, or region. It is not a different story in Latin America and the Caribbean.

Analyzing container ports in the Caribbean, specifically on the issue of transshipment, data was found of throughput at transshipment ports and traffic from 1997 to 2012, which is worth highlighting. Things are changing fast and even though the port in Colon, Panama at one time moved the most shipments, they had 50% of the market share. There was an unusual and atypical case in the region which led to that disproportionate market share, where almost all the ports decreased participation, and this was also the case with the port of Cartagena, Colombia. Consequently, there was a phenomenon contrary to the other ports in the region. This is because its market share increased from 4 to 11 percent. This is because the container movement has increased dramatically since 2005 and because Hamburg, which at that time was an independent company, today this company is part of Maersk. It decided to choose the port of Cartagena as its strategic point of transshipment and hub for Latin America and the Caribbean connecting it with carrier services from Northern Europe to South America (Wilmsmeier, Monios, & Pérez-Salas, 2014b).

The first port developed in Colombia was the port of Santa Marta, followed by Barranquilla and Cartagena. These ports are now each specialized in different types of cargo (Viloria-de-la-Hoz, 2006b).
In order to briefly describe Colombia’s port areas, the highlights of each of them will be highlighted. The port of Puerto Bolivar in La Guajira is a specialized port dedicated solely to the transport of coal (Viloria-de-la-Hoz, 1998b).

The port of Santa Marta is specialized in solid and liquid bulk as well as rolling cargo. It also handles containerized cargo.

The port of Barranquilla manages hydrocarbons as its main cargo. This is a fluvial port located on the Magdalena River, which is Colombia’s main river that connects the productive centers in the middle of the country with the ports in the north (Calle, 2016). There is a natural phenomenon, however, that has affected the navigability in certain parts of the river, which has made the national government find itself in need to formulate a comprehensive project to repel the navigation of the river, especially in those sections that have low draft (Castro, García, & Benavides, 2015).

The port of Cartagena is a general cargo port although it has some private terminals for the management of hydrocarbons and derivatives. It has specialized as a transshipment port at a national and regional level (Wilmsmeier, Monios, & Pérez-Salas, 2014c).

The Gulf of Morrosquillo in Coveñas is a port area that does not have a terminal. Colombian oil company ECOPETROL does, however, perform tanker tanking using Single Buoy Moorings called TLU1 y TLU3 (Cárdenas Ramírez, 2014). Crude oil and naphtha are pumped from dryland and ships are tanked. TLU is a buoy that is secured to the bottom with six chains and buried piles and is used as a terminal loading system.

The port of San Andres is a general cargo port and also handles containerized cargo although to a lesser extent. The primary function of this port is to supply the island with necessary supplies such as fuel, gas, and housing for the population. It also has frequent routes to Miami in the United States and Costa Rica which by distance is more profitable than its main supply route, namely the port of Cartagena where they bring gasoline, gas, and food (Meisel-Roca, 2003).
3.1.2. Pacific Port Area

Buenaventura is Colombia’s main port in terms of foreign trade since it is through this port where a significant amount of cargo enters and leaves Colombia. Due to this, in recent years this port has seen the construction and concession authorizations of new port companies. The port also handles exclusivities in the export of products such as coffee and sugar cane derivatives. Given its location close to the production centers, it is a more profitable option in terms of transport. Likewise, due to its connection to the Pacific routes, it receives most of the country's imports from Asia (Collazos & Borrero, 2006).

The port of Tumaco is the second port in the Pacific. Although it does not compete with Buenaventura, it is a multi-purpose port that can also handle fuel. It generally handles general cargo and some liquid bulk such as edible oil among others (Rojas, Yissed, & Serrano Amaya, 2018).

3.2. Integral Port Management Plan

The integral port management plan is how a port is designed, and the tools provided, thus tracing the national objectives and goals in the port sector that goes hand in hand with economic and foreign trade goals. In Colombia, this economic and social planning is performed through the analysis and elaboration of CONPES documents as a government planning mechanism with the support and direction of the National Planning Department DNP.

The National Council of Economic and Social Policy (CONPES), created by Law 19 of 1958 is an advisory body of the Colombian national government that deals in all aspects related to the country's economic and social development. It is the highest national planning authority. The National Planning Department (DNP) serves as the executive secretary of CONPES, which prepares the documents to be discussed during the meeting sessions. These documents are for the development of general policies.
CONPES 3474 was the last document created regarding the issues of the port expansion and aimed at increasing the competitiveness of the port sector as a policy of the Colombian government.

CONPES Document 3474

CONPES Document 3474 April 13, 2013, is a port policy for a more modern country. Through this document, the guidelines for the development of the Colombian port infrastructure are formulated as part of the port expansion covered by Law001 of 1991, especially in Article 2, in these five points:

1. The advisability of making new port facilities. On this point, emphasis will be placed on the need to increase port capacity and type of cargo, highlighting the importance of making investments in port infrastructure.

2. With respect to the regions in which it is convenient to establish ports, this CONPES document establishes the guidelines laid down in CONPES 3611 in which it identified the susceptible areas of port infrastructure implementation that are part of the Port Physical Planning Plan.

3. Public investment must be made in port and private activity to stimulate those projects that relate to identified necessary infrastructure needs such as canals, access roads, coastal protection, and environmental mitigation works, especially those affected by the port activities and related studies on how to finance these investments.

4. The methodology should be applied in general when establishing the compensations for the port concessions granted. It establishes the methodology applied to the beneficiaries of port permits for new projects and of those who, having a current concession contract, make substantial modifications to these contracts.

5. The methodology must be applied to authorize tariffs to port companies or the criteria that must be taken into account before releasing the tariff indication. Regarding this issue, the
guidelines established by the resolutions issued by the General Ports Superintendence’s Resolution 723 of 1993 and in resolution 426 of 1997 are maintained. (DNP, 2013a)

The previous CONPES document on port expansion policies are, in turn, CONPES 3611 of September 14, 2009. It is the seventh port expansion plan formulated after the port statute. Some approaches made in this CONPES of the year 2009 are still valid even in the CONPES 3744 of 2013, such as the port physical ordering plan where the susceptible areas of port infrastructure implementation are established.

CONPES 3474 mentioned above was elevated to a Decree through the formulation of Decree 4739 of 2009, giving formality and becoming a more forceful measure in order to boost port development in Colombia.

Earlier, as part of the background to be taken into account, six CONPES documents had been formulated. These six documents converge in a common point: the need for a modern port system that allows the internationalization of the Colombian economy and increases the country's competitiveness. The previous documents were:

- CONPES Document 2550 of 1991 Port Expansion Plan

These documents are covered in article 2 of the first Law of 1991, which mentions the plans for port expansion and there, in an appropriate manner, establishes precautions the government must take when analyzing and approving biannually.
This planning document is aimed at identifying the best areas and regions to establish ports in order to reduce the impact on the environment. It encourages the creation of new port facilities and the efficient use of existing ones by following the agreements established in the renegotiations of concessions with regional port companies, where they must comply with performance indicators to monitor the evolution in port efficiency on these terminals, including concession contracts (DNP, 2009).

There are other types of CONPES documents that articulate the CONPES documents of port development. For example, the CONPES documents for the development of river navigability of the Magdalena River.

Through this CONPES document, a plan to restore the navigability of the Magdalena River was established, which is mainly supported by a program of strategic and priority interventions, as well as proper maintenance of the navigable canals. This is of great interest to the national government since it is in the nation’s interest to recover river navigation that connects the production centers of the country with the ports to the north, especially the Ports of Barranquilla and Cartagena. Barranquilla is of special interest since it is where the mouth of this river arrives and is the most important in terms of navigation, extension and flow in the country, allowing intramodality in logistics services and connection with the port infrastructure of the Colombian Caribbean (DNP, 2013b).

### 3.3. Port Authority

In Colombia, the port authority is the Superintendence of Transport. It was created on January 10, 1991, by the First Law of 1991. Initially, with the first law, it was called the General
Superintendence of Ports, then by Decree of 101 of 2000, it was changed to Superintendence of ports and transport. Subsequently, through Decree 2409, its name is changed to Superintendence of Transportation.

The superintendence of transport is an administrative and technical body, which is attached to the Ministry of Transportation, has administrative and financial automation and is responsible for fulfilling the functions established in Law01 of 1991 and Decree 2409 of 2018.

Its main objective corresponds to the functions of inspection, control, and surveillance that correspond to the President of the Republic as the supreme administrative authority in Colombia.

The functions of the Superintendence of Ports are established in Decree 2409 of 2018. in general, and in article five, especially.

Numeral 3: Monitor, inspect and control compliance with the provisions that regulate the proper provision of public transport services, ports and concessions and infrastructure, related services, and the protection of users of the transport sector.

Numeral 4: Monitor, inspect, and control the subjective conditions of public transport companies, ports, concessions, and related infrastructure and services.

Numeral 7: Order improvement plans, through an administrative act of a particular nature and when deemed necessary, in order to overcome the difficulties identified from the analysis of the legal, accounting, economic and/or internal administrative status of all those who provide the service of transport, ports, concessions or infrastructure, related services and other subjects provided for in current regulations.

Numeral 8: Advance and decide on the administrative investigations that may take place due to the failures in the due provision of the public transport service, ports, concessions and
infrastructure, related services, and in the protection of the users of the transport sector, under current regulations.

Numeral 9: Impose the corresponding measures and sanctions under current regulations, as a consequence of the violation of norms related to the due provision of public transport services, ports, concessions and infrastructure, related services, and the protection of users of the transport sector.

Numeral 11: Order, utilizing an administrative act of a particular nature and when appropriate, the necessary corrective measures to correct a critical situation in relation to transport service providers, ports, concessions or infrastructure, related services, and other subjects provided for in the law.

Numeral 12: Decree special or provisional measures in order to guarantee the due provision of public transport services, as well as the correct operation of related services in ports, concessions, and infrastructure, always favoring the protection of the rights of the users in the terms indicated in current regulations.

Numeral 13: Provide instructions for the proper provision of public transport services, ports, concessions and infrastructure, related services, and the protection of users of the transport sector, as well as in the other areas of their functions. Set criteria that facilitate compliance and indicate the procedures for its full application.

Numeral 16: Set the contribution rates and collect the fines that must be paid by entities that are monitored and controlled, as per the law.

Article 17: Change in concession conditions. In order for a port company to change the conditions under which a port concession was approved, it must obtain prior written permission from the General Superintendence of Ports, which will only grant it if this does not inflict severe and unjustified damage to a third party and if the change is not of such a nature that it distorts the purposes of competition in which the procedures described in articles 9, 10, 11 and 12 of Law 001.
When making any changes in the conditions of the concession, the consideration paid to the Nation may be varied, as well as the term.

Article 18: Expiration of the concession. The General Superintendence of Ports may declare the expiration of a port concession when the conditions under which it was granted are repeatedly breached, or the obligations and prohibitions to which the concessionaire is subject to are ignored, in such a way that public interest is severely damaged. The expiration of a port concession will be decreed by reasoned resolution against which the only remedy of appeal is appropriate.

3.4. Port Concession Scheme

In the Colombian Concession Scheme, different governmental entities and agencies are involved. The entity responsible for carrying out the high-level planning stage is a function assigned to the National Planning Department, who in turn serves as secretary on the highest council of national planning that is the National Council of Economic and Social Policy (CONPES). Once the planning and guidelines are performed, framed in the national goals and objectives, the structuring and the elaboration phase of the concession that is prepared by the National Infrastructure Agency (ANI) is carried out, and the supervision functions are in charge of the Superintendence of Transportation (see Table 7).

<table>
<thead>
<tr>
<th>Concessions Process Phases</th>
<th>Concessionary Entity</th>
<th>Administrative functions</th>
<th>Planner</th>
<th>Bidding Structuring and Adjudication</th>
<th>Control and supervision of Concessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Entity</td>
<td>National Infrastructure Agency</td>
<td>Regional Port Societies</td>
<td>National Planning Department</td>
<td>National Infrastructure Agency</td>
<td>Port Authority (Superintendence of transport)</td>
</tr>
</tbody>
</table>
3.4.1. Legal Framework


This Law stipulates and issues the statutes of ports in Colombia it is structured in 10 chapters. In turn, these chapters have articles and paragraphs, which is the standard structure according to Colombian law. Some articles have jurisprudence, which is a source of law that modifies this law. This rule is of particular importance since it has been referred to as the Colombian Maritime and Port Statute.

Decree 474 of 2015

This Decree regulates the process of requesting a concession for the development of port activities provided for in the first laws of 1991 and 1242 of 2008.

The procedure and granting of concessions, temporary authorizations and modifications to contracts for goods of public use, for the development of port activities are stipulated in the first Law of 1991. It is through the National Infrastructure Agencies (ANI) that the granting of concessions is made.

The initial procedure for the granting of a port concession is carried out by filing a petition with the competent authority, which must have the following documents:

Technical study of the application includes the following documents:

Georeferenced plans, a bathymetric study and plan of the area, conceptual designs where the area of wharves and yards docks is evident, project description that specifies what type of pier it is, whether public or private, then what type of cargo it will handle or if it is multipurpose. plans of
connectivity with railroad, river and/or land routes with the outside or with the centers of production and consumption in the country and specify the areas of public use.

Financial study document of the application must include free cash flow in US dollars, item of income calculating the type of cargo, the volumes of cargo to be handled, the rates for the different services offered, percentage and load times, expenditure item must include costs and expenses of the port project and an investment plan with its respective free cash flow.

Additional documents of the proposal such as the certificate of legal representation, the subscribed company, the possible partners and their contributions; must prove that they have the surrounding privately-owned land.

Any person can oppose or formulate an alternative petition; it has a two-month window from the last publication. Then a public hearing will be held where the authorities may verbally require additional information for which they will have a month to get it. Once this procedure has been completed, the authority will have five months to grant the concession through an administrative act; it must contain an analysis of the petition and other documents that make it up.

The publication of the procedure is as follows: To guarantee its proper publication, the competent entities must publish the procedure of the proceeding of the concession in its different stages on the website of the entity.

3.4.2. Interagency cooperation

The regulation of port activities in Colombia presents an important fragmentation regarding the state functions, since in it several institutions intervene, with different roles, such as the National Council of Planning Policy and Economics created in 1958 and the Administrative Department of Planning and Technical Services. Later, in 1968, some of these entities of the national government were modified, becoming the National Council of Economic and Social Policy CONPES and the National Department of Planning DNP respectively.
National Planning Department (DNP)

The National Planning Department (DNP) is a technical entity, in charge of directing, coordinating services and granting information to the government for decision making. It has the category of Ministry without being one. The DNP seeks the implementation of a strategic vision of the country in the social, economic and environmental fields, through the design of Colombia’s public policies, maneuver, and allocation of public investment and the realization of them in plans, programs and projects of the government (DNP, 2019).

The functions of the DNP are established in Decree 1832 of 2012 and they are as follows:

- Coordinate the formulation of the National Development Plan for its evaluation by the National Planning Council, the National Council of Economic and Social Policy, CONPES and for its subsequent presentation to the Congress of the Republic.

- Promote, coordinate and technically support the development of partnership schemes between the private and public sector on issues and projects of interest to the National Government.

- Participate in the evaluation of private, national, or foreign investment projects in which the National Government is an involved party.

- Participate and support entities in external or internal financing efforts related to economic, social, institutional, and environmental development plans, programs, and projects.

- Exercise the functions assigned to the National Planning Department as Technical Secretariat of the National Council of Economic and Social Policy - CONPES.

- Prepare and submit for the consideration of the National Council of Economic and Social Policy - CONPES - the documents that develop the policy priorities of the National
Government and others within its competence. Likewise, carry out the dissemination of its contents and the monitoring and evaluation of the defined guidelines.

- Promote the realization of activities aimed at strengthening territorial planning and public management processes that contribute to the articulation between different levels of government and local and regional development.

**The National Infrastructure Agency – ANI**

It is a National State Agency of Special Nature of the decentralized sector of the Executive Branch of the National Order, with legal status. Its assets and administrative, financial and technical independence are, attached to the Ministry of Transportation, according to Decree 4165 of November 03, 2011. According to the previous decree, the legal nature of the National Institute of Concessions (INCO) changed, becoming the National Infrastructure Agency (ANI). In Colombia, the National Infrastructure Agency ANI, is the one who performs the process of structuring, reviewing and granting the port concession.

Within the main functions of the ANI, there is the identification and evaluation of feasibility, proposing concessional initiatives and other forms of private-public association. Other functions are planning and elaboration of the structuring, contracting and execution of concession projects for the design, construction, maintenance, operation, administration and exploitation of public infrastructure, identified by the Ministry of Transportation or assigned by the National Government.

It creates a bank of transport infrastructure projects that are likely to be developed through concession or another form of PPP. It also defines methodologies and procedures in the stages of planning, pre-adjudication, adjudication, and post-adjudication, as well as the evaluation of concession projects or other forms of PPP. It identifies and proposes as a result of the technical, economic, financial and legal feasibility analysis, the modifications required to the concession projects or other forms of PPP, in order to ensure appropriate conditions for their development.
Further, it takes into account the guidelines and policies set by entities responsible for planning the transport sector and by the National Council of economic and social policy CONPES.

It also coordinates and manages, either directly or indirectly, the obtaining of licenses and permits, the negotiation and acquisition of land and the performance of the actions required in the development of concession projects or other forms of private-public association under their charge. It also identifies, analyzes and assesses the risks of concession projects or other forms of private-public association under their charge and incorporates the concession contracts to their risk distribution rule modifications so that the assumption of risks in each one is explicit of its parts (ANI, 2016).

It evaluates and monitors contractual and institutional risks and proposes and implement measures for their management and mitigation. It also performs the measurement and segmentation of the variables required in each project to verify compliance with the levels of services and other obligations established in the concession contracts or other forms of PPP in charge.

Further, it controls the evolution of the variables related to the guarantees granted by the nation during the term of the concession contracts or other forms of PPP in charge of the entity and calculates and updates the contingent liabilities, if any, to cover said guarantees under current legal norms and guidelines issued by the Ministry of Finance and Public Credit. It exercises the powers and carries out the necessary actions and activities to guarantee the timely execution of the contracts under their responsibility to protect the public interest following the Law.

It supervises, evaluates, and controls compliance with technical regulations in concession projects of service levels and other obligations established in concession contracts or other forms of PPP. It advises decentralized entities, territorially or for services to national entities, in the technical, legal and financial structuring of concession projects or other forms of private-public association, for which agreements and contracts that are necessary will be signed.

Decrees are related to the ANI, by Decree 1745 of August 3, 2013, by which the structure of the National Infrastructure Agency was modified.
Subsequently, through resolution No. 1453 of 2013 dated December 16, 2013, through which internal working groups were created in the different departments of the organizational structure of the National Infrastructure Agency, in which through its article 1, the groups were created by the internal work of the vice presidency of contractual management, particularly creating the internal workgroup of ferrous and port projects.

In article 6 subsequently, the specific functions for this group are established, within which it mainly oversees the audit contract, concession or any other PPP, issues a technical concept on the granting of concessions and PPP in the port mode. It verifies the data contained in the information system of the port concessions and issues technical concept on modifications to port concession projects.

Afterward, by Decree 2191 of December 28, 2016, article 2 of Decree 1745 of 2013 is modified, which deals with the functions of the executive vice president of the ANI.

Through resolution 1071 of July 15, 2019, the transparency and anti-corruption agency work team is defined as the result of the agreement between the Presidency of the Republic of Colombia and the Organization for Cooperation and Economic Development (OECD), for which the ANI must take estates and generate good practices to achieve integrity in the public administration, prevent possible acts of corruption and contribute to the inclusive and sustainable development of the country.

**The General Maritime Directorate - DIMAR (Maritime Authority)**

DIMAR is the Colombian Maritime Authority, previously called Maritime and Port General Directorate, after a law that changed its name and functions, becoming the Maritime General Direction.

The leading roles and functions of this direction ascribed to the Ministry of National Defense are to execute the government's policy in maritime frights, directly providing for the strengthening of
the national maritime power, fulfilling as its main functions watching over national and international regulations aimed at safeguarding the integral maritime security, the protection of human life at sea, the promotion of maritime activities and the scientific and technological development of the Nation. This is the case as well as others of its structural role that it leads and under which the harbormaster is included. Who fulfills scientific research tasks, performs the Colombian maritime mapping (DIMAR, 2019).

Within the internal organization of the DIMAR, there are three sub-directorates The first one is a merchant marine subdirectory, where the different divisions related to this area are found, such as seafarers, ships, maritime service companies, international maritime and river transport, marine inspections, support to management and maritime technical regulation.

The second subsection of maritime development, where the part of signaling research is included, with its scientific research group divisions and maritime signaling, is the center of oceanographic and hydrographic research of the Caribbean.

The third is an administrative and financial sub-division in charge of human talent, communication, and logistical support. However, at the same level of these three sub-directorates, but at the area level, the area of maritime and port integral security is enclosed, without having divisions.

On the other hand, within the main functions of the DIMAR, the only ones directly related to the ports is to regulate, authorize and control the construction of ports and public docks and their operation following current regulations. In addition, it regulates, authorizes and controls concessions and permits in the waters, low tidelands, beaches, and other public use goods in the areas of its jurisdiction.

In order to comply with and enforce their role as the maritime authority, through the port state control officers, inspectors, port captains, and other officials who are part of this directorate, it
must fully comply with the different rules and international conventions, including the three pillars or the three main conventions of the IMO.

The International Convention for the Safety of Life at Sea (SOLAS), details the requirements and standards that the ships must have to guarantee the safeguarding of the life of the personnel on board. This convention covers aspects such as design, construction, equipment, and operation of merchant ships in their different categories (SOLAS, 2003).

Colombia approved the International Convention for the Prevention of Pollution from Ships (MARPOL) through Law 12 of 1981. This Agreement contains various rules about the protection and battles against various types of sea pollution, such as hydrocarbon pollution, by harmful liquid substances transported in bulk, among others (International Maritime Organization, 1986).

The International Convention on Standards of Training, Certification, and Watchkeeping for Seafarers (STCW) establishes minimum requirements that seafarers must meet to obtain the navigation license. They are mandatory rules for training and qualification. Its objective is to eliminate inadequate or insufficiently supplemented requirements and to make known the current norms. Colombia approved this convention through Law 35/8 (STCW, 2011).

Decree-Law 2324 of 1984, through which the General Maritime and Port Directorate is organized, through the first Law of 1991, in article 47 the following functions and powers are repealed: Regulate, authorize and control the construction of ports, docks and the operation of them in accordance with current regulations; set the fees for the provision of related and complementary services with maritime activities.

In the case of consultation, the council determines that the General Superintendence of Ports is the official agency responsible for granting, through a reasoned resolution, the port concessions on the facilities that have been incorporated into the port concept that defines numeral 5.11 of Article 5 of the law first of 1991, that is, the port terminals, docks and piers destined for carrying out loading and unloading operations of all kinds of ships, as well as the exchange of goods between land, sea and river traffic.
All other non-port activities must be authorized, monitored and controlled in accordance with the law, by the Maritime General Directorate of the Ministry of Defense.

**The National Institute of Roads (INVIAS)**

INVIAS is a public establishment of the national order, with legal status, with administrative autonomy and its assets, attached to the Ministry of Transportation. Its main objective is to execute policies and projects related to road infrastructure in charge of the Nation. This institute, however, executes the policies, strategies, plans, programs, and projects of the non-concession infrastructure of the National Road Network of primary and tertiary, rail, river and maritime infrastructure roads, following the guidelines given by the Ministry of Transport.

Among the different functions assigned to these entities, the following stand out in their relationship with port infrastructure: They define the technical regulation related to the infrastructure of road, river, rail and sea transport modes. Moreover, they coordinate with the National Infrastructure Agency, ANI, the delivery, by an administrative act, of the transport infrastructure, in development from the concession contracts (INVIAS, 2019)

**The Rio Grande de la Magdalena Regional Autonomous Corporation (CORMAGDALENA)**

The Rio Grande de la Magdalena Regional Autonomous Corporation (CORMAGDALENA) was created by the Colombian Political Constitution in Article 331. As a special entity of national order, which has administrative, budgetary and financial autonomy, it is empowered with its own legal status, operating as an Industrial and Commercial Company of the Colombian State subject to the rules of Colombian corporations, provided in the first article of the Law 161 of 1994 in which the Rio Grande de la Magdalena Regional Autonomous Corporation is organized, its sources of financing among other things.
The corporation was created with the purpose of recovering the navigation and the port activity, the adaptation and conservation of land, in addition to the generation and distribution of energy as well as the sustainable use and preservation of the environment.

Its functions include preparing, adopting, coordinating and promoting the execution of the development plan to achieve the objectives entrusted to it, in accordance with the National Development Plan. Additionally, it has the function of formulating and adoption the mechanisms of coordination and execution of plans, programs and projects, by the public and private entities delegated, concessionaires or contractors, as well as the evaluation, monitoring and control. In addition to those, it has the role of promoting and participating in the creation of port societies in the river towns of the Magdalena River, which contributes to the development of the river transport service and its integration with complementary means. To comply with this, the corporation may yield concessions or provide the facilities and equipment of its heritage (CORMAGDALENA, 2019)

**National Tax and Customs Office (DIAN)**

The National Tax and Customs Office (DIAN), is an entity attached to the Ministry of Finance and Public Credit. The DIAN is organized as a Special Administrative Unit of the national order of an eminently technical and specialized nature, with legal status, administrative and budgetary autonomy and with equity.

Its principal function is to guarantee the fiscal security of the Colombian State and the protection of the national economic public order, through the administration and control of due compliance with taxes, customs, exchange obligations, exploitation rights and administrative expenses over games of luck and chance exploited by public entities at the national level and the facilitation of foreign trade operations in conditions of equity, transparency and legality (DIAN, 2019).
3.5. Concession Contract

A concession contract is a state contract according to what is established in the General Contracting Statute of the Public Administration. State contracts are all legal acts that generate obligations that state entities, provided in private law or special provisions, or derived from the exercise of the autonomy of the will, as well as those, by way of example.

Content of the state contract and the stipulations of the contracts will be those that according to the civil, commercial norms and those foreseen in this law, correspond to their essence and nature.

Entities may enter into contracts and agreements that allow the autonomy of the will and require the fulfilment of state purposes.

In the contracts entered into by state entities, modalities, conditions and, in general, may include the clauses or stipulations that the parties consider necessary and convenient, provided they are not contrary to the Constitution, the Law, public order and the principles and purposes of this Law and those of good administration.

Term and reversion

The term of the concessions will be twenty years as a general rule. The concessions will be extendable for periods of up to 20 years and more. However, exceptionally, it may be higher, in the Government's opinion, if necessary so that under reasonable conditions of operation, port companies recover the value of the investments made, or to encourage them to serve the public in their ports.
Approval of the concession

Within five months from the date of the initial request, the General Superintendent of Ports will issue a resolution indicating the terms under which the concession will be granted. Such terms should include the terms, consideration, guarantees and other conditions of sanitary and environmental conservation, and operation, to which the port society must be submitted to which it is necessary to grant the concession. The resolution approving the concession will be communicated to the petitioner, the authorities, and all the parties involved.

All port companies, officials and/or individuals require a concession to occupy and use in their activity beaches and low tide areas and accessory areas.

Improper restrictions on competition

The Law prohibits any act or contract that has the capacity, purpose, or result, to unduly restrict competition between port companies.

3.5.1. Main Actors

The government actively participates by taking measures that encourage the participation of Colombia in world trade and the development of the necessary infrastructure to enter and be at the forefront of globalization. An example of this participation is through the reduction of tariff barriers, the acceleration of customs processes and reduction of unnecessary steps.

There is a strong tendency in the world and the regions of South America and Central America, to make bilateral agreements, cooperation and free trade agreements, as well as regional integration initiatives such as the Pacific Alliance, consisting of 4 member countries, Chile, Colombia, Mexico, and Peru. According to the particular interests and needs of each country, governments seek to participate in these alliances and make the necessary lobby to finalize free trade agreements, such as Colombia and its regional and national interests.
The contract of concession is an agreement between the two parties that sign a reciprocal arrangement under conditions established in the body of the contractual obligations to carry out an activity or services with a consideration. In this case, the entity authorized to sign the contract is the Superintendence of Transport, and on the other hand, the different forms of association established in Colombian law, which signs the contract as a counterparty by becoming a State port company concessionaire.

As established in the fifth article numeral 5.2, the port concession is an administrative contract of which the nation, through the general superintendence of port, allows a port society to temporarily and exclusively occupy the beaches, low tidelands and access zones for the construction and operation of a port, a change of an economic restriction in favor of the nation and the municipalities or districts where the ports operate.

The concessionaire is different from the port operator, since the operator is the company that provides the service in the ports. The port operator is directly related to the port entity, such as the loading and unloading of the cargo, the storage of the cargo in its different presentations and stowage, the practical pilot service, towing through the supply of tugs, stowage and unloading, land handling or porting of the cargo, dredging of the seafloor, classification, recognition and value-added services to the load among others.

On the part of the individuals, the port society is a public company, constituted with private, public or mixed capital whose social objective is the investment in the construction and maintenance of ports and its administration. Port companies may provide loading and unloading services, storage in ports and other services related to port activities.

A state port company may hold port concessions, and all port companies, whether official, private or mixed, require a concession to occupy and use the beaches and low tide areas and accessory areas of those activities.
A state port company is considered official if in its capital structure it belongs more than 50% to public entities or, on the contrary, it is considered a private port company if in its capital structure it belongs more than 50% to private persons. The users of the port are the shipowners, cargo owners, port operators, and generally any person who uses or receives the services of the port.
4. CHAPTER FOUR: Port Concession Scheme and Role of the Port Authority in Chile

4.1. Description of the Port Sector

Chile is located along the western coast of the southern cone of South America, between the highest segment of the Andes Mountains and the Pacific Ocean. Its shape is unique as it is one of the longest countries in the world, with 4,300 km in length, but also one of the narrowest, with an average width of only 180 km.

The Chilean port system consists of 24 ports for public use distributed as seven bulk carriers and 17 multipurpose, of these, 10 provide cabotage services. The Chilean port system also counts with 30 private terminals specialized in minerals, oil and its derivatives as well as 14 passenger ports and 17 fishing ports. To the north of the country, the primary transportation needs are based on minerals that are transported in bulk. In the central part of Chile, agricultural production, like fruit, is concentrated because of its need for containerized cargo, refrigerated containerized cargo, and general cargo. In the south the primary transportation needs are for of wood in bulk. In the southern zone, the main route of communication is maritime, which requires transport by ferries and the transport of vehicles and passengers, as well as cargo for the provisioning of the region.

Currently, the capacity of multipurpose ports and especially terminals that receive container ships have a draft limit, since no port has more than 14 meters of draft. The only ports with high draft are the ports of Punta Arenas with 13.9 meters but with 230 meters of length, 14.3 windows with 240 meters in length, the port of Valparaiso with 11.4 meters and 628 meters in length, the port of Angamos with 12.84 meters of draft and 225 meters of length and the port of San Antonio with 13
meters of draft and 290 meters of length. This means that no Chilean port can receive Post-panamax ships that have more than 14 meters draft and 300 meters in length.

Ports develop public interest activities, as they serve international trade and contribute significantly to the economic development of the country, creating employment and wealth in its areas of influence. Chile has maintained a growing development of its foreign trade and within the process of port modernization the State sought to improve the levels of efficiency and effectiveness of the state port sector. This modernization process began with Law No. 18.042 of 1981, which eliminated the exclusivity of the Chilean Port Company (EMPORCHI) in cargo operations between the ship and the storage areas.

The port authority in Chile began its exercise in 1997, when Law 19,542 was enacted, which is also known as the "Law of Modernization of the State Port Sector", which aimed to improve port efficiency. This law eliminates the old Chilean Port Company (EMPORCHI) and created 10 State companies that operate in the following ports:

**Table. 8 State Port Areas of Chile**

<table>
<thead>
<tr>
<th>State Port Companies</th>
<th>Port Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arica State Port Company</td>
<td>Port Area of Arica</td>
</tr>
<tr>
<td>Iquique State Port Company</td>
<td>Port Area of Iquique.</td>
</tr>
<tr>
<td>Antofagasta State Port Company</td>
<td>Port area of Antofagasta</td>
</tr>
<tr>
<td>Coquimbo State Port Company</td>
<td>Port area of Coquimbo</td>
</tr>
<tr>
<td>Valparaiso State Port Company</td>
<td>Port area of Valparaiso</td>
</tr>
<tr>
<td>San Antonio State Port Company</td>
<td>Port area of San Antonio</td>
</tr>
<tr>
<td>Talcahuano-San Vicente Port Company</td>
<td>Port area of Talcahuano and San Vicente.</td>
</tr>
<tr>
<td>Puerto Montt State Port Company</td>
<td>Port area of Puerto Montt.</td>
</tr>
<tr>
<td>Chacabuco State Port Company</td>
<td>Port area of Chacabuco</td>
</tr>
<tr>
<td>Austral State Port Company</td>
<td>Port area of Punta Arenas</td>
</tr>
</tbody>
</table>

Source: Law 19.524 of 1997
The CORFO Production Development Corporation created the SEP Chilean Business System Committee as a technical advisory body of the state. This committee is in charge of different groups of Chilean companies, of which there are 10 State companies. Its function is to make decisions and represent the Chilean state as well as the owners of these companies.

Thus, it delivers general guidelines and ensuring compliance with its particular objectives, in addition to representing the interests of the state of Chile. Although SEP does not have legal status, it is authorized to enter into contracts. On the other hand, it evaluates the management of the companies based on the Decree with force of law number 211 of 1960, the law 6640 and the DS number 360 of 1945 of the Ministry of Economy of Chile, as well as the law 19081, which form the regulatory and constitutive framework of CORFO and the SEP.
**Arica Port Company**

The port of Arica is located in the north of Chile, very close to the neighboring country of Peru. It is a port that serves for the transit of goods that come and go to Bolivia, which is a landlocked state. The port was built between 1960 and 1966 and has a new pier built-in 2009. Its facilities mainly handle general cargo in sacks, ore, and bulk wheat as well as containerized cargo.

The port company of Arica began its activities on April 30, 1998, through an announcement in the official newspaper D.S 92 of the Chilean Ministry of Transportation and Telecommunications. The port of Arica is under concession and operates under a mono-operator scheme. The consortium of companies is made up of a group of companies that can operate the concessioner port for 30 years. The bidding process was completed in October 2004.

**Iquique Port Company**

The port of Iquique is on the north coast of Chile, the Tarapaca region. Due to its location, it becomes a strategic point of connection with Asian Pacific markets. The port has a logistics center to provide solutions to the users of the port. The port of Iquique company is a state company with its assets and a company of indefinite duration. Under the control and supervision of the SEP Public Company System, its board is appointed and elected by its board.

The port is made up of two terminals. Terminal 1 is operated by a multi-operator. On the other hand, terminal 2 is the International Terminal (ITI) and has been in operation since 2000. In 2002 it was concessioned for 20 years and extended to 30 years in 2008 when making new investments which include infrastructure and superstructure works.
Antofagasta Port Company

The Antofagasta Port Company has two terminals or docking fronts. Docking front 1 is a multi-operator terminal, which can be used by all the agencies and companies that require it. The account is the treaty in force between Chile and Bolivia which was signed in 1904 through which the cargo in transit of Bolivia receives a particular treatment. This agreement also applies to the port of Arica. The International Antofagasta Terminal (ATI) has been in service since 2003 and also manages the number 2 docking fronts, mono-operator terminal. There is also infrastructure and a services business area for tourism and regional commerce, granted in January 2006 until 2034.

Coquimbo Port Company

The port of Coquimbo has essential connections with the development of infrastructure projects such as the tunnel that connects the Chilean border crossing, currently serving the entire mining and agricultural region located in the Chilean regions of Atacama, Coquimbo and metropolitan area. The possibility of growth increases, because this port is part of the so-called "Central Bi-oceanic Corridor (CBC) of Mercosur, which connects Brazil, Paraguay, and Uruguay. Coquimbo integrates this corridor offering its connection with the Asia Pacific and California, among others.

In 2012, Coquimbo Port Company completed a bidding process for the operation of the port docking terminal. It will be performing the concession for 20 years, requiring investment for the construction of a third docking dock as well as the construction of a passenger terminal to receive cruises, inaugurated in 2013. It is necessary to make modifications and some adjustments related to environmental issues to the concession contract, in order to carry out the construction of the new loading dock of mineral bulk using clean technologies that protect the marine environment of the area. The most significant amount of cargo that this port handles is bulk cargo. With the construction of the new dock, it seeks to improve the productivity and service levels of the other docking sites.
Valparaiso Port Company

The port of Valparaiso has three main land accesses through the connection to three important routes in the country, as well as rail access for cargo. This guarantees connectivity with the productive centers located in the center of the country.

Terminal 1 is a terminal with cargo and passenger infrastructure, with the capacity to receive containers, refrigerated containers, general multi-purpose cargo and passenger cruises. It has five docking positions with the deepest draft available through the port. This mono-operated terminal with a concession granted since 1999 for 20 years initially, subsequently extended the agreement period for another 20 years, from 2000, is in force until 2030, guaranteeing expansion, investment and improvement projects of the current structures.

Terminal 2 has three berth positions with smaller openings available, however it can also receive general cargo, containerized and refrigerated cargo, as well as crossings. This terminal is under concession as of December 2013 for 30 years.

The passenger terminal has a boarding and unpacking terminal for passengers of cruise ships, which has been in a concession contract since December 2002 for a period of 30 years.

The Area of Extension and Logistic Support (ZEAL) is the area where the controlled entry and exit of cargo to the different terminals of the port happens. Document and physical inspections also have an area which added value to both cargo of the user services of the port. This logistics area is located 11.6 km from the terminal and is under concession contract for 30 years since 2008.

San Antonio Port Company

The Port Company of San Antonio is 100% state-owned; its resources support its financing policy. A board of directors manages the company made up of 5 representatives, including a worker representative. The port of San Antonio is the closest to Santiago, the Chilean capital, with both land and rail connections. As of 2011, the entire general cargo handling structure was
concessioned. Within this port, there are three terminals. San Antonio International (STI) has the most significant amount of gantry cranes in Chile, providing high performance and efficiency as well as operations, specialized in container transshipment. The Puerto Central Terminal (PCE) as of 2011 is concessioned for 20 years. The terminal of Puerto Panul is a port of solid bulk with level luffing bulk cranes that allow unloading bulk ships at a rate of 700 tons per hour. Terminal Sitio 9 is a multi-operator system specialized in liquid bulk; the San Antonio Port Company operates this as well.

**Talcahuano San Vicente Port Company**

This port company manages two terminals, the Talcahuano and the San Vicente terminals, both located in the Chilean region of Biobío. Both are granted to private companies that manage the docking fronts and offer the logistic services in the respective terminals.

The port of San Vicente is mostly focussing on handling containerized cargo. On the other hand, the port of Talcahuano is more dedicated to general cargo ship and bulk cargo, as well as fishing vessels.

**Puerto Mont Port Company**

It started activities on June 24, 1998 and is subject to the financial, accounting, and tax regulations that apply to open corporations. It has two terminals, Montt Port Terminal, with two areas, a commercial dock area, and a ferry terminal. It has a storage area for cargo in pallets and bags. This port is characterized by bulk cargo handling. The other port is the port of Castro with a boarding ramp and a passenger terminal.
Chacabuco Port Company

The first docks of this terminal were built at the end of the 50s and the beginning of the 60s, then in the 80s and 90s construction and reconstruction works of the first docks was established. This company began operations on September 1, 1998. The ports and terminals it administer are for public use. It has a standard multipurpose dock that receives bulk carriers, container ships, and fishing vessels. It has storage areas that are used for mineral concentrates and salmon feed. It has an esplanade that functions as a meter yard, and also an area for vehicle transshipment and passenger terminal as part of the cruise terminal.

Austral Port Company

The Southern Port Company began operations on August 1, 1998. Arturo Prat Terminal has two docking fronts. Terminal Jose de Los Santos Mardones, which started operations in 1997 has three docking fronts. Puerto Natales Terminal, dedicated to providing services to the Roll-on ship system, lightships and also light tourist cruises has a docking front with three docking positions.

Docks in this area are mostly dedicated to the cruise services but also handle containerized cargo and other types of cargo for the southernmost region of Chile in the South American continent.

4.2. Integral Port management Plan

The reform through Law 19542 establishes ten independent and autonomous state companies, allowing in many cases, its outsourcing and concession. Within the planning in Chile, the ports have a master plan, which is an instrument of territorial planning in which the maritime and terrestrial areas are clearly delimited, within the port activities and infrastructure, as well as the work required for the planned development in a certain port or terminal its uses. This planning is for a minimum period of 20 years.
In each Chilean company, there must be not only a master plan but also a reference investment calendar for each port and terminal under its competence.

The master plan is the planning document that must consider essential areas within the port enclosures for the realization of fishing, industrial, tourist, recreational, maritime transport, towing, construction, or ship repair activities. This way, all the activities and projects carried out in each of the areas contemplated must be in accordance with the provisions of the master plan. The plan must be approved and kept updated by the respective directories and boards and must be in the public domain. Individuals may request modifications to the master plan or project inclusion to the preferential investment calendar.

In the Chilean case, it is the state that is in charge of promoting and stimulating private participation in order to achieve investment, innovation, management, and administration of the port system. The necessary investments in infrastructure are executed following the provisions of Law 19542 through the concession or private-public association models. When required, contributions or subsidies from the state may be considered to guarantee the development of the projects, or even in those sites where there is no interest of private individuals or individuals to provide the socially justified infrastructure it will be the state that builds and the private ones that exploit it.

### 4.3. Port Authority

Through the first article of Law 19542 of Chile, the ten companies of the state were created, which will be legal continuators of all rights attributions and obligations that the Chilean port companies had:

- Arica port company, operating the port of Arica.
- Iquique Port Company, operating the port of Iquique.
- Antofagasta Port Company, operating the port of Antofagasta.
- Coquimbo Port Company, operating the Coquimbo port.
- Valparaiso Port Company, operating the port of Valparaiso.
- San Antonio Port Company, operating the port of San Antonio.
- Talcahuano-San Vicente Port Company operating from San Vicente and Talcahuano.
- Puerto Montt Port Company, Operating the leek and the ferry terminal of Puerto Montt.
- Chacabuco Port Company that will operate in the port and ferry terminal of Chacabuco.
- Austral Port Company operating the port of Punta Arenas and ferry terminal of Puerto Natales.

The State Port Companies (Port Authority) must be profitable and efficient in the use of resources and infrastructure, making the assets profitable through business models delivered in private concession.

These ten companies fulfil the functions of the port authority in Chile for each of the zones. They are legal persons of public law, they build a state company with their assets, of indefinite duration, and they relate to the government through the Ministry of Transportation and Telecommunications. The ports and terminals managed by these companies are for public use.

These companies will have as their object the administration, the exploitation, development, and conservation of ports and terminals, as well as the assets they own. They will be able to carry out all kinds of studies, projects, and execution of construction, extension, improvement, conservation, repair, and dredging of the ports.

These companies may carry out their objectives directly or through third parties. Whenever it is through third parties, they will do so through the granting of port concessions, the conclusion of lease contracts or through the constitution of Chilean or foreign individuals or legal entities of public limited companies.

If they are at the head of the port companies, they should perform some functions directly like the setting of tariffs for the services they provide and for the use of the exploited assets, formulate the master plan and the referential investment schedule of the ports and terminals they manage and develop and supervise the compliance with the regulations necessary for the operation of the ports and terminals that they manage.
4.4. Port Concession scheme

The model of port concessions was implemented for a term of 20 years, incorporating the private sector to port management and investments. These port concessions operate the port terminals under the mono-operator mode, leaving the multi-operator mode permanently. On these bases, the main port facilities in the country began to be delivered under concession, following a Landlord operating model.

The Chilean port concessions scheme is centralized in the autonomy given by law 19542 to the ten State Port Companies of the Chilean State. They have as an objective the administration, exploitation and development of the ports and terminals, being able to do these objectives directly or through the granting of port concessions, the conclusion of lease contracts or through the constitutions of natural or legal persons. These acts and contracts are governed by private law.

In that order of ideas, the entities that plan and structure concessions are the Chilean State Port Companies. They may receive advice, and support from entities such as the Port Works Department of the Ministry of Public Works among others that could help during this process, however, the companies remain responsible.

The functions of supervision and control over the contract of the concession will be a function performed by the company. The duties, procedures, and details are those established in the decree and other existing laws, should be detailed in the bidding basis and other documents that are part of the preliminary stage of the tender, as well as subsequently on the concession contract with all its parts.
Table 9 Port Concession Scheme in Chile

<table>
<thead>
<tr>
<th>Concessions Process Phases</th>
<th>Concessionary Entity</th>
<th>Administrator</th>
<th>Planner</th>
<th>Bidding Structuring and Adjudication</th>
<th>Control and supervision of Concessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible Entity</td>
<td>Port Authority</td>
<td>Port Authority</td>
<td>Port Authority</td>
<td>Port Authority</td>
<td>Port Authority</td>
</tr>
</tbody>
</table>

4.4.1. Legal Framework

It was necessary to establish a port policy that defines and plans the development and guidelines for the operation of the ports, which must be defined by the Ministry of Transportation and Telecommunications and implemented through the State Port Companies (Port Authority).

The laws and decrees mentioned below become part of the regulatory framework that provides legal basis and support for the port concession scheme in Chile.

**Law 19542 of 1997**

The legal framework of the port concession scheme is the Law 19542 of 1997. Through this law, the Ministry of Transportation, through its transport secretary, modernizes the state port system by creating the ten State Port Companies in Chile and establishes the procedure for the future liquidation of the Chilean port company EMPORCHI.

**Decree 104 of 1998.**

In Decree 104 of 1998 the Ministry of Transportation and Telecommunications make proposals through its Secretary of Transportation, which establishes the rules and procedures that regulate the bidding process, which deals promptly with article 7 of Law 19542.
It must be taken into account that the Government has as a policy that private investment in state ports is promoted and that it also seeks to establish clear rules that promote free competition and guarantee principles of transparency and equity for concessionaires.

The participation of partners and third parties in the company that forms the companies, the cleansing of contracts and the granting of public concessions must be carried out by public tender.

In the pre-bid stage, reports and documents are required to take into account the form of participation of private parties. For example, what the assets and rights that are included in the contract or concession that is being tendered, what is the origin of bidding if it is of public or private origin, what are the stages of the tender and the factors taken into account for its award and what is the way to determine the economic value of the assets, of the assigned rights and of the corresponding payments are all factors to be considered. In cases in which the rights of the concessionaire may be limited, the advertising program contemplated for the tender and its respective schedule should also be considered. The board of each company must approve this explanatory report.

The board must approve the bidding rules of each company. These bases must contain the following elements:

- The conditions, modalities and stages of the bidding process, for the presentation of the offers by the participants.
- The procedures to carry out the necessary consultations and clarifications during the process, the deadline to rate and review the proposals.
- The elements that are a fundamental part of the port contract or concession.
- The guarantee regime, which will be and their respective amounts.
- The deadlines for constituting these guarantees.
- The economic regime of the contract, if the contract incorporates assets.
- The location of these goods and their nature.
The board must also take into consideration the necessary insurances, clarifying what type of coverage, with their corresponding amounts and deadlines duly established and, the sanction regime in case of possible non-compliance, possible applicable fines. Lastly, the board must also take into consideration the mechanism to resolve disputes that arise, which would be the cause of suspending the concession contract and lastly the term of the concession contract.

Both the explicative report and the bidding conditions mentioned above must be sent to the Ministry of Transport and Telecommunications who must issue their opinion within a period not exceeding 30 days.

The call for a public tender for the granting of the contracts object of the regulation must be made with sufficient advance notice so that the interested parties can deliver their proposals, for the specific case of port concessions. This period may not be less than 90 days. The publicity of these so-called tenders must be through two publications in national newspapers, with a space between each publication of not less than seven days.

The award process will take place by reviewing the proposals and according to the characteristics and the objectives of the contract.

The proposals must be opened by the commission commissioned by the company, and a minister of faith, who is the person who records and attests that proceeded in accordance with the rules.

The board of the company will carry out the evaluation of the proposals and the award within the term established in the bidding basis.

The tender establishes that two types of guarantees are established; the first is the guarantee of the offer and the second the guarantee of faithful compliance with the contract.
4.4.2. Interagency Cooperation

Below are those agencies, ministries and other state agencies that due to their functions and tasks participate directly or indirectly in the Chilean port concession scheme.

The General Directorate of the Maritime Territory and Merchant Marine (DIRECTEMAR)

It was created by Decree-Law No. 1111 of May 1978, called the Navigation Law. This rule defines the Chilean maritime authority. The governors and port captains are established in the same way. The General Directorate of the Maritime Territory and Merchant Marine is the high-level body of the Chilean Navy. Its main objectives are to comply with international agreements and regulations in order to protect the Chilean marine environment and natural resources, safeguard human life at sea and the safety of navigation, as well as supervise the activities carried out in the Chilean marine environment, all this in order to contribute to the maritime development of Chile (DIRECTEMAR, 2019).

The maritime authority should correspond to the Directorate and, as such, apply and supervise compliance with the navigation law and international conventions and with the legal or regulatory norms related to its functions, with the preservation of ecology at sea and with navigation in waters subject to national jurisdiction. The Directorate will have the official representation of the State in international matters or meetings related to professional and technical matters.

National Customs Service (SNA)

The Organic Law approved the National Customs Service by decree with force of law 329 of April 16, 1979.

The National Customs Service is a public service under the Ministry of Finance, responsible for monitoring and supervising the passage of goods along the coasts, borders, and airports of the
republic. It intervenes in international traffic for the collection of import taxes, exportation and others determined by law. It is also in charge of generating the statistics of the traffic on the frontiers (SNA, 2019).

Ministry of Public Works - Port Works Department

The Direction of Port Works belongs to the Ministry of Public Works; they have within their functions the planning of port infrastructure and developing directly or through consulting projects of port work. It is responsible for supervising, controlling, and approving all port work projects, both public and private. It establishes technical standards for the development of port projects and supervises and controls all public port and dredging works nationwide. It also supervises and oversees the construction of port work carried out by individuals, verifying compliance with the approved project (Ministry of Public Works, 2019)

Through the project division, it supervises the projects of port and coastal infrastructure work that is carried out at the national level and that is executed by an organ of the Chilean State Administration. Likewise, through the construction division, it supervises the public port and dredging work at the national level as well as the technical and administrative aspects, from the tender until its liquidation and according to the approved project, technical specifications, administrative bases, and current regulations.

Ministry of Transportation and Telecommunications

The Ministry of Transportation and Telecommunications was created through Decree-Law No. 557 of 1974. Its main functions are to propose national policies in matters of transport and telecommunications, according to the parameters of the Chilean Government. It also exercises the regulation and control of its implementation of the policies and norms issued as well as supervising public and private companies that operate means of transport and communications in the country, as in this case the 10 Chilean port companies, in addition to monitoring compliance with laws,
regulations, and regulations on maritime and port transport (Ministry of Transportation and Telecommunications, 2019).

**Chilean Business System (SEP)**

Chilean Business System (SEP) is a committee that was created by the Production Development Corporation (CORFO), a technical advisory body of the State. The State exercises the function of evaluation of the management and corporate governance of companies in the state sector and that are related to the government through some ministry. In this case, the 10 Chilean port companies are related to the Chilean Ministry of Transport and Communications.

This committee is governed by a board of directors that is made up of 9 advisors including the chairman of the board. Under this board is the executive director, who in turn is at the head of the co-management, the area of projects, the treasury and the administration. The companies under the evaluation of this organization are organized in three sectors, ie the port sector where the services sector is located with eight companies, the transport sector with two companies and 10 Chilean port companies. SEP presents the interests of the State of Chile in these companies, evaluates its strategic management, and delivers general guidelines (SEP, 2019).

**4.5. Concession Contract**

The main contributions, terms, and conditions of the port concession contract in Chile are listed below, under the parameters and conditions established in the Chilean legal framework.

Obligations that will be on the part of the company are as follows:

- The administration of common goods when appropriate.
- The establishment of easements when appropriate
- The regulation of access of personnel and vehicles when they are of activities other than the activities of the port.

- The control of the excellent use and the correct use of the assets delivered through the concession contract.

The term of the contract will be the established in the bidding base. In the case of leasing, and the agreement is of port activity, it will be a maximum term of 30 years. How the term is computed, and the extensions of the term initially agreed upon but within the maximum limits will be the establishment at the base of the tender.

Guarantees of faithful fulfilment of the contract must be constituted which may not have an amount less than 100% of the annual income received as a fee committed to be paid the company in the respective concession contract, or the equal part if the term is shorter to one year. Decreases in the development of the contract can be considered, depending on the excellent performance and the correct fulfilment of the concessionaire's functions.

Below is a list of statements of the obligations of the concessionaire or lessee:

- The fulfilment of the levels of service, production, and development during the duration of the contract.
- The diligent care in the conservation of the works and improvements of the systems and the equipment in the levels of quality stipulated in the contract, timely compliance with the payments established in the contract with the company.
- The provision of the service continuously and permanently under non-discriminatory conditions.
Furthermore, the concessionaire or lessee should

- Establish public and non-discriminatory rates that in no case may be higher than those contracted.
- Respond to damages caused of any nature that due to the fulfilment of the contract are generated against the environment or against third parties.
- Carry out the controls, measurements and statistics established by the bidding conditions and the contract, being responsible for the veracity of the information provided.
- Allow the entry of the personnel of the company or other public entities competent to fulfil its functions, among them that of supervision and supervision.
- Take care of the lands that are delivered under the supervision of the company, keep them free of occupants or object.

The company may declare the contract temporarily suspended in case of war, internal commotion or force majeure preventing the execution of the contract when there is a partial destruction of the work or elements of the contract. When unforeseen causes occur and cannot be resisted that are not attributable to the contracting party. In this case of suspension, the contracting party may request an extension of the contract term.

The bidding rules will establish in any case that it is the company in charge of controlling the faithful fulfillment of the contract in all its aspects. In the event of any breach, it will notify the tenant or dealer of the infraction detected for the application of fines or penalties. Concessionaires will not be exonerated of guilt when the breaches are a consequence of contracts concluded with third parties. If the breach corresponds to the delay of the pecuniary obligations established in the contract, according to the bidding rules, the corresponding maximum interest payment amount (annual value) will be applied.

The grounds for termination of the agreement contract are the expiration of the contract term; when there is a mutual agreement of the parties; due to breach of obligations; others that are established on the basis of the tender or contract. If there is repeated breach of the contractor's obligations, the
company may request the forced assignment of the contract, without prejudice to the application of other penalties and fines.

According to the base of the tender, a conciliatory commission may be established to mediate the differences between the company and the lessee.

All extension or modification works of the berthing front or construction of a new one must have the prior authorization of the company. The company may require a technical basis and modifications to the background presented.

All work to be carried out must comply with the technical specifications required by the companies, and the contractor or lessee may not make modifications without authorization by the company.

It will be up to the company to control during the execution phase, the progress, development, and quality of the work and improvements, as well as granting the authorization for commissioning the work. The contractor must correct at his cost the observations made by the company during the execution of the work or improvement of the infrastructure.

The concession contract must establish a program of conservation of the work or improvement for approval by the company, which be a requirement for the commissioning of the work.

4.5.1. Main actors

Concerning the state contracting, there is a party that represents the Chilean state, and for this, it must be duly empowered by the Chilean rules or laws and in the counterpart is the contractor, as will be explained in more detail below.

Article 8 of Law 19.542 in its numeral 2 states that the State Port Companies must directly perform the function of coordinating the operation of the agents and public services that intervene or must
intervene inside the port enclosures, in accordance with article 49; which states that the Ministry of Transportation and Telecommunications will establish through Supreme Decrees the rules that will govern the coordination of the various public bodies that are related to the activities that take place within the port areas.

Within the contractual parts are the state companies that are legal persons under public law, who are duly authorized by article 7 of law 19542 of 1997 to carry out their objective directly, by the company or by third parties, in which case they must do so through the granting of a port concession, through the conclusion of the lease agreements or the constitution of natural or legal persons.

During the term of the concession, the rights of the concessionaire may only be affected or limited in the manner and conditions established in the bidding conditions. In these bases, the causes for the expiration of the contract must also be considered and how it will be acted upon if it is entered into an expiration date must be reflected, until a new bidding process is carried out.
5. CHAPTER FIVE: LEGAL COMPARATIVE ANALYSIS

In this chapter, the variables selected by the authors will be compared in order to find similarities and differences between them in the legal regime of both countries, regarding port concession schemes and regulatory function of the port authority.

5.1. Legal Comparative Analysis of the Port Concession Scheme

In Colombia’s case, the legal regime of the port concession scheme is determined by Law 001 of 1991 and Decree 474 of 2015. In Chile’s case it's determined by Law 19.542 of 1997 and Decree 104 of 1998.

The indicator variables selected to be legally compared on the subject of port concession scheme are the following:

- Concession contract use
- Duration of the Concession contract
- Port terminal use and provision of port services
- Bidder Qualifications
- State protectionism
5.1.1 Concession Contract Use

In Colombia’s case, Law 001 of 1991 Article 5 states: The use of the concession contract by State, to allow a regional port society (concessionary) to occupy and use port areas temporarily and exclusively for the construction and operation of a port in exchange for an economic consideration in favor of the Nation and municipalities or districts where the ports operate.

In Chile’s case, Law 19.542 of 1997 Article 7 states that the Port Authority (state port companies) may delegate the use and operation of port facilities to private operators, through the granting of concession contracts.

In this variable a similarity was found. In both countries the law requires the use of the concession contract as a state mechanism to authorize private operators to use port areas for the construction and operation of ports.

The legal implication of this finding is that the state must establish the terms by which the concession contracts will be governed such as the duration, the amount of the consideration, the type of tender, among others. Additionally, the state must legally empower the entities that will be in charge of each regulatory function within the stages of the port concession contract in its planning, structuring, evaluation, adjudication, and control phases.

5.1.2. Duration of the Concession Contract

In Colombia’s case, when reviewing the legislation, we found that Law 001 of 1991 Article 8 states the following: The duration of the concession period will be 20 years as a general rule, but it can be extended for another 20 years with the authorization of the government, so that private operators have time to recover the investments made in the port terminals.
In Chile’s case, Law 19,542 of 1997 Article 14 states that port concessions may be granted for a maximum of thirty years.

In this variable a difference was found. In Colombia’s case the duration period established by law (20 years) is shorter than in Chile’s case (30 years).

The legal implication of this finding in both cases is that the duration of the concession must be adjusted, taking into consideration the payback of the investments made by the private concessionaire in the port terminal.

5.1.3. Port Terminals Use and Provision of port Services

In Colombia’s case, Law 001 of 1991 Article 1 states: Port operators which carry out activities in public service ports, should do so in accordance with rules of general application such as avoiding privileges and discrimination among users, avoiding any practice that have the capacity, purpose or effect of generating unfair competition or creating restrictive practices.

Additionally, Decree 474 of 2015 Article 4 defines the procedure principles: The competent entities must apply the provisions that regulate the service provision in order to guarantee that they will be carried out in accordance to the principles of due process, equality, impartiality, good faith, morality, participation, responsibility, transparency, publicity, coordination, efficiency, economy, and speed.

In Chile’s case, Law 19,542 of 1997 Article 3 states that private operators (concessionaires) must operate the ports in accordance with the rules of this law and will provide services continuously and permanently. They may not celebrate or execute facts, acts or procedures that affect free competition.
Additionally, Decree 104 of 1998 Article 19 defined that the service will be provided continuously and permanently in non-discriminatory conditions.

In this variable a similarity was found. Both country's legislation establishes that the use of terminals facilities and port services provision must be provided without interruption and with equality conditions for users.

The Legal implication establishes the concept of universality in access to public services, seeing that port operations are privatized does not mean that free access to the services offered by state assets can be restricted.

5.1.4. Bidder Qualifications

The candidate’s qualification requirements are provided in Colombian Law 001 of 1991 Article 6: Only regional port societies may hold port concessions. Additionally, in Article 1: Both public entities, such as private companies, may constitute port companies, to build, maintain and operate ports, port terminals, or docks, and to provide all port services under the terms of this law.

On the contrary, the Chilean Decree 104 of 1998 Article 8 states that any Natural or legal persons, Chilean or foreign, or groups of them that comply with the requirements established in Law 19,542, can participate in a bidding process.

In this variable, a difference was found since bidder qualifications are more restricted in the Colombian process compared to the Chilean one.

The legal implication, in this case, is that in Colombia only those who constitute a regional port company may submit to tender, while in Chile any natural or legal person that meets the requirements established by law, may present themselves to bidding.
5.1.5. State Protectionism

In Colombia’s case, the law and regulatory decree do not provide any specific provision on this matter.

On the other hand, Chilean legislation defined in Law 19.542 of 1997 Article 20 states that port companies will not be able to obtain credits, subsidies or guarantees from the State, unless these measures are applied to the private sector and in equal conditions.

In this variable a difference was found. Colombian legislation does not restrict the State's protective measures towards port companies and in the case of Chile, it is restricted by law.

The legal implication in this case is that in Colombia the state may establish protectionist measures for port companies, while in Chile’s case, it is not authorized, unless they are implemented for the entire private sector on equal terms.

5.2. Legal Comparative Analysis of the Regulatory function of the Port Authority

In Colombia’s case, the legal regime of the port authorities’ regulatory function is determined by Law 001 of 1991 and Decree 2409 of 2018. In Chile’s case it is determined by Law 19.542 of 1997 and Decree 104 of 1998.

The indicative variables selected to be legally compared in relation to the regulator function of the port authority in port concessions are the following:

- Planning phase of the port concessions
- Structuring of the concession contracts
- Evaluation and adjudication of the concession contracts
- Control and supervision of the concession contracts
- Penalty for breach of the concession contract

5.2.1. Planning phase of the port concessions

In Colombian legislation, the port authority (Superintendence of Transport) has no legal attributions at this stage of the port concession, since the State exercises the regulatory function through the National Planning Department, which is responsible for designing the Port Expansion Plan according to Law 1 of 1991 Article 2.

The Chilean legislation establishes in Law 19.542 of 1997 Article 8 that the port authority (State Port Company) will carry out the planning function of the port concessions through the formulation of the "Master Plan" and the "investment calendar".

In this variable, a difference was found. In Colombia’s case the port authority does not have legal attributions to execute the regulatory function at this phase of the port concession. In contrast, the Chilean case, the port authority does have legal attributions to exercise the regulatory function in this phase.

The legal implications of this finding indicate that in Colombia’s case, the regulatory functions of the port concessions are divided into different agencies, while in Chile’s case, they are kept unified by the port authority.

5.2.2. Structuring of the concession contracts

In Colombian legislation, the port authority (Superintendence of Transport) has no legal attributions at this phase of the concession contract, since the State exercises the regulatory function through the National Infrastructure Agency according to Decree 475 of 2015 Article 2.
In Chilean legislation, the port authority (State port company) will prepare the bidding conditions, taking into account the following elements established in Decree 104 of 1998 Article 4:

- The conditions, modalities and stages of the process of tender, for the presentation of proposals.
- The procedures for consulting and clarifications on the bidding conditions.
- The specific evaluation factors of the Proposals and award procedures.

In this variable, a difference was found. In Colombia’s case, the port authority does not have legal attributions to execute the regulatory function at this phase of the concession contract. On the contrary, in Chile’s case, the port authority does have legal attributions to exercise the regulatory function in this phase of the concession contract.

The legal implications of this finding indicate that the Colombian port authority does not participate in the preparation of the bidding rules, the development of documents that regulate the selection process, or the economic and technical conditions of the futures contract.

5.2.3. Evaluation and adjudication of the concession contracts

In Colombian legislation, the port authority (Superintendence of Transport) has no legal attributions at this phase of the concession contract, since the State exercises the regulatory function through the National Infrastructure Agency according to Decree 475 of 2015 Article 2.

The Chilean legislation establishes in Decree 104 of 1998 Article 11 that the port authority (State Port Company) will carry out the evaluation and adjudication of the proposals, within the terms and conditions established in the bidding, which should be consistent with the magnitude of the concession contract.

In this variable a difference was found, given that in the Colombian case the port authority does not have legal attributions to carry out the regulatory function at this stage of the concession
contract. While, in the Chilean case the port authority does have legal attributions to exercise the regulatory function on this contract concession phase.

The legal implications of this finding indicates that the Colombian port authority has not participation in the conditions evaluation of bidders, in terms of legal, economic, financial, technical, experience or other nature that the bidders must accomplish to be qualified, as well as defining the evaluation factors and regulating the procedures of how the contracts will be awarded. In contrast, in the Chilean case, the port authority has a regulatory function for bidders’ evaluation and contract adjudication.

5.2.4. Control and supervision of the concession contracts

Colombian legislation establishes in Decree 2409 of 2018 Article 14 that the port authority (Superintendence of Transport) carries out the regulatory function of inspection and surveillance concerning concession contracts for the construction, operation, administration, maintenance of port infrastructure in accordance with the law.

Chilean legislation establishes in Decree 104 of 1998 Article 22: The port authority (State Port Company) supervises and controls the fulfilment of the concession contract in all its aspects.

In this variable, a similarity was found, since both countries port authorities have legal attributions to exercise control and supervision function at this stage of the port concession contract.

The legal implication of this finding is that port authorities in both countries should direct and coordinate all supervision and control activities, such as plans, programs and orders inherent to the inspection function, as well as design coordination mechanisms with other State entities, in order to ensure compliance in port concession contracts.
5.2.5. Penalty for breach of the concession contract

The Colombian legislation establishes in Decree 2409 of 2018 Article 17: The port authority (Superintendence of Transport) has the responsibility of imposing the corresponding measures and penalties as a result of the violation of the rules related to concession contracts for construction, rehabilitation, operation, as well as the maintenance of the port infrastructure.

The Chilean legislation establishes in Decree 104 of 1998 Article 22: The port authority (State Port Company) in case of non-compliance, it will notify the infraction detected to the concessionaire, for the application of fines and penalties.

In this variable, the similarity was found, taking into account that the legal regime of the two countries give legal attributions to the port authorities to exercise the regulatory function of penalizing private concessionaires in case of a breach of the concession contract.

The legal implication of this finding indicates that the port authority of both countries has the regulatory function of guaranteeing that the breaches of the concession contract are penalized, and determining the amount of the fines that will be applied or if it is the case to declare the nullity of the contract.
6. CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

Latin America had a period of port reforms which aimed to eliminate the state monopoly that had high levels of inefficiency and create a new model in which they yielded the port operation to private companies through concession contracts. Colombia and Chile were the only countries that carried out these reforms entirely. However, based on the results obtained, it is observed that Colombia presents shortcomings in the scheme of port concessions and the regulatory function of the authority compared to the results obtained by Chile.

For this reason, this dissertation aimed legally compare the Colombian and Chilean systems, based on the legal framework, to identify what the similarities and differences were in the port concession scheme and the attributions that the port authority has in this matter.

The study carried out focused on achieving the objectives and answering the research questions raised in Chapter 1. For which the following aspects were considered:

First, Identify similarities and differences between the legal framework that regulates the port concession scheme in Colombia and Chile.

Second, determine whether or not there are differences and similarities between the regulatory role of the port authority on port concessions of both countries, if so, in which indicators variables, and what would the legal implications be of the presence of these similarities and differences.

Third, suggest modifications, if the analysis yields elements that would suggest or imply possible legal modifications, which could be a hint of improvement that could be suggested in the Colombian legal framework and in the role that the Colombian port authority has.
6.1 Conclusions

The comparative legal analysis leads to the following conclusions in the first aspect:

The authors concluded that there are similarities, between the legal framework that regulates the port concession scheme in Colombia and Chile in the following indicative variables:

- **Concession Contract Use**

  In both countries the law requires the use of the concession contract as a mechanism to authorize private operators to use and operate public ports. The above implies that the state will delegate to the entity in charge of regulating this process and determine the terms and conditions of the concession contract, in order to protect the public interests resulting from the exploitation of a national asset (Seaports).

- **Port Terminal Use and provision of port services**

  The legislation in both cases, establishes that use of terminals facilities and port services provision must be provided without interruption and with equality conditions for users. The above implies the concept of universality in access to public services, seeing that port operations are privatized does not mean that free access to the services offered by state assets can be restricted.

Furthermore, the authors concluded that there are differences between the legal framework that regulates the port concession scheme in Colombia and Chile in the following indicative variables:

- **Duration of the Concession contract**

  The duration period established by law in Colombia (20 years) is shorter than in the Chilean case (30 years). This aspect of the research suggested that the time period must be specified within the concession contract, and one of the factors that must be considered in determining
this time, is the payback period of the investments made by the private concessionaire in the port terminal.

- **Bidder Qualifications**

  The qualification of bidders is more restricted in the Colombian process compared to the Chilean one. The legal implication in this case is that in Colombia only those who constitute a regional port company may present themselves to tender, while in Chile any natural or legal person that meets the requirements established by law, may present themselves to bidding.

- **State Protectionism**

  In this variable, a difference was found, given that the Colombian legislation does not restrict the state's protection measures towards port companies and in the case of Chile, if it is restricted by law. The above implies that in Colombia the state may establish protectionist measures for port companies, while in the Chilean case it is not authorized, unless they are implemented for the entire private sector on equal terms.

The comparative legal analysis leads to the following conclusions in the Second aspect:

The authors concluded that there are similarities between the regulatory function of the port authority of both countries regarding port concessions in the following indicative variables:

- **Control and Supervision of Concession Contracts**

  In both countries the port authority has legal attributions to exercise the control and supervision function at this stage of the port concession contract.

  The legal implication of this finding is that the port authorities in both countries should direct and coordinate all supervision and control activities, such as plans, programs and orders
inherent to the inspection function, as well as designing coordination mechanisms with other State entities, in order to ensure compliance in port concession contracts.

- **Penalty for breach of the Concession Contract**

The legal regime of the two countries gives legal attributions to the port authorities to exercise the regulatory function of penalizing private concessionaires in case of concession contract breach.

Therefore, the legal implication of this finding indicates that the port authority of both countries has the regulatory function of guaranteeing that the breaches of the concession contract are penalized, and determining the amount of the fines that will be applied, or if it is the case, to declare the nullity of the contract.

Additionally, the authors concluded that there are differences between the regulatory function of the port authority of both countries regarding port concessions in the following indicative variables:

- **Planning Phase of the Port concessions**

  In the Colombian case, the port authority does not have legal attributions to execute the regulatory function in this phase of the port concession. Because the State granted that function to another state entity (National Planning Department). In contrast, in the Chilean case, the port authority does have legal attributions to exercise the regulatory function in this phase.

  The legal implications of this finding indicate that in the Colombian case, the regulatory functions of the port concessions are divided into different agencies, while in the Chilean case, they are unified by the port authority.
- **Structuring of the Concession Contracts**

In the Colombian case, the port authority does not have legal attributions to execute the regulatory function in this phase of the concession contract as the State granted that function to another State entity (National Infrastructure Agency). On the contrary, in the Chilean case, the port authority does have legal attributions to exercise the regulatory function in this phase of the concession contract.

The legal implications of this finding indicate that the Colombian port authority does not participate in the structuration process of bidding rules, selection procedures or the economic, financial and technical conditions of the future concession contract.

- **Evaluation and adjudication of the concession contracts**

In the Colombian case, the port authority does not have legal attributions to carry out the regulatory function at this stage of the concession contract while, in the Chilean case the port authority does have legal attributions to exercise the regulatory function in this contract concession phase.

The legal implications of this finding indicates, that the Colombian port authority has no participation in the evaluation of bidders, in terms of legal, economic, financial, technical, experience or other nature that the bidders must accomplish to be qualified. In addition, the Colombian port authority does not participate in defining the procedures of how the contracts will be awarded because the State granted that function to another State entity (National Infrastructure Agency). In contrast, in the Chilean case, the port authority has a regulatory function for bidders’ evaluation and contract adjudication.
6.2. Recommendations

After concluding the dissertation, the authors recommend that:

- The potential effects to modify the legal framework of the port concession scheme should be considered with respect to bidder’s qualification, allowing that any natural or legal person that meets the requirements established by law, can participate in bidding for port concessions as Chile has implemented, without having to establish a regional port society to participate in the bidding.

- In a future legal reform of Law 1 of 1991, rules that regulate the state protectionism applied in the port sector should be included, considering in which cases and under what conditions it should be used in the port concession contracts.

- A SWOT analysis of the role of Port authorities in Colombia should be carried out, in order to establish the advisability of continuing with a segmented regulatory role of port concessions, or if it is feasible to change to a unified regulatory role such as Chile has.

- Future research should use the findings obtained in this study, as a starting point to investigate the implications between them and port competition applying a mixed method (Qualitative-Quantitative).
References


Cárdenas Ramírez, (2018). Analizar el impacto de la ampliación física y logística del puerto de Tolu sucre.[Analyzing the impact on the physical and logistic enlargement of the port of Tolu – Sucre].

Castro, F., García, H., & Benavides, J. (2015). Estudio de impacto socioeconómico para el proyecto de recuperación de la navegabilidad por el río magdalena.[ Socio-economic impact study for the navigability recovery project of the Magdalena River].


DIMAR. (2019). The general maritime directorate; Retrieved from https://www.dimar.mil.co/

DIRECTEMAR. (2019). The general directorate of the maritime territory and merchant marine; Retrieved from https://www.directemar.cl/


DNP. (2013a). CONPES document 3744., 1-44.


Pérez-Valbuena, G. J., & Pérez-Valbuena, G. J. (2007). Historia, geografía y puerto como determinantes de la situación social de buena ventura. *Documentos De Trabajo Sobre Economía Regional Y Urbana; no.91*,


Viloria-de-la-Hoz, J. (1998a). La economía del carbón en el caribe colombiano. *Documentos De Trabajo Sobre Economía Regional Y Urbana; no.4,*

Viloria-de-la-Hoz, J. (1998b). La economía del carbón en el caribe colombiano. *Documentos De Trabajo Sobre Economía Regional Y Urbana; no.4,*


World Bank. (2007). *Port reform: Toolkit*