

Comparative Examples of Intermodal Logistic Platforms (ILP) in the Brazil

Olavo Celso Tapajós Silva¹, Jandecy Cabral Leite²

^{1,2}Research department of Industrial and Electrical the Galileo Institute of Engineering Education the Amazon (ITEGAM). Avenue Joaquim Nabuco N°. 1950, Center, ZIP: 69.020-030. Manaus, Amazonas, Brazil.

Abstract— *The need to show the evidences of the eight Logistics Platforms (LPs) in study and implantation in the different regions of Brazil. a summary of each platform, starting with the two logistics platform located in the Midwest (Goiás and Palmas), two in the State of Bahia (Juazeiro and Feira de Santana), two in the state of Rio Grande do Sul will be presented (Guaíba and a municipality to be chosen), one in Paraná, one in São Paulo and other platforms (dry ports and Customs stations Interior) scattered in other states. It will be approached aspects of interest of the research, such as geographical location, types of infrastructure, classification of the Platform (Unimodal or Multimodal), the phases of implantation or study of the Brazilian platforms. The objective is to make a comparative between the different regions where the LPs where they are implemented. Data analyzes the relationship between transport infrastructure and regional development, notably through the implementation of a LPs network located in specific parts of the country able to spread the impact of economic growth in areas lacking adequate transportation infrastructure for your productive potential. The study methodology has as theoretical framework the recognition that the implementation of a transport infrastructure is a necessary component to promote development, but it is not enough to promote development. The results from the analysis of the theories of regional development and programs implemented in Brazil for this purpose, it was found that dropout programs to supply the lack of transport infrastructure has resulted in large gaps that constitute barriers to national development in order to reduce this gap network deployment of logistics platforms from the Integration and development Hubs is presented as a tool to induce development and reduce inter-regional inequalities in Brazil in the three regions mentioned.*

Keywords— *Intermodal Logistics Platforms (PLIs), Multimodal Logistics, Internal Customs Stations, Integrated Logistics Center (CLI).*

I. INTRODUCTION

The importance of transportation infrastructures as one of the variables necessary to promote economic development is unquestionable, thus, Logistics Platforms (LPs) are of primary importance for Brazil [1] [2]. It can be argued whether these infrastructures are the starting point for the development of all the regions of the depressed country or if the need for their implantation derives from the endogenous development of a region that, through the natural expansion of its production, seeks to connect to other regions, creating a system in which, the greater its production, the greater the need to expand its network of economic relationships that, to be executed, depends on the transportation of goods and people, since the economic interrelations bring in his body the social interrelations [3] [4].

In Brazil, this option of structural and conceptual development is in the initial phase. It is noticeable that companies in the textile, furniture and footwear industries, for example, need to increase their flexibility

as a way of facing Chinese competition in a field other than price. The idea of LPs developed in Europe since the 1990s is still stagnant in Brazil [5] [6].

As for the structural development, it is necessary to develop the concept of LP first, so as to allow the prioritization of actions, such as regional development policies and the recovery of the transport structure by the government sector, necessary for the successful implementation of LPs [5] [7].

The LPs, according to [8], are a delimited area within which all activities related to transport, logistics and distribution of goods are carried out by different operators, both for national transit and for International. These operators can be owners, tenants of buildings, equipment, facilities (warehouses, storage areas and workshops) that are built.

The operation of a Logistics Platform (LP) should be coordinated by a single entity, aiming at maintaining the harmony and the working conditions that provide the advantages described in this work. The area related to LP,

shown in figure 01, adapted from [8] is that which must be coordinated by the Platform administration. Suppliers and markets are the agents that directly influence the

functioning of a platform [6]. Figure 1 shows an operation of a

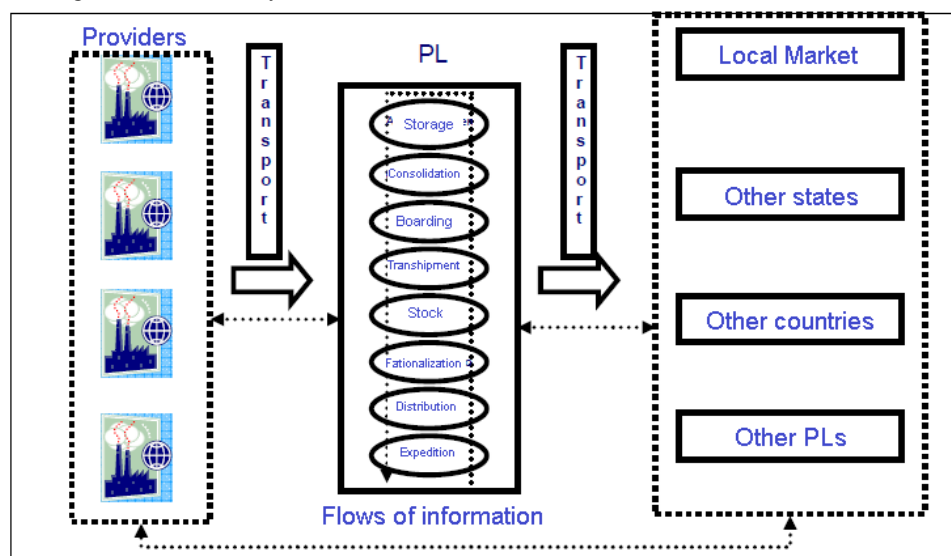


Fig.1 - Operation of a Logistics Platform.

Source: [6].

The development of a LP is not an easy task. As proposed by [10], it can be done following the 11 steps listed below: - Geographic localization, - Define supply (identify who the suppliers are, locate each category, identify the needs of the logistics network), - external and modal), Define storage, Determine the sub-zones (3 above), Define multimodal transport, Define logistics

services, Define customs services, Define information system, Determine security criteria, Define distribution, Determine protection criteria environmental.

As a way to better represent the development of these platforms, it follows figure 2, developed by [9].

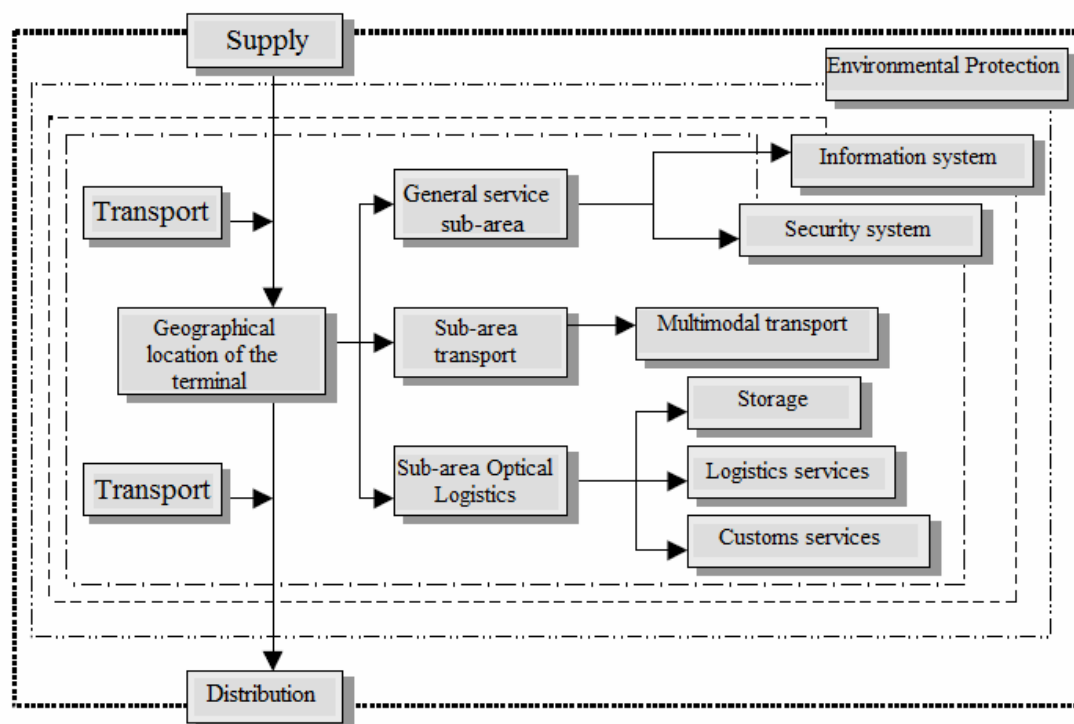


Fig.2 - Logistic Platform methodological scheme.

Source: [6].

II. LITERATURE REVISION

2.1 GOIÁS MULTIMODAL LOGISTICAL PLATFORM

The first of these logistics intelligence centers to be implemented in Brazil is the Goiás Multimodal Logistics Platform (GMLP), an initiative of the Goian government, to be installed in Anápolis, 52 kilometers from Goiás, the geographical center of the country. It will be located at the junction of important national road and rail logistic vectors, the country's main agribusiness route and the strategic center of the South American continent (SEPLAN-Goiás, 2005).

GMLP will promote for the first time in Brazil the concept of logistics intelligence center, combining multimodality, telematics and freight optimization. By means of efficient access to the axes of road, rail and airport transportation, it will allow integration with the main logistics routes in Brazil. The platform will be implemented in an area of 6,967,790 m², between the Agribusiness District of Anápolis (DAIA), the largest in the State, with 84 companies located and located in the city of Anápolis, and important axes for logistic integration, both aerial and terrestrial (road and rail). In addition to the handling of goods, storage and reception

of transit staff, the platform will cover all necessary logistics subsets to reduce handling costs. In the same space, in which the air, rail and road modalities will be integrated, the Land Transport Center, the Cargo Air Terminal, the Cargo Railway Terminal and the Services and Administration Center will be in operation. All these areas will have support infrastructure (energy, telecommunications and sanitation) and it will be possible to carry out [11]:

- Storage and distribution of the cold chain;
- Customs clearance and hiring of cargo;
- Processing, processing and packaging of goods;
- Concentration of deconcentration of loads;
- Financial and telecommunications services;
- Industrial assembly of products.

The state of Goiás is the first to implement a Logistics Platform in Brazil. Through its Secretariat of State for Planning and Development - SEPLAN, it was authorized by Law no. 14,040 of December 21, 2001, to implement the Multimodal Logistics Platform Project of Anápolis, situated 52 kilometers from Goiânia, the geographical center of the country. Figure 3 shows the Multimodal Platform of Goiás.



Fig.3 - Multimodal Platform of Goiás.

Source: [12].

2.2 LOGISTIC PLATFORM OF PALMAS (TO)

Tocantins presents itself as the state of national articulation. It is in the center of the country, being, therefore, the link between all the regions. To support this claim, the government of Tocantins has invested heavily in the intermodal transportation system formed by highways, waterways and railways that, interconnected,

will lead to Tocantins' production, to other states and to the international market, at more competitive prices [13].

In order to complete the intermodal transport system, which will facilitate the production flow, the state government develops, with the Ministry of Transport, a partnership for the definitive implementation of the

Araguaia / Tocantins waterway and the North / South railroad [14].

In Palmas, the state capital, the first Multimodal Agro-Food Logistics Platform is being structured, through a Franco-Brazilian technical cooperation agreement. The project provides for the construction of a Ceasa with separately designed areas for wholesalers of large and small sizes, environmental protection zone, storage area, manufacturing industry, port, loading and unloading platform, airport terminal, support and rail terminal.

2.3 PARANÁ LOGISTIC PLATFORM

The idea of transforming the state of Paraná into a network of logistics platforms throughout its transport system, inspired by the facilities of this type existing in France [15]. A great opportunity for Brazil, which still has a needy and outdated logistics infrastructure in relation to its competitors, show that it begins to give conditions to such logistics organizations.

The Paraná platform project is divided into four distinct phases [16]:

- The logistics master plan: it will subsidize the state's economic development plan, choosing priorities in order to achieve the best efficiency and perfect interaction between economic activities. Another dimension of the plan is the customs area, fundamental for the efficiency of the import and export process. For that, the Inner Customs Stations (EADIs) were created in Curitiba, Foz de Iguaçu, Maringá and Paranaguá.
- Paraná's seaports: another part of the "Paraná Plataforma Logística" project, is to make a strategic plan to direct the expansion and expansion projects of the Paraná port system (Portos de Paranaguá and Antonina), adapting the Port Authority and integrating with the other agents (importers, exporters, dispatchers, operators and public authorities). Another point of the project is to transform Paranaguá into a third generation port, which besides adding the industrial part that characterizes a second generation port, would have the dimension of a Logistics Platform.
- The Multimodal Pole of the West: aiming to add an East-West dimension to the "Growth Acceleration Plan - PAC" of the federal government, which provides for the transposition of the Itaipu dam, the Paraná government wants to develop the Multimodal Pole, which aims to integrate waterway projects through various modes of transportation. The idea of this Pole is to expedite the crossing of the three frontiers - Argentina, Paraguay and Brazil - with the creation of a customs port with structure for general cargoes and containers, to feed the interior of

Paraná, the automobile hub and the port of Paranaguá.

- The Logistics Institute: this dimension of the project has two aspects; capitalize and centralize knowledge and information to develop the logistics of the state and train and retrain the workforce for new demands of industrialization.

2.4 INTEGRATED LOGISTICS CENTERS - CLI

An Integrated Logistics Center (ILC) is an area that encompasses a number of logistics functions, operational support, industrial processing and other related functions. This concept was conceived by the State Secretary of Transport of São Paulo within the Transport Development Master Plan (TDMP) for the period from 2000/2020. This area is designed to house an intermodal road-rail terminal and a logistics platform capable of carrying out warehousing, distribution, consolidation and deconsolidation of containers, support services and bonded areas [17].

This Center was conceived as an intermodal cargo potential within the state of São Paulo, estimated at 56 million tons in 2000, with the Metropolitan Region of São Paulo (MRSP) as the hub of origin and destination. This project has finally demonstrated that the development of the railroad and the operation of this market depend, among other factors, for the implementation of a set of facilities that have been called Integrated Logistics Centers (ILC). The TDMP indicates that the ILC is a vital element for the transportation complex to meet the public and private objectives of the state of São Paulo (RMSP, 2008).

The state of São Paulo signaled investment, along with the private initiative, in the order of R \$ 1 billion in the consolidation of a new export corridor, a Logistics Platform that will allow warehousing services, merchandise transfer and other types of cargo sharing, products, intermodal terminals, container and mobile transfer equipment, as well as communication facilities, workshops, hotels and whose main attraction will be the integration of the Campinas - Vale do Paraíba - Litoral Norte route [18].

2.5 DRY PORTS

Porto seco is a customs terminal of public use, located in a secondary zone of the customs territory, for the provision by third parties of the public services of movement and storage and customs clearance of goods and baggage, coming from abroad or destined under control customs office. Dry port is the name that is given, currently the old Internal Customs Stations (EADIs), created from the legal permission contained in Decree-

Law 1455/76 and currently governed by Decree 4.543 / 02. The services developed in dry ports may be delegated to legal entities governed by private law whose main purpose is to store, store or transport goods, cumulatively or not. The delegation is carried out by means of concession or permission of public service, after the accomplishment of competition. They are installed, preferably, adjacent to the producing or consuming regions [19].

2.6 INTERIOR CUSTOMS STATIONS - EADIS

Since 1996, a project that simplifies the creation of EADIs - Interior Customs Stations has been processed in the Brazilian National Congress. EADIs have the same bureaucratic structure necessary for foreign trade and are normally concentrated in ports, airports and border posts, such as tax inspectors of the Federal Revenue, responsible for the inspection of import taxes, health surveillance inspectors and Federal Police agents.].

The location of the first 11 EADIs was made in agreement with the state governments and meeting geoeconomic criteria translated by high concentration of import and export cargoes. Thus, EADIs were defined in Santo André and Campinas (SP), Brasília (DF), Cascavel (PR), Caxias do Sul (RS), Anápolis (GO), Manaus (AM), Salvador (BA), Juiz de Fora (MG), Recife (PE) and Resende (RJ).

The EADIs located in secondary zones (far from the ports and airports), gather the services of Customs Warehouses, allowing the warehousing of the merchandise under consignment, without import guide or exchange coverage and nationalization of the merchandise. And Customs Warehousing services, where the products imported or for export are stored under any customs regime with exchange coverage. The Customs Retrofitting Terminals (CRTs), located at a distance of not less than 5 km from the primary zones, are authorized to carry out the customs control of import cargoes shipped only in containers. After the containers have been dismantled, the goods can be stored for a maximum period of 90 days until they are cleared [15].

2.7 OTHER LOGISTICAL PLATFORMS UNDER CONSTRUCTION IN BRAZIL

In Europe, where there is a great concentration of Platforms, the existing models have been analyzed and studied by several European authors, among them. In Brazil, studies and partnerships with governments of European countries are being developed for the construction of Multimodal Logistics Platforms, which will be presented below and are illustrated in figure 4 [18].



Fig.4 - Map identifying the Brazilian states with Logistics Platforms in the study or deployment phase.

Source: Adapted by the authors, (2019).

2.7.1 TERMINAL DE GUAÍBA - TERGUA (RS)

The privileged geographical location of the Multimodal Port Terminal - Tergua, in the Municipality of Guaíba, in the state of Rio Grande do Sul, near the Mercosur Industrial Center, as well as its excellent strategic locations, which allow interconnection with the waterways, railways in the interior of the State of Rio Grande do Sul, makes it possible in the short and medium term to reduce bottlenecks in the release of cargo and services from pre- and post-port activities, encouraging the attraction of private investment to the region and to facilities to support the system, since it emphasizes the optimization of the waterway as the main means of transporting goods and cargo [20].

The Tergua Project proposes a reduction of the operational costs in the movement of goods through the use of this new location logistics option. There are several factors that cause changes in the direction of a country's exports or its imports, as well as its origins and destinations, among several, high freight costs and the precariousness of highways stand out in the case of Brazil.

The Tergua Project proposes the occupation of 350 hectares for the installation of a Port Terminal (Cais) and infrastructure in the retro-port area in the Industrial District of the municipality of Guaíba / RS with an enterprise that includes modern port facilities that will allow the installation of a new Industrial Pole in the metropolitan region of Porto Alegre, contributing significantly to the development of the southern half of the State of RS. In addition to these aspects, the Tergua Project proposes a reduction in the operational and transportation costs of goods (by up to 30%), in addition to the increase in economic activity, Research & Development, increase in income and employment [20].

2.7.2 MULTIMODAL TRANSPORTATION LOGISTIC PLATFORM - JUAZEIRO (BA)

The project for the construction of the platform is being developed by the Bahia government through the Secretariats of Planning (SEPLAN-BA) and Infrastructure (SEINFRA), in partnership with the Government of Spain, through the Ministry of Industry, Tourism and Commerce, responsible for release of the donation of 300 thousand euros destined to the realization of the Feasibility Study for the Implementation of a Multimodal Logistics Platform of Transport in Juazeiro [21].

Currently, the project is in the phase of selecting the company that will prepare the feasibility study, which will serve to define the characteristics of the Logistics

Platform. Depending on what is identified, a Multimodal Platform that links railways, waterways, highway and air transport can be installed - or just the conjunction of some of these modalities. This will facilitate the flow of agricultural production in the region.

The Government of Spain donation was made through the Feasibility Studies Financing Lines (FSFL), which are an instrument of commercial policy managed by the Directorate General of International Financing of the Ministry of Economy of Spain. The LFEV is divided in three modalities: Public, Private and Multilateral.

The FSFL in the public mode is a financial instrument of cooperation to finance the feasibility studies carried out by Spanish companies for projects or programs of common interest in the beneficiary countries. This modality is implemented through the donation of the feasibility study carried out by a Spanish company by the Government of Spain to the Government of the beneficiary country.

2.7.3 INTEGRATED LOGISTICS CENTER (CLI) - SANTANA FAIR (BA)

The logistics center, which will promote intermodality between ports, highways and railways, airports and waterways in cargo transportation, established to be installed by the State Transport Logistics Program (PELTBAHIA). The Integrated Logistics Center (ILC) should be installed in the city of Feira de Santana, in the state of Bahia [21].

The state of Bahia, sought the partnership of the French in the implementation of the project, aiming to absorb the experience and high technology European. For the executive, Feira de Santana is an extremely strategic point for the arrival of the logistics center. The city is close to BR-116, BR-101 and Aratu Port, he says, citing that the platform will be made in partnership between the Luís Eduardo Magalhães Foundation (FLEM) and the State Secretariat of Planning (SEPLAN), in addition to SEINFRA and the ADÉFRANCE Foundation [21].

Besides the possibility of the international agreement with France, Spain is also interested in the implementation of more logistics platforms in the interior of the state. According to Gordilho, the Spanish have Juazeiro as an area of attention, and should invest in the financing of feasibility studies (LFEV) modality, and can donate around 300 thousand euros to carry out project studies [18].

2.7.4 LOGISTIC PLATFORM IN RIO GRANDE DO SUL

In addition to the Tergua project in the municipality of Guaíba, the government intends to build another Logistics Platform in Rio Grande do Sul; to this end, representatives of the State Transport Secretariat and the Spanish company Advanced Logistics Group (ALG) met to begin a roadmap that aims to analyze the cities and regions with the best conditions for the implementation of a Multimodal Logistics Platform. The working group sought information to compose a study that will serve as a basis for the Strategic Transportation Plan (STP). In addition to Rio Grande, the technical team also visited the port of Pelotas. Other municipalities were visited as: Uruguaiana, São Borja, Passo Fundo, Santa Maria, Caxias do Sul, Estrela, Triunfo, Novo Hamburgo, Guaíba, Canoas and Porto Alegre [22].

Funded by the Government of Spain, the plan aims to concentrate all the necessary infrastructure for the cargo movement in Rio Grande do Sul, as well as the installation of industries that will give the final finishing to the products. The working group will also meet with business entities and unions linked to the logistics sector to discuss the implementation of the Logistics Platform and its importance for the development of the State.

With the objective of planning and implementing infrastructure programs in the road sector, the Strategic Transport Plan has the objective of incorporating to Rio Grande do Sul an investment program with a perspective of actions to be adopted for the next 20 years [23].

2.8 SYNTHESIS OF LOGISTICAL PLATFORMS IN BRAZIL

Analyzing the proposal of the Goiás complex (Goiás and Anápolis), we clearly see the intention to formalize a multimodal logistics platform, where the main objectives are: implementation of the cold chain, improvement in the customs clearance process, processing, and packaging of cargo consolidation and deconsolidation, administrative, financial and telematic services. This complex demonstrates intermodality through the following modes of transportation: Anápolis airport, Centro Atlântica and Norte-Sul railroad, BR 153, BR 060, Tietê-Paraná waterway and Porto Seco Midwest S.A.

In the Bahia complex (Juazeiro and Feira de Santana), there is also the desire to formalize a multimodal platform, through the Planning and Infrastructure Departments of Bahia, as well as the State Transport Logistics Program (PELTBAHIA). This complex will formalize intermodality through the port of Aracatu, the BR 116 and 101 highways, among other intermodal connections.

While in the Rio Grande do Sul complex (Tergua and Rio Grande do Sul), there is a clear intention to transform the complex into multimodal platforms, through the Multimodal Port Terminal - Tergua, the State Department of Transportation and other state and federal agencies, as well as Transport Strategic Plan (TSP). This complex evidences intermodality through the highways RS-124, BRs 290 and 116, besides the port of Pelotas.

At the Palmas (TO) and Paraná Platforms and at the Integrated Logistics Center in São Paulo, the same intention is observed for the implementation of multimodal platforms, through the connection of several highways, the waterway (Araguaia / Tocantins) and the railroad (North / South) connected to the state of Tocantins, while in the state of Paraná, the implementation of the platform is associated to a project of four distinct phases: logistics master plan, Paraná sea ports, west multimodal pole and logistics institute. In the state of São Paulo, the platform is characterized by the Transport Development Master Plan (TDMP) for the period from 2000/2020. This proposal meets the intermodal load potential within the state of São Paulo, estimated at around 56 million tons, with the Metropolitan Region of São Paulo (MRSP) as the hub of origin and destination.

With regard to Dry Ports or the Internal Customs Stations (EADIs) installed in our country, they can be classified as multimodal platforms in Brazil, according to denomination of the Ministry of Public Works of Spain.

It is observed that there are several studies in progress and implantations of infrastructures of logistic platforms in Brazil. However, it is not possible to show a single systematic procedure in the design of a logistical platform model. The European model (France and Spain) has prevailed in Brazilian conceptions [9]. In the bibliographic review it was not possible to show another author, besides [24], who studies and establishes a procedure for the design of Logistics Platforms under the European approach, without taking into account the unimodal and multimodal classification. Therefore, the proposal of this research becomes very interesting in terms of the possibility of merging the European, American and Asian conceptions in the proposal of the implantation of Unimodal and Multimodal Logistics Platforms for the Amazon Region, making academic research innovative, with the creation of a procedure for the design of a model of logistics platforms with intercontinental experiences, in addition to the European experiences already incorporated in the study.

It is important to note that most of the Logistics Platforms under study in Brazil are linked to sea ports,

not excluding the possibility of PL deployment in fluvial or inland ports, or even in dry ports.

III. APPLIED METHODOLOGY

The methodology used allowed the analysis of the economic viability and the regional characteristics and the infrastructure potential and the main aspects of PLs in Brazil. The regional profiles that allowed the study for the proposal of a procedure that allows a Regional Logistics Platform (RLP) model were verified.

IV. RESULTS

Analyzing the proposal of the Goiás complex (Goiás and Anápolis), we clearly see the intention to formalize a multimodal logistics platform, where the main objectives are: implementation of the cold chain, improvement in the customs clearance process, processing, and packaging of cargo consolidation and deconsolidation, administrative, financial and telematic services. This complex demonstrates intermodality through the following modes of transportation: Anápolis airport, Centro Atlântica and Norte-Sul railroad, BR 153, BR 060, Tietê-Paraná waterway and Porto Seco Midwest S.A.

In the Bahia complex (Juazeiro and Feira de Santana), there is also the desire to formalize a multimodal platform, through the Planning and Infrastructure Departments of Bahia, as well as the State Transport Logistics Program (PELTBAHIA). This complex will formalize intermodality through the port of Aracatú, the BR 116 and 101 highways, among other intermodal connections.

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In the state of São Paulo, the platform is characterized by the Transport Development Master Plan (PDDT) for the period from 2000/2020. This proposal addresses the intermodal load potential within the state of São Paulo, estimated at around 56 million tons, having as its source and destination the Metropolitan Region of São Paulo (RMSP, 2008).

With regard to Dry Ports or the Internal Customs Stations (EADIs) installed in our country, they can be classified as multimodal platforms in Brazil, according to denomination of the Ministry of Public Works of Spain.

It is observed that there are several studies in progress and implementations of infrastructures of logistic platforms in Brazil. However, it is not possible to show a single systematic procedure in the design of a logistical platform model. The European model (France and Spain) has prevailed in Brazilian conceptions (DUARTE, 1999). In the bibliographic review it was not possible to highlight another author, besides studying and establishing a procedure for the design of PLs under the European approach, without taking into account the unimodal and multimodal classification.

Therefore, the proposal of this research becomes very interesting in terms of the possibility of merging the European, American and Asian conceptions in the proposal of the implantation of Unimodal and Multimodal Logistics Platforms for the Amazon Region, making academic research innovative, with the creation of a procedure for the design of a model of logistics platforms with intercontinental experiences, in addition to the European experiences already incorporated in the study.

It is important to note that most of the Logistics Platforms under study in Brazil are linked to sea ports, not excluding the possibility of PL deployment in fluvial or inland ports, or even in dry ports.

Table 1 presents a summary of the aspects of interest of the research, such as: geographical location, types of infrastructure, classification of the Platform (Unimodal and Multimodal), the implementation phase or study of the Logistics Platform in the Brazilian territory, already described previously. It is observed that there is a relationship with the selected aspects (types of infrastructure, intermodality systems and expansion plans) in the nine International Logistics Platforms selected in this study, mainly with the aspects chosen in the Logistics Platforms in Brazil.

Table 1 - Comparative aspects of Logistics Platforms in Brazil.

Aspects of Research Interest	Logistics Platforms in Brazil									
	Anapólis	Palmas	Paraná	São Paulo	Portos Secos	EADIs	Guaíba	Juazeiro	Feira de Santana	Rio Grande do Sul
Geographic location	State of Goiás	State of Tocantins	State of Paraná	State of São Paulo	Various states	Various states	State of Rio Grande do Sul	State of Bahia	State of Bahia	State of Rio Grande do Sul
Types of infrastructure	Integration of aerial, rail and road modalities. The Land Transport Center, Air Terminal, Cargo Terminal and the Services and Administration Center will be in operation.	Intermodal transport formed by highways, waterways and railways. The most important works on the platform are the completion of the Araguaia / Tocantins waterway and the North / South railroad.	Implement the Logistics Master Plan, improve the infrastructure of the Paranaguá and Antonina ports, transpose the Itaipu dam and create the Institute of Logistics.	Intermodal road-rail terminal to meet warehousing, distribution, consolidation and deconsolidation operations of containers, support services and bonded areas.	Bonded terminal of public use, located in a secondary zone of the customs territory, destined to the provision of public services and logistics of merchandise and luggage from abroad.	Bonded terminal of public use, located in a secondary zone of the customs territory, destined to the provision of public services and logistics of merchandise and luggage from abroad.	Connections to the road, railway and waterway networks in the interior of RS. Construction of a road-rail bridge over the Jacuí River and pavement of only 14 km of road to the municipality of Eldorado do Sul.	It will promote intermodality between ports, highways, railways and waterways for cargo transportation.	It will promote intermodality between ports, highways, railways and waterways for cargo transportation.	Connections to the road, railway and waterway networks in the interior of RS. Construction of a road-rail bridge over the Jacuí River and pavement of only 14 km of road to the municipality of Eldorado do Sul.
Platform classification (Unimodal or Multimodal)	Multimodal Logistic Platform	Logistic platform Agroalimantar Multimodal	Multimodal Logistic Platform	Integrated Logistics Center	Multimodal Logistic Platform	Multimodal Logistic Platform	Multimodal Logistic Platform	Multimodal Transport Logistics Platform	Integrated Logistics Center	Multimodal Logistic Platform
In the project phase (deployment)	Yes	No	No	Yes	Yes	Yes	No	No	No	No
In the study phase	No	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes

Source: Authors, (2019).

V. CONCLUSION

When meeting the established objectives of the research, it was verified that the aspects of interest were taken care of the geographic locations, the types of infrastructures and the classifications of the Platforms (Unimodal or Multimodal). The analyzes used to identify the PLs in Brazil where they were established in Table 1 where the results of each region are shown the competitive advantages of each of them, this shows that Brazil needs to develop these PLs in order to be able to dispose of all the existing production for the market internal and export.

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