

## ENVIRONMENTAL AND SOCIAL STRATEGY <sup>1</sup>

**BR- L1109**

**BRAZIL**

**March 2007**

<b>Project name:</b>	TECON SANTA CATARINA (Formerly Itapoá Port Project - BR-0347 <sup>2</sup> )
<b>Country:</b>	Brazil (State of Santa Catarina)
<b>Sponsors:</b>	Aliança Navegação e Logística Ltda. (Brazil) (Hamburg Süd Group/Germany) Portinvest Participações S.A. (Brazil) (a company of Conglomerado Battistella)
<b>Project cost:</b>	Approximately US\$140.1 million
<b>Proposed IDB Participation:</b>	IDB A Loan: up to US\$35.0 million IDB B Loan: up to US\$50.0 million
<b>Group Head:</b>	Michael Ratliff
<b>Project team:</b>	John Graham, Elizabeth Brito

### **I. PROJECT SUMMARY**

#### **A. Nature of the project**

- 1.1 The project consist of the construction and operation of a US\$140.1 million fully-private, public-use, greenfield container port (the “Project”) with the infrastructure and superstructure for container berths, warehousing and logistics facilities and an access road that traverses the Project area. The Project Company is *Itapoá Terminais Portuários S.A.* (“ITP,” or the “Company”). The Project Sponsors are *Portinvest Participações S.A.*, a company of Conglomerado Battistella of Brazil and Hamburg Süd Group of Germany through its sister company *Aliança Navegação e Logística Ltda.*, of Brazil (collectively, the “Sponsors”).
- 1.2 The states of Santa Catarina and Paraná in the southern region of Brazil have attracted substantial domestic and foreign direct investment in manufacturing exports and agribusiness during the past decade. Unfortunately, the regional infrastructure in ports and logistics is not adequate to handle the demand for port services. Regional ports of São Francisco do Sul, Itajaí and Paranaguá have reached their limit capacity in terms of traffic, so producers and shipping companies currently pay the costs of waiting time and port fees that constrain their ability to compete in export markets.
- 1.3 The TECON SANTA CATARINA is being implemented in response to such demand. The Project will add an additional 300,000 containers per year once the Port has reached its operating

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<sup>1</sup> This Environmental and Social Strategy (ESS) is being made available to the public in accordance with the Bank's Policy on Disclosure of Information. The ESS has been prepared based primarily upon information provided by the project sponsors and does not represent either the Bank's approval of the project or verification of the ESS's completeness or accuracy. The Bank, as part of its due-diligence on the feasibility of the project, will assess the environmental and social aspects. This assessment will be presented in the project Environmental and Social Management Report, prepared by the Bank, and will be made available to public prior to consideration of the project by the Bank's Board of Executive Directors.

<sup>2</sup> The Bank was originally mandated by the previous sponsors in 1999 regarding the Project after being declared eligible in July of that same year. Due to a merger, the lead sponsor at the time (Groupe GTM) withdrew its interest in the project, and the transaction itself was placed on hold.

potential. The Project will help alleviate additional waiting times, provide additional competition regarding handling and storage fees and allow further specialization among the existing ports such that each port will handle the cargo type (containers, liquid cargo, grains, etc.) for which it is most suited.

## **B. Project Description**

- 1.4 The Project is being implemented in the Babitonga Bay (also known as São Francisco Bay), in the municipality of Itapoá, State of Santa Catarina, Brazil (See Site Figure), opposite to the São Francisco do Sul Port.<sup>3</sup> The Port will primarily serve the following cities (distances from the Port to the cities): Curitiba (156km), Paranaguá (150 km) in the state of Paraná and Florianópolis (265 km), Joinville (88 km), Blumenau (193 km), Itajaí (180 km) in the state of Santa Catarina.
- 1.5 The Port is located on the outskirts of the Municipality of Itapoá away from the city center and the small town's roughly 10,000 inhabitants. Inland transportation to and from the Port will not traverse the town center, but rather will be routed through a major federal highway (BR-101) by way of state roads SC-412 and SC-415, which is being upgraded and expanded to a double-lane road during 2007-2008, under a US\$50 million loan to the State of Santa Catarina from *Corporación Andina de Fomento* ("CAF")<sup>4</sup>. The Port will also benefit from the pre-existing deep water access canal (13-28.0 m) to the existing São Francisco Port, which is located in the opposite side of the Babitonga Bay, used as the primary oceanic shipping routes.
- 1.6 The decision to locate the Port at the municipality of Itapoá was based on a number of positive physical and logistical attributes of this particular site. A primary factor in the selection of the Itapoá site is the possibility of using the same mooring procedures of Port of São Francisco do Sul, taking advantage of the access channel, and an existing evolution basin of approximately 1.200 meters, which have the proper depths for big size ships up to 120.000 DWT and full-containers with up to 16 meters of draft. The access channel in the estuary follows the alignment of the thalweg of River São Francisco do Sul, with depths that vary from 13.0 m to -28.0 m., thus requiring no dredging and minimizing additional environmental and social impacts. Other factors included i) the possibility of designing the alignment of the pier following the prevailing direction of the isobathic to facilitate the ships have direct access to the pierage, thus reducing maneuvering and consequently risks of accidents; ii) its proximity to the inland market and ocean shipping lanes; iii) the ease of access to the Port itself without traversing the municipal center; and iv) the complete ownership by the Project Sponsors of the total project area of 97.550 m<sup>2</sup> (9.75 ha) located within the area classified in the Municipal Land Use Plan of 1996 as Area for Port Activities (*Área de Vocação Portuária / Lei Municipal 139/96*).
- 1.7 The Port will be implemented in two different phases. In its first phase of construction the Port will have two berths 315 m long each with a total 630 m, about 230m from the shore, linked by a bridge (See Figure 1). In the second phase a berth at the internal side will be built as well as a new bridge (See Figure 2). Other facilities include the administration and operation of the Port, located in the rear of the port facility with a total of approximately 6,000 square meters (administration and operational support buildings, container inspection station for customs and other support facilities necessary to the proper functioning of the Port, such as maintenance and repair. In addition, the terminal will include a small biomass power generator station for emergency use only, water tower, illumination systems, smaller boat connections, fire-fighting station and the communications system for the port complex itself. There will also be a small access road that will cross the port complex leading container trucks to the loading and storage zones.
- 1.8 Construction started in March 2007 (worker's camp, area demarcation, topography and other mobilization activities) with civil works to start in 60 to 90 days, under the responsibility of

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<sup>3</sup> The 5th largest port in Brazil, inaugurated in 1955 and administered by a State of Santa Catarina's agency (Administração do Porto de São Francisco do Sul – APSFS).

<sup>4</sup> The road concession has been approved by the State Government, and will be published in March 2007. Construction is to start in 90 days, approximately.

Andrade Gutierrez (EPC contractor) , one of the largest construction companies world-wide and is expected to be completed over a period of approximately 18 months. The Operation and Maintenance (“O&M”) of the port will be managed from within the consortium by personnel from Aliança/Hamburg Süd, based on its vast global experience in the shipping and container handling business.<sup>5</sup>

## II. DEVELOPMENT IMPACT

### A. ENVIRONMENTAL AND SOCIAL STRATEGY

#### A.1 Legal Status

- 2.1 Under the current Brazilian regulatory framework<sup>6</sup>, the Project will be established as a private port on private land with the authorization to develop the Port given directly by the Federal Government. The Project will be executed pursuant to a Water Transport License (the “License”) from the *Agencia Nacional de Transportes Aquaviarios* (“ANTAQ”), which was signed by ITP and ANTAQ in April 2005. Navy clearance was also issued in August of 2003, subject to a list of conditions that ITP must follow during the construction and operation of the Port. The License is for an indefinite period of time provide that the facility is operated as an open facility for public use and that there are no material instances of breach under the License. Technical standards and monitoring will be performed directly by the Ministry of Transportation (ANTAQ) under the terms and conditions included in the License and other relevant regulations.
- 2.2 With regard to the environmental permits, according to CONAMA Resolution no 237/1997, the environmental licensing of projects located in the territorial sea or continental plataforma (“*mar territorial ou na plataforma continental*”) is the responsibility of IBAMA, the Brazilian Institute of Environment and Renewable Resources. Under the National Environmental Policy Law 6,931/81 and CONAMA (National Environmental Council) Resolution 01/86 and 237/97, the Company submitted an Environmental Impact Study (EIA) and the corresponding Environmental Impact Statement (*RIMA -Relatório de Impacto Ambiental*) to the national environmental agency (*IBAMA – Instituto do Meio Ambiente e dos Recursos Naturais Renováveis*) who issued the Previous License (LP 102/2001) was issued on 31 de July 2001 upon approval of the EIA and after the required public hearing took place on 22 March 2000, in Itapoá, Santa Catarina had taken place.
- 2.3 Subsequently, upon the approval of the Environmental Management Plan (*Plano Básico Ambiental*), IBAMA issued the Installation License 228/2003 on 13 October 2003, which was renewed on 10 November 2005. In December 2005, IBAMA issued the Authorization for Vegetation Suppression of an area of 2.5 ha, which accounts for approximately only ¼ of the total project area (See paragraph 1.6). As a compensation requirement under Brazilian legislation (that a minimum of 0.5% of the project cost be dedicated to impact compensation) IBAMA established an estimate amount of US\$1 million dollars (over the minimum of 0.5%) to be invested in five conservation areas– four National Parks and one State Park.
- 2.4 In 2003, Itapoá received its Installation License from IBAMA for a multiple-use terminal for a period of two years. This license was duly renewed in November of 2005 by IBAMA, and covers both phases. The possession of the Installation License is a key event in that it allows the Company to commence construction once the Sponsors have finalized all of the necessary

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<sup>5</sup> Hamburg Süd operates the port complex at Hamburg, but also provides operator services to other facilities, including the Port of Santos, where the group maintains substantial traffic.

<sup>6</sup> The Port Modernization Law 8630 of 1993 (the “Port Law”), established the legal framework for the operation of port facilities by the private sector. Such facilities require a direct authorization from the Ministry of Transport after a non-objections from the Customs Authority, the applicable municipal government, and after having an approved Environmental Impact Study (EIA). In the case of ITP, the Sponsors have complied with these requirements.

contracting. The construction has started in March 2007 and is estimated to be completed in 18 months. If necessary, the Installation License could be renewed pursuant to a similar review process with IBAMA. The Project is also in compliance with the Municipal Land Use Plan of 1996<sup>7</sup> (see paragraph 1.6)

## A.2. Project Impacts

- 2.5 Due to the Port's medium size, the project's design and characteristics, to the characteristics of the site, which presents no sensitive natural resources, and to its location opposite to 5<sup>th</sup> largest Port in Brazil, the TECON SANTA CATARINA is not likely to cause significant negative and associated environmental social impacts, or to have profound implications affecting natural resources. Contrariwise, it is likely to have mostly local and short-term moderate negative direct and indirect and cumulative impacts for which effective mitigation measures are readily available and implementable. The TECON SANTA CATARINA is considered to be of a medium size (approximately 450 thousands TEU) whereas a large size port such as Sao Francisco do Sul Port or Santos Port handles above 1,2 million TEU<sup>8</sup>. Therefore, given the project size, design and characteristics, its location away from, and with no potential direct or indirect impacts on, sensitive natural resources, given the project's mostly local and short-term moderate negative direct and indirect and cumulative impacts, and availability of standard effective mitigation measures, given that the Project will not significantly convert or degrade critical natural habitats or damage critical cultural sites, and has no potential direct, indirect or cumulative negative impacts on indigenous peoples, the Project Team proposes a classification of "B", as defined in the Bank's Environmental and Safeguard Compliance Policy.
- 2.6 The primary potential negative environmental impacts of the project are likely to occur during the construction of the Port, mainly associated with potential permanent changes to the morphology of the site, both onshore and offshore, due to changes in the sediment transport patterns. However, this probability is minimized given that the pier has been designed using an open structure, which will significantly minimize current and sediment transport disruption. In addition, the berth runs parallel to the coast, which also presents minimum potential to affect sediment transport. Other potential negative environmental impacts may include soil erosion of exposed areas, dust generation due to the land movement, and limited loss of vegetation in the project area (See paragraph 2.3). Potential social impacts related to the project during construction include temporary<sup>9</sup> accessibility impacts to local beaches and communities, due to increased heavy traffic and safety risks in the project area, temporarily limiting the access to a portion of the Itapoá beach until the bridges are completed. Other potential negative impacts of the work force in the existing population in the surrounding area and potential impacts to the artisanal fishery are not expected to be relevant given the location of the artisanal fishermen colonies, the characteristics of the construction process (maximum of approximately 800 workers in the peak period, thus absorbing much of the local workforce) and the use of the existing marine access channel and evolution basin of the San Francisco Port, thus with no additional relevant impacts on the marine environment and fishermen activities. Given that the Company retains full ownership of the land where the Project will be located and given that such lands are not inhabited, the project will not require resettlement or physical displacement of families.
- 2.7 During operations, the principal potential negative environmental impacts are related to the heavy container traffic, operational noise of large cranes, and risks of accidents during ship maneuvering, including potential fuel leaks and spills. Given that the area already includes the San Francisco Port, the 5<sup>th</sup> largest port in Brazil, and given that the TECON SANTA CATARINA will only handle containers, its operation is not likely to present many of the common impacts of other ports, such as inadequate disposal of hazardous wastes and development of socially undesirable activities.

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<sup>7</sup> In 2006, the Municipality has expanded the industrial area to accommodate future expansions of the "retroport" activities.

<sup>8</sup> Twenty Feet Container Equivalent Unit

<sup>9</sup> Construction is estimated to be completed in 18 months, approximately.

- 2.8 There are no transboundary issues associated with the Project. The Project will not significantly convert or degrade critical natural habitats or damage critical cultural sites. The Project has no potential direct, indirect or cumulative negative impacts on the indigenous peoples, given that there are no indigenous peoples in the project area and its direct and indirect area of influence, and therefore no physical, social, cultural, or economic interaction with indigenous peoples or indigenous areas. Similarly, the Project does not present a potential for mainstreaming indigenous peoples interest or exploring potential benefits for the indigenous peoples.
- 2.9 The potential positive impacts of the TECON SANTA CATARINA during construction include new employment opportunities and economic benefits to the Municipality of Itapoá due to the payment of taxes by the project. During operations, the Port is likely to have a positive economic impact in the State of Santa Catarina, mainly from taxes, as well as providing economic reactivation in many sectors associated with the employment opportunities related to the terminal's operations. The new Terminal will also help alleviate additional waiting times, provide additional competition regarding handling and storage fees and allow further specialization among the existing ports such that each port will handle the cargo type (containers, liquid cargo, grains, etc.) for which it is most suited. There might also be a positive impact at a regional level in relation to the redirection of cargo and trucks from the São Francisco do Sul Port.
- 2.10 With regard to other potential risk factor, the main corporation, Conglomerado Battistella, seems to have adequate governance capacity, with extensive experience related to environmental activities due to their strong involvement in the forestry industry, with their forestry companies certified since November 2003 with the Practical Conservation through Certified Forestry certification number SW-FM/COC-1070 issued in accordance to the Smart Wood Program<sup>10</sup> and the Forest Stewardship Council (SFC). In addition, through its companies, the Battistella Group implements extensive corporate social responsibility activities, involving environmental education, municipal waste management, and support to public educational and health programs, among the principal.
- 2.11 The Sponsors have hired RioInterport, an engineering and environmental consulting firm specialized in port activities, to develop and implement the environmental and social management plans, programs and procedures for the Project. Reports on the implementation of the ten proposed environmental plans (including the water quality monitoring, monitoring of the mangrove<sup>11</sup> in the area of indirect influence, and the off set compensation established by IBAMA, among others) are submitted to IBAMA on semi-annual basis, starting three months prior to commencement of construction. The first report will be sent to IBAMA in April 2007.
- 2.12 The Port will operate according to the International Ship and Port Facilities Security Code (ISPS Code). The objectives of this Code are to establish an international framework involving co-operation between Contracting Governments, Government agencies, local administrations and the shipping and port industries to detect/assess security threats and take preventive measures against security incidents affecting ships or port facilities used in international trade.

### **A.3. Strategy for the Environmental and Social Due-Diligence**

- 2.13 The Bank will apply to the Project the new Environmental and Safeguard Compliance Policy and the Disclosure of Information Policy.<sup>12</sup> The Project Team proposes a classification of "B", as defined in the Bank's new Environmental and Safeguard Compliance Policy (See paragraph 2.7). While the Project Company has already implemented various information disclosure and public consultation activities as part of the EIA approval and environmental permit issuance, the Bank will assess as part of its environmental and social due-diligence (ESDD) whether additional

<sup>10</sup> Coordinated by the Rainforest Alliance, an international non-governmental organization.

<sup>11</sup> The mangroves are protected by Brazilian legislation and therefore, as a precautionary measure, the Project company is monitoring the mangroves that are located approximately 2.5 km upstream the Project site even though they are not likely to be impacted.

<sup>12</sup> As previously stated the Indigenous Peoples Policy and the Involuntary Resettlement Policy are not applicable to the Project (See paragraphs 2.8 and 2.9).

actions are required during the project construction and operation phase. The Independent Environmental and Social Consultant of the Bank will participate alongside the Independent Engineering Consultants to ensure that the all environmental and social, health and safety and labor aspects of the construction and operation of the Port are fully assessed, in particular, in the following aspects:

- (i) Compliance with all governmentally permit/authorization requirements (i.e., permit conditions, requirements); all applicable in-country environmental, social and health and safety regulatory operating requirements (i.e., design characteristics, reporting, monitoring, etc.); and all applicable international environmental treaties and conventions;
- (ii) Adequacy and completeness of the EIA and any additional studies performed;
- (iii) Adequacy and sufficiency of the proposed Environmental, Social and Health and Safety Management Plans (PBA), particularly in terms of mitigation and monitoring programs during construction and operation;
- (iv) Adequacy and sufficiency of the public consultation, social communication, and information disclosure already performed during the EIA process and those ongoing activities performed during project construction and operation to inform the public of project status, activities, changes, etc;
- (v) That all project impacts have been properly identified and mitigated or compensated, in particular, but not limited to: (a) accessibility impacts to local beaches and communities; (b) impact on local tourism and local communities in general; (c) negative social impacts in local communities during the construction and operation phases; (d) increased heavy terrestrial traffic during construction and operations; (e) increased maritime traffic during the port operations; (f) induced impacts in the municipal urban development; (g) air and noise emissions during construction and operations; (h) increased risk of accidents with commercial and tourism vessels during construction and operations; (i) potential indirect impacts on Itapoá and other surrounding cities from the expanded SC-415 and increased traffic; (j) potential for introduction of invasive species from fauna and/or flora; (k) potential impacts to the fishermen communities; and (l) potential GHG emissions from the Port and the traffic, among others;
- (vi) Adequacy and sufficiency of the proposed Environmental, Social and Health and Safety Management Systems, in terms of written policies and procedures, defined staff responsibilities, training programs, auditing/inspection programs, and reporting procedures, in particular the environmental, social and health and safety monitoring programs for both the project construction and operation phases, including independent (third-party) quality control or project supervision activities;
- (vii) Adequacy and sufficiency of the project's risks assessment for both the construction and operation phases including both natural hazards and man-induced risks (i.e., spills, fires, accidents, unplanned emissions/discharges, etc.) and the construction and operation phase contingency plans (emergency plan, spill prevention and control plan); and
- (viii) Adequacy and sufficiency of the specific clauses related to environmental, health and safety and labor in the construction contract.

- 2.13 The Bank will prepare an Environmental and Social Impact Report (ESMR) summarizing the results of the ESDD and the recommended environmental and social and health and safety management programs that will be implemented by the project construction and operation phases, including mitigation programs (with the incorporation of ongoing social communication), project monitoring, schedule and budget allocations, as well as the framework for the Bank's supervision of the project's environmental, social, health and safety and labor aspects for the duration of the loan.



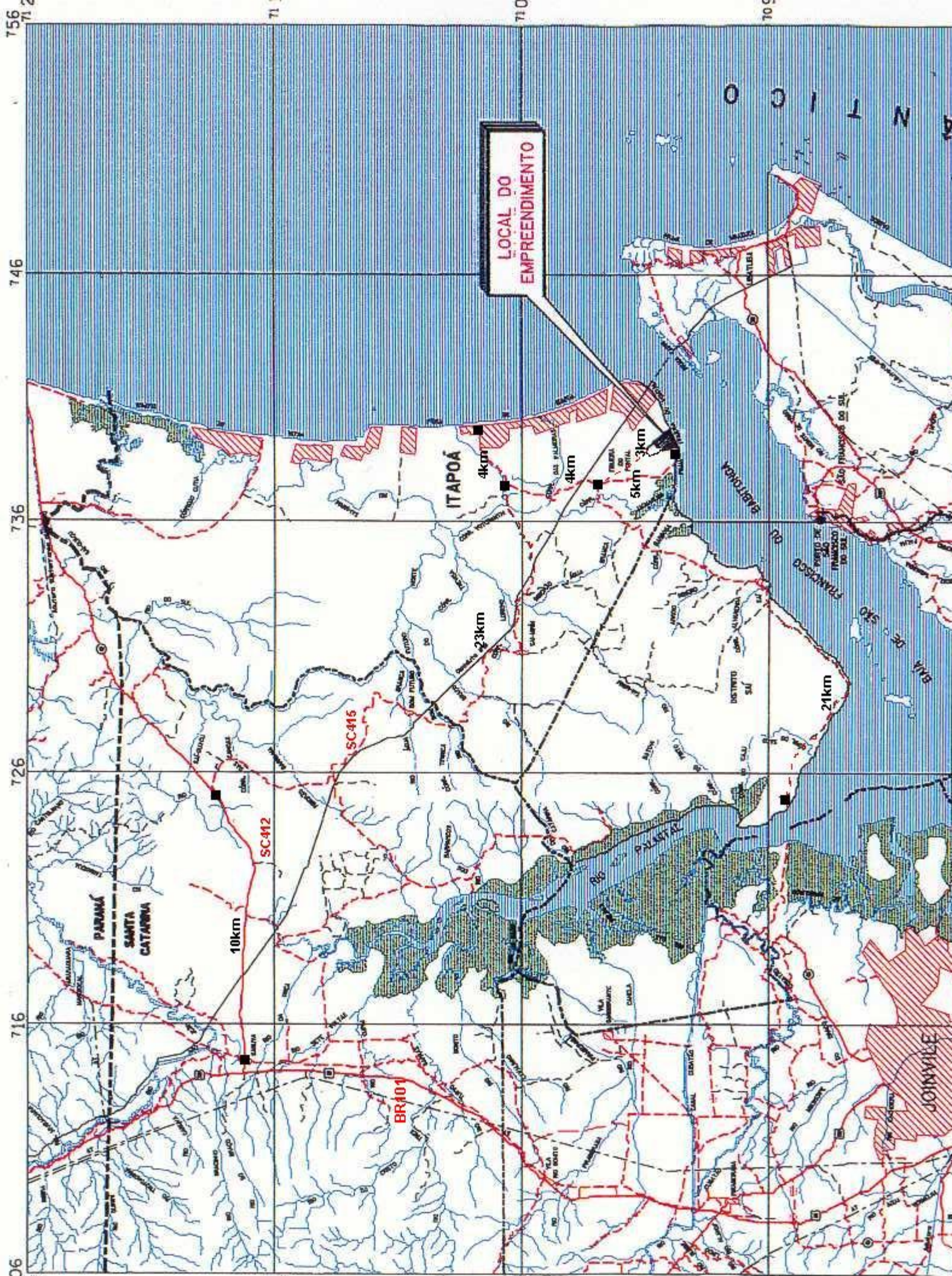




Figure 1



**TECON – First Phase**  
**Tecon Port Layout**



Figure 2

## TECON Layout - Second Phase

