

Porto Itapoá (“Project” or the “Sponsor”) is a Private Use Terminal, administered by two partners (Portinvest Participações S.A. and Aliança Administração de Imóveis e Participações Ltda), located at the city of Itapoá in the state of Santa Catarina, Brazil.

The Port began its operation in June 2011, with an infrastructure able to handle 500 thousand TEUs (Twenty Foot Equivalent Unit) per annum. To fulfill the increasing market demand, the Sponsor is developing a 170-meter expansion in the port’s pier and constructing 40,000 m<sup>2</sup> of additional storage area. At the end of the expansion phase the Port will have a total storage area of 100,000 m<sup>2</sup> and a pier with 800 meters in length, increasing its capacity to handle 1.2 million TEUs/year.

A construction company (Piacentini) was hired to perform the expansion work. At the time of Project appraisal Piacentini had already completed 85% of the works.

Brazilian environmental regulation requires the preparation of detailed E&S impact assessments (ESIAs) as part of a stepwise environmental licensing process applicable to medium to major impacting activities. Regulatory entities are responsible for reviewing ESIAs prior to issuing a Preliminary License (“Licença Prévia” or LP) and Installation License (“Licença de Instalação” or LI) required prior to the start of construction activities of any project. This is followed by the issuance of an environmental operating license (“Licença de Operação” or LO), granted after regulatory inspection of the fully constructed project, just before commencement of operations. Accordingly, Porto Itapoá’s expansion has gone through a full environmental permitting process by IBAMA (Brazilian National Environmental Agency), which has included issuance of an LP, LI and a LO (the latter was issued in February 2018 and is valid for four years).

## **1. General Information and Overview of Scope of IIC Environmental & Social (E&S) Review**

The IDB Invest scope of review during the appraisal included the ESIA, field studies, as well as environmental, occupational health & safety management plans for the construction and operational phases of the Project. IDB Invest conducted a 5-day site visit (May 14-18, 2018), which included the following activities: 1) meetings and interviews with Itapoá's directors, managers, E&S personnel as well as Piacentini's project manager and E&S team; 2) interview with fishermen's leader and family; 3) interview with the director of the neighborhood public school; 4) meeting with the tenants of a small restaurant located at Vila dos Gonçalves, 5) meetings with the Sponsor's consultants: Synergia (for resettlement), Arkhê (for fishermen engagement and social programs); 6) field visit to Vila dos Gonçalves, 7) visit to the Port's pier and storage areas, as well as its administrative offices; and 8) field visit to the RPPN (Private Reservation for the Natural Patrimony) Volta Velha.

## **2. Environmental and Social Categorization and Rationale**

The proposed Project has been classified as a Category B transaction per IDB Invest's Environmental and Social Sustainability Policy. The project has impacts and risks that are generally limited to the project site, are moderate in magnitude, and can be mitigated via measures that are readily available and feasible to implement in the context of the operation.

Key impacts associated with this type of operation include noise, handling of hazardous materials, risks to land and marine biodiversity, water quality, land acquisition and resettlement, and community related impacts and risks during expansion and operation.

## **3. Environmental and Social Context**

The Port expansion direct area of influence encompasses the municipality of Itapoá (in the state of

Santa Catarina), distant some 130 km from Curitiba, 88 km from Joinville and 250 km from the state capital Florianopolis. Itapoa, together with the municipalities of Guaruva, Joinville, Araquari, Balneário Barra do Sul and São Francisco do Sul compose the Babitonga Bay. The Bay is considered an Important Bird Area (IBA), home to some vulnerable species, like *Hemitriccus kaempferi* (maria-catarinense) and *Dryocopus galeatus* (pica-pau-de-cara-canela).

Itapoa has around 43,000 permanent inhabitants, and this number can triple during the summer due to tourism. The city has experienced some degree of urbanization in the last 10 years, caused mainly by the installation of ports and associated businesses (transportation and logistics services).

The main access routes to reach Itapoa are: federal highways BR-376 (Curitiba-Guaruva) and BR-101 (Florianopolis-Guaruva); state roads SC-147 and SC -416; municipal road Jose Alves (also known as Jaca Road) that connects the SC-416 to the port; and a dedicated road (B1) allowing cargo trucks to reach port's gate.

#### **4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures**

##### **4.1 Assessment and Management of Environmental and Social Risks and Impacts**

###### **a. E&S Assessment and Management System**

IDB Invest's appraisal considered the E&S management planning process and documentation for the Project, as well as gaps between the project planning process and IDB's E&S requirements. Where necessary, corrective measures, intended to close these gaps within a reasonable period of time, are summarized in an Environmental and Social Action Plan (ESAP), mutually agreed with the Client, at the end of this document.

###### **b. Policy**

Porto Itapoa has an integrated policy establishing commitments, procedures and goals for environmental and health and safety performance.

###### **c. Identification of Risks and Impacts**

Porto Itapoa initiated the assessment of the E&S risks and impacts for the its expansion in 2013, and the ESIA, written by a local consultancy, was made available locally (published) at the end of the same year.

###### **i. Direct and indirect impacts and risks**

The ESIA identified key E&S impacts likely to be generated during the port construction (expansion), for which prevention, mitigation, control and monitoring measures have been suggested and mitigation programs have been structured. The main impacts identified in the ESIA were: sound pressure level increase; increase in erosion processes; increase in turbidity levels; air quality reduction; reduction of groundwater recharge; increase in surface water flow speed; reduction in the quality of surface and underground waters; increase in soil vibrations; increase in underwater noise; reduction in the abundance of plant species; land fauna evasion; reduction in the abundance and diversity of fauna species; suppression of benthic organisms; decrease of nektonic organisms; disturbance of small cetaceans; reduction in the abundance of planktonic organisms; disturbance of ichthyofauna and crustacean-group species; overload of the local road system; increase risk of traffic accidents; and deterioration of public roads.

IBAMA technical reports also indicated potential health impacts caused by high noise levels at the neighboring community of Vila dos Gonçalves and hence recommended a “relocation” program. The environmental agency also recognized the potential impacts to artisanal fishing, caused mainly by the port's exclusion zone partial overlap with fishing grounds. Because of the difficulty in engaging with the fishermen and the impasse in agreeing compensation measures (in relation to impacts arising out of the port's construction phase), IBAMA recommended the client organized a negotiating forum conducted by a third-party mediator to settle additional compensation actions from the port's expansion.

ii. Cumulative impact analysis

The Babitonga Bay area is home to other ports (Bulk Terminal of Santa Catarina, Bulk Terminal of Babitonga). A new private port – Brasil Sul Terminal – was expected to publish an ESIA but the licensing process has been suspended after a tumultuous public hearing. There are also two railway construction projects in the region (Ferrovia do Frango and Ferrovia Litoranea), still not formally presented for environmental licensing.

Since these projects have not yet been approved, Itapoa Port could, through its participation in several local forums (like the City Council, the Municipal Business Association) act as an important actor attracting new investments for the port backup area, advocating for strengthening of the environmental and social strategy of the municipality of Itapoá. Especial attention should be given to the Master Plan, Integrated Sanitation Plan, Municipal Conservation and Recovery Plan for the Mata Atlantic Forest of Itapoá (PMMA) and the Ecological-Economic Zoning of the municipality.

iii. Analysis of alternatives

The ESIA contains an analysis of alternatives chosen to minimize overall environmental and social impacts. Criteria for the alternative analysis included siting and infrastructure (e.g. road accessibility, need for natural habitat suppression, distance from archaeological relevant sites) as well as interference with local communities and indigenous groups.

**d. Management Programs**

The Sponsor has a strong EHS (Environmental, Health and Safety) management program, and a series of environmental and social management plans (ESMPs or “Planos Basicos Ambientais” [PBAs] in Portuguese) to address E&S impacts identified in the ESIA. Key ESMPs include solid waste management, liquid waste management, flora and fauna rescue and relocation, traffic management, air emissions and air quality, effluent quality, water quality, rain and underground water quality, biodiversity program, sediments monitoring, coastal erosion monitoring, amongst others. Social management plans include workers’ management, environmental education plan, fishing impact monitoring plan and social communication plan. A relocation (resettlement) plan will be developed.

The project expansion was subcontracted to an independent engineer company, Piacentini. To monitor Piacentini’s activities the Port created an environmental Construction Plan (PAC), and hired an independent consulting engineering company (Caruso) to oversee the quality of the work, including environmental, health and safety indicators.

**e. Organizational Capacity and Competency**

Porto Itapoa has a qualified and sufficient team to meet the demands of its EHS management system (Environmental Team).

The EHS department reports to the Operations Director; and its Occupational Safety and

Environment Supervisor is technically responsible for both areas. It is recommended that the E&S division reports directly to the CEO, and that the supervisor gains status of Manager, having more autonomy and power to present the area's challenges and requests to senior management. The work safety team has four safety technicians working 12-hour shifts covering a 24-hour period and a safety technician during regular business hours (7:30 – 17:30). The environmental team is comprised of one environmental analyst, a pharmacist and an environment and safety technician, all working during regular business hours. In addition, the team has the assistance of an engineer supervisor that mediates the demands between the Port and the construction company. Piacentini has a team of 6 people for EHS topics: one safety engineer, three health and safety technicians, one assistant and one young apprentice (intern).

#### **f. Emergency Preparedness and Response**

Itapoa Port has an Emergency Preparedness and Response Plan and qualified personnel and equipment to respond to potential emergencies. Potential emergency scenarios were identified (accident with ship/vessel at the pier; accident with ship/vessel collisions; accident during supply operations of machinery and equipment; diesel oil leakage; leakage of hydraulic oil machinery and equipment; and accident with truck or heavy machinery) and adequate emergency response arrangements were developed and implemented (including a list of all the emergency equipment required, detailed operational procedures for each scenario, fire brigade responsibilities, external agencies and support companies' contacts). A simulation of an emergency scenario (drill) will be carried on with the awareness and involvement of the local community, as per ESAP action 09.

In 2016 Itapoa Port commissioned Price Waterhouse Cooper to assist the company to strengthen their risk, crisis and compliance management processes. By the end of 2018 the port will have implemented additional controls for all the significant risks identified.

#### **g. Monitoring and Review**

Itapoa Port monitors all ESMPs referenced in the ESIA. Environmental, Human Resources and Health and Safety teams have specific key performance indicators (KPI) reported to senior management as part of their variable payment program.

#### **h. Stakeholder Engagement**

##### *Stakeholder Mapping, Analysis and Engagement Planning*

The Social Responsibility team (called "Sustainability" team at the Port) has an informal stakeholder mapping, but it is not extended to all the port's activities and divisions. As per IDB Invest recommendation (ESAP Item 1), the Port will undergo a stakeholder mapping exercise to identify key actors that should be included in the stakeholder engagement plan. The plan will be aligned to Performance Standard 1 requirements and encompass (i) a communication campaign to keep stakeholders informed of the project redress grievance mechanism and any operational changes; (ii) calendar for meetings with government and environmental authorities, fishermen communities, Vila dos Gonçalves residents, association of ports, civil society organizations and other groups, as needed; (iii) key actions and activities to be developed with each group and team responsible and iv) monitoring reports of the engagement process.

##### *Informed Consultation and Participation*

As part of the environmental licensing process the Sponsor held a public meeting, disclosing the summary of the ESIA for the expansion project on February 13th, 2014, at the Community

Association of Pontal and Figueira do Pontal headquarters (in Itapoa). During the meeting, attended by 546 people, IBAMA opened with a presentation of the expansion project and its milestones. Then the Port's operation director shared the port's future goals and the need for the expansion. The consultancy that produced the ESIA (Aquaplan) detailed the social and environmental study of impacts and mitigation recommendations. By the end of the public meeting, a total of 35 questions and comments were asked and answered by IBAMA, Itapoa Port and Aquaplan.

### *External Communications and Grievance Mechanisms*

Affected communities can communicate with the company and bring grievances to the sponsor's attention via a toll-free telephone number or email. The "Social Ombudsman's Office" is open to internal and external stakeholders. The telephone number is managed by an external company - DBM Contact Center, and the e-mail directly linked to a senior communication analyst, responsible for managing that mechanism. The Port believes that it is important to keep track of the complaints, so the system requests user identification. The company has 24 hours to provide an answer, extended to 48 hours if a technical visit is required. Itapoa receives around 15 calls monthly, and no demand increase has been observed due to the expansion works at the port.

As per ESAP action 2, the Port will develop a detailed workflow for registering, following up, responding to, and closing out complaints, as well as the timeframes within which the company will act on grievances and report back to complainants. Specific procedures regarding sexual harassment will be implemented and high management will evaluate the complaints results monthly. An anonymity option will be created, and the grievance mechanism will be communicated to internal and external public. An anonymity option will be designed, and the grievance mechanism will be communicated to internal and external publics.

### *Disclosure of Information and Ongoing Reporting to Affected Communities*

Itapoa Port sends constant reports on ESMPs to IBAMA. All relevant Environmental and Social Impact Assessment (ESIA) related studies were made available locally at the municipality's web portal, as well as published at the IDB Invest's website.

## **4.2 Labor and Working Conditions**

Itapoa Port has a dedicated Human Resources team composed of one manager, eight analysts, one nurse, one labor physician, and two assistants. The same manager is responsible for the community relations program and social corporate responsibility projects, with only one analyst dedicated to both. Consultancies assist on social programs, like Arkhê, Synergia, Comunitaria, Adema and Walm. As per ESAP item 12, the community relations and social project's team will be reinforced with at least one more employee.

### *Human Resources Policies and Procedures*

The Port has a Human Resource Policy and a set of work procedures and instructions, part of the sponsor's Management System: (i) recruitment and selection; (ii) internal and external training; (iii) internal qualification; (iv) functions and wages; (v) benefits; (vi) payroll processing; and, (vii) internal communication). The procedures have recently been revised and the new versions will be shared with all the employees.

The Sponsor has documented and communicated working conditions and terms of employment to all employees. Those terms are in accordance with local law and collective agreements. For the construction phase, Piacentini presented its Human Resources procedures and guidelines to the Sponsor, all in accordance to Brazilian law.

## *Working Conditions and Terms of Employment*

Terms of employment include information on wages and benefits, wages deductions, hours of work, time off, overtime arrangements and compensation, medical insurance, pension, leave, amongst others. They are in compliance with the Brazilian labor law, collective bargaining agreements in place and are consistent with IFC PS2 requirements.

### *Workers' Organization*

Brazil is a signatory to numerous international conventions and treaties relevant to labor rights, including the International Labor Organization (ILO) Convention 87 on Freedom of Association and Protection of the Right to Organize. Under the national labor code, all employees have the right to freedom of association. The Itapoa Port human resources policies and procedures state the employees 'right to freedom of association and the relationship with the Sao Francisco do Sul Port labor union (please confirm that this is the Union) is cordial and collaborative.

### *Non-discrimination and Equal Opportunity*

The Port Code of Ethics makes it clear that the Sponsor will not accept any kind of discrimination or prejudice of any nature, either related to race, religion, age group, sex, political belief, nationality, civil state, sexual orientation, physical condition or any other kind. Also, during the recruitment, selection and promotion processes, applicants will only be evaluated for their condition to fulfill the criteria established in the function descriptions, according to the Port's internal guideline. The Port also has a program for demobilization of complementary workforce.

In an attempt to increase the number of female workers in its activities, the Sponsor created a program (Mulheres Portuarias) to train women from the region in specialized functions like terminal tractors driving and mechanical and electrical maintenance. Since 2012 an average of 90 women were trained, and a new group will start at the end of 2018.

### *Protecting the Work Force*

The Sponsor follows Brazilian labor legislation, including the laws on minimum age and working conditions. Minimum age of employment in Brazil is 18 years old, except for apprentices, which can range from 14 to 24 years (Federal Decree 5.598/2005). The port has an apprentice program in accordance with local law and ILO conventions.

### *Occupational Health and Safety*

Itapoa Port has a comprehensive environmental and health and safety management system, including an Environmental Risk Prevention Program (PPRA) and an additional "Hazard and Risk Management procedure". Both cover the risks in each work activity, necessary protection measures and Personal Protection Equipment.

An Occupational Health Care Control Program - OHMCP has also been implemented. The Port is visited by a labor physician twice a week, to undertake medical examinations. A nurse stays during working hours during the week to manage the occupational medical certificates and controls the periodical examinations. Employees receive several training courses before starting their activities at the Port, and when they are hired the need for specific training is assessed according to each function, such as: Training to Enter Confined Spaces, Training on the Maintenance of Electric Facilities, Training on Work at Heights and Qualification to Operate Equipment (e.g. forklifts). During work pauses the Safety and Environmental team provide safety training recycling activities. All Port's workers receive a kit with the necessary Personal Protection Equipment (PPE) and

instructions on how to properly use it.

Porto Itapoá has two Emergency Response Plans: a) Individual Emergency Plan and b) Emergency Action Plan. The Individual Emergency Plan fulfills the requirements of local law CONAMA N° 398/08, on oil leakages situations at the terminal facilities that can harm people and the environment.

As for the Emergency Action Plan, it establishes the guidelines deemed necessary to act in emergency situations during the terminal's operation and Porto Itapoá's expansion works. It describes procedures and define responsibilities and duties of all involved parties (emergency team, fire brigade, employees, third parties), upon the occurrence of emergencies, in order to override or minimize negative consequences. Simulations are undertaken with the Port Operation team on a monthly basis, the fire brigade team is constantly trained, and a subcontracted company inspects and tests the emergency response equipment (such as fire extinguishers, hoses and hydrants).

The sponsor has an integrated communication procedure: any occurrence in the premises of the terminal must be informed to the Monitoring Team (via internal radios; telephone internal extension; external telephone calls and VHF radio). The Monitoring Team (composed of people from different departments within the port) first informs the dedicated division that should be responsible for each occurrence (like environmental, health and safety, security, etc) and after responding, a commission is formed to investigate possible deviations and adopt corrective measures.

For the project expansion Piacentini developed its own Environmental Risk Prevention Program (PPRA), an Occupational Health Care Control Program and an Industry Working and Environmental Conditions Program. Training and PPE were provided to all workers. An ambulance stayed at the construction site and a nurse was available during working hours. Piacentini's Environmental and Health and Safety indicators were monitored by Caruso and informed to the Port.

### **4.3 Resource Efficiency and Pollution Prevention**

#### *Resource Efficiency*

The main resource used by the port is electric energy, coming from the grid, and fossil fuel (Liquid Petroleum Gas- LPG and Diesel) for Heavy Trucks ("TTs" that transport containers inside the pier). The average monthly consumption of electric energy is 3.27 MWh, and the largest consumer users are: 86% on Reefers (used to keep containers refrigerated), 9% on *Portainers* (heavy transport machines that move containers from the ship to the trucks) and 5% on administrative building. Itapoa Port uses a month average of 2.9 million liters of diesel and 29.600 kgs of LPG.

As per ESAP action 6 Itapoa will conduct an energy assessment to identify possible reduction actions.

#### *Water Use & Wastewater Treatment*

The Port supply of potable water comes from the public water supply service (IGUASA) and it is used at toilets, workers cafeteria, water fountains, locker rooms and for cleaning the administrative building. Before human consumption the water is treated, filtered and tested at a small water treatment plant inside the port. The Port does not perform tasks that demand heavy water consumption - like cleaning of containers or constantly washing the operational area.

Itapoa Port has installed a new physical-chemical wastewater treatment plan in August 2017. The sludge is withdrawn and send to a landfill, and the treated water effluent is discarded at the Babitonga Bay. The Port Effluent Management Program established sampling points to monitor the

quality of the treatment effluent discharged at the Bay. According to the last results, the parameters comply with local regulations, but are not totally in compliance with IFC EHS Guidelines. The Port will implement a plan to improve its wastewater treatment to comply with all IFC EHS Guidelines (ESAP Action 8).

The Sponsor has committed to IBAMA to expand the drainage network of the terminal's back area, guaranteeing that the water from patios will be led to water and oil separator boxes (ODS) for treatment before discharging in the Babitonga Bay. Currently, the treatment received by rainwater is done by a solid retention box and a reclusa. Porto Itapóá is in the process of hiring a laboratory to perform the samplings of the rainwater parameters collected in the area to make sure of its adequacy for disposal.

As per ESAP action 9, Itapóá Port will implement a program to monitor the quality of the rain water discarded from the port. The rain water quality must comply with both IFC EHS guidelines and local legislation (Conama 430/2011).

### *GHG Emissions*

The sponsor will track the greenhouse gas contributions from its operation and report the amounts in the project's annual environmental reporting (ESAP action 10).

### *Air Emissions and Ambient Air Quality*

The Atmospheric Emissions Management Program developed by the Sponsor aims to identify and monitor contaminants responsible for altering air quality and indicate necessary control measures. Local regulation (CONAMA Res. 03/1990) establishes quality standards to be met. The Port assesses air quality using gas samplers at four different points and evaluates the influence of trucks and machine operations on air quality (black smoke concentration).

The monitoring program results show that the Port's activities do not affect ambient air quality, and all parameters are within the limits established by local regulation and IFC EHS guidelines.

### *Noise*

Itapóá Port has a Noise Management Program that measured sound pressure levels at 14 sample points in three different periods of times (8-12 am, 2 to 6 pm and 10 pm to 3 am) during 8 months in 2017 (including some period of construction being done in the pier).

The results are in compliance with local regulation for a port zoning area. However, considering that the area has in fact a mix use of industrial, residential and commercial activities, the noise levels exceeds Brazilian regulations for nightly periods for non-industrial receptors. The results measured for some residential receptors (during day and night) are not in compliance with IFC EHS guideline's limits.

IBAMA has requested that the sponsor implements a Compensation and Remediation Program for inhabitants affected by noise impacts living in the port's adjacent area (Vila dos Gonçalves), as a requirement for the renewal of the Operation License 1030/2011 due in 2021. IBAMA established in its Technical Note 02001.00313/2017-30 that the Program should be included in the list of ESMPs to be developed by the Itapóá Port, and its results incorporated in the monitoring reports presented to the environmental agency.

Itapóá Port will develop a Resettlement and Livelihood Restoration Plan (RLRP) for Vila dos Gonçalves, ESAP action 3, further described in section 4.5 of this report.



### *Solid Waste Management*

The Sponsor has a Waste Management Program where all sources of waste generated in the operation of the port are identified, classified considering environmental risks, properly stored and disposed according to local regulation. The main wastes generated by the Itapoa Port are: a) hospital waste and needles generated in ambulatory services (small quantities), which are collected by a specialized company and incinerated, b) hazardous waste (expired, contaminated, unused medicine and products such as oils, greases, solvents, lubricants and paint), collected by a specialized company and sent to an industrial sanitary landfill; c) contaminated effluent (from container spills) collected by specialized companies and properly decontaminated; d) common domestic waste (bathroom, restaurant, administrative areas) disposed at environmental licensed landfills in Joinville; e) recyclable waste (paper, plastic, metal, glass) are sent to external companies specialized in recycling and f) sanitary effluents collected in the mobile toilets are treated by an external environmental company.

The state environmental agency (FATMA) issues a document (MTR - Waste Transportation Manifesto) authorizing the waste to be collected and transported. After receiving the MTR the Port controls the issuance of the Final Destination Certificate - CDF, which certifies the correct final destination of the waste.

### *Management of Hazardous Material*

The Port has a procedure for Dangerous Cargoes, observing occupational health and safety requirements, the preservation of the physical integrity of the port facilities and the protection of the environment during the storage of products. Preventive measures are set to guarantee the safety of the Port's employees and compliance with legal requirements. All cargo companies need to inform the Sponsor of the presence of dangerous substances or goods, and the environmental team follows the procedures during the removal and storage of those specific containers.

Itapoa has a detailed procedure for handling, reporting and recording environmental occurrences resulting from leakage of hazardous and non-hazardous chemicals on land and on board, ensuring an appropriate and timely response in case of accidents. The port trains all employees to notify the Monitoring Team when detecting a container leak, so the procedures can be followed, and all necessary measures are taken (including the use of contention basins).

## **4.4 Community Health, Safety and Security**

### *Infrastructure and Equipment Design and Safety*

After the expansion, an increase in traffic is expected to transport containers to and from the port. For this reason, the Sponsor will prepare a Traffic Safety Management Plan (ESAP action 12), that will identify the increase in number of vehicles/trucks/ required for the operation and the impacts on highway, roads and local communities. Truck drivers will receive training in defensive driving and appropriate conduct towards the community (including prevention to gender-based violence).

Additional traffic signage will be implemented at the B1 access road, alerting about maximum speed limit and the crossing of wild animals. The Sponsor will engage with the municipal public authority responsible for the Jaca Road in order to obtain authorization to implement the same traffic signs.

### *Hazardous Materials Management and Safety*

Piacentini has a waste management plan that includes proper use, storage and disposal of hazardous materials. Itapoa Port has procedures for management of hazardous materials, described previously

in this report.

### *Community Exposure to Disease*

The expansion project mobilized around 400 workers, the majority from the region (Joinville, Itapoa, and Guaruva). The Port does not allow crew members from the ships to descend on land.

### *Emergency Preparedness and Response*

The Sponsor has some Emergency Action Plan and qualified personnel (composed of a supervisor, an analyst and eight monitoring assistants) and equipment response to potential emergencies. The Sponsor complies with the International Ship and Port Facility Security Code (ISPS), an amendment on the Safety at Life at Sea Convention (SOLAS) on minimal security arrangements for ports, ships and governmental agencies.

### *Security Personnel*

A private security contractor (VEPER) has been commissioned by the Sponsor to provide armed security services of the port during all times. There is an electronic monitoring system with several cameras and a central control room that keeps track of the terminal area (excluding administrative facilities). The armed guards hold the National Security Guard Card (CNV) and firearms licenses. The team undergo training courses that include the content of the Itapoa's Code of Conduct and nonviolent response.

Several simulation and exercises are performed by VEPER to provide real life experience on how to deal with conflicts and how to approach suspects. VEPER'S hiring process includes criminal background checks and onboarding training. Itapoa has a Public Security Plan and procedures to guide security roles and monitor VEPER's activities.

## **4.5 Land Acquisition and Involuntary Resettlement**

In 1995 the Sponsor responsible for the Port's installation acquired the land where the project is now installed - assigned specific plots to landholding families that were within the port's area and acknowledged their prior land tenure rights. Those plots adjacent to the port conform the Vila dos Gonçalves.

Vila dos Gonçalves was originally composed of 99 plots of land, and in recent years the Sponsor has been gradually acquiring them (total of 49 plots as of July 2018). The remaining 50 plots are owned by 43 people: 24 houses are occupied by the owners; 13 lots are empty, and 6 houses are rented for residential and commercial uses.

As described above, due to the noise impact caused by the port's operation IBAMA has required that the Port carries out a program to compensate and remove the residents at Vila dos Gonçalves as a condition for the issuance of the Operational License (in 2021). As a result, the Sponsor is developing a plan, with the assistance of a specialized consultancy (Synergia), to acquire the plots and, if necessary, resettle the occupants.

Itapoa Port will, as per item 3 of the ESAP, present a Resettlement and Livelihood Restoration plan in accordance to IFC's Performance Standard 5 and IDB's Operational Policy 710, containing: a) census of the 43 families (including their vulnerability status); b) the methodology to evaluate the values of land, houses, improvements and economical use of the properties; c) the entitlement matrix and compensation measures; d) description of the consultation process; e) engagement plan; f) livelihood restoration plan when applicable; g) post reallocation assistance and h) grievance

mechanism.

In the entitlement matrix and eligibility criteria the Port will define all categories of affected people, including property owners and land right holders, tenants and other service providers and vulnerable groups; all types of loss associated with each category (including loss of physical assets; loss of access to physical assets; loss of wages, rent, or sales earnings; loss of public infrastructure and elements of cultural significance); types of compensation and assistance due to each category, including: compensation for or replacement of land and natural resources; compensation for structures, assets, wages, rent, or sales earnings; moving and post-reallocation assistance.

The plan will be monitored monthly, and fully implemented until August 2020.

### *Economic Displacement – Artisanal Fishing*

According to data from the local Fishing Colony (Z1), Itapoa has approximately 600 artisanal fishermen associated with the colony (some do not exclusively fish for a living, but they keep their membership for other benefits). These fishermen are distributed in four communities: Barra do Saí, Itapema do Norte, Figueira and Pontal.

As part of the ESIA for the Port expansion, potential impacts to fishing and fishing resources were listed as: a) increased underwater noise caused by stacking activities in the aquatic environment (short term event); b) suppression of areas of the seabed inhabited by benthic organisms (offset by the natural colonization of new sites in neighboring areas), c) reduction of abundance of planktonic organisms and removal of ichthyofauna and carcinofauna species caused by the construction and d) conflicts with fishing activities.

To mitigate those impacts IBAMA has requested an Aquatic Biota Monitoring Program and an Artisanal Fishing Monitoring Program. As part of the ESIA the Sponsor also developed a Participatory Socio-Environmental Diagnosis – DSAP, in which fishermen were consulted.

The perception of the fishermen group is that the impacts caused to their activities are limited to exclusion zones around the pier and the ships, and no impacts were felt in the fishing stock (apart from comments on the decrease of abundance of white shrimp). The results on the Artisanal Fishing Monitoring Program are not conclusive at this point, and some improvements are recommended in the ESAP action 5.

### *Construction impacts*

When the port was built (2011), a collective civil suit was filed by Colony Z-01 against the Port, pleading the suspension of the Operating License and compensation amounting to 37 million of Reais (roughly 10 million dollars). In the legal action IBAMA was consulted and stated that fishing exclusion zones have been in force since 1912 (due to the Port of São Francisco do Sul), and that therefore Porto Itapoá should not be held responsible for the impact. The Public Prosecutor's Office claimed lack of evidence to consubstantiate the alleged loss suffered by local fishermen. The action was dismissed by the judge and the Colony has not submitted an appeal.

Since then, 15 new collective actions have been filed (totalizing 146 individual actions) by the fishermen (all represented by the same attorney) pleading moral and material damages. The court independent technical expert stated that no reduction in the fish stocks has been observed, and that the Port has not caused environmental damages to the Babitonga Bay. When judged at trial court, the moral damages request was rejected, but some unquantified indemnities for material damages have been awarded. The Port is requesting, in appellate court, for more clarity on the extent and definition of the compensation. A final decision is expected for the next three years.

Until a final judicial decision is reached, IBAMA (not part in the law suit) is waiting on requesting compensation measures to the fishermen, avoiding causing a double payment from the Sponsor regarding the same matter.

### *Expansion impacts*

As for the port expansion impacts, IBAMA has requested the Itapoá Port to develop engagement activities with the fishermen in order to reach a decision on compensation. A consultancy was hired (Arkhê) to facilitate the meetings.

Because the judicial matter for the construction impacts mentioned above is not yet resolved, the fishermen's attorney has been instructing his clients not to engage with the Sponsor. Arkhê and the Sponsor are continuing to develop engagement actions and insisting on meeting with fishermen families and individuals.

The ESAP action 4 establishes the need for the Sponsor to continue negotiating with the port's expansion affected fishermen, and agree - in participatory manner - on compensation. Furthermore, the Port has to inform on the progress of the judicial decision regarding the port construction's impacts and as soon as a final decision is reached, implement the compensation measures legally determined, monitoring its results.

## **4.6 Biodiversity Conservation and Natural Habitats**

Baseline studies for flora and fauna were conducted as part of the ESIA's for the port construction and expansion, for the assessment of potential biodiversity and ecosystem risks and impacts, on both terrestrial and marine ecosystems. The onshore (terrestrial) project area of influence is located within the Mata Atlantica Biome and the aquatic area of influence comprises the Babitonga Bay. The Bay is considered an Important Bird Area (IBA), home to some vulnerable species, like *Hemitriccus kaempferi* (maria-catarinense) and *Dryocopus galeatus* (pica-pau-de-cara-canela).

### *Impacts on Terrestrial and Marine Flora and Fauna*

The vegetation suppression included 28.52 ha of Mata Atlantica in medium and advanced stages of revegetation. As required by Brazilian Law 11.428/2006, areas of vegetation suppression will be compensated to preserve the same biodiversity value of area impacted, at a rate to be determined by IBAMA. Because Mata Atlantica is a heavily protected biome, the Sponsor asked for a Decree of Public Utility to be able to advance construction at the storage area.

The Sponsor reached an agreement with the Machado family, who owned a large extension of preserved area in the same habitat area (located 16 kms from the port site) and created a RPPN called Volta Velha (Private Reserve of Natural Patrimony) of 285.23 has. As per the agreement, the Machado family must inform the environmental authorities of the RPPN creation and attest that the land conservation status is rectified in the property's deed and land registry. The Sponsor will also follow up on the development of the RPPN's management plan (ESAP action 6).

IBAMA requested the development of several environmental programs for protection of both terrestrial and marine biodiversity, prior to the issuance of the Installation and Operating licenses for the port expansion: a) Suppression of Vegetation Program (including Subprogram of Rescue and Transplant of Germplasm; Forestry Product Utilization and Allocation Subprogram and Subprogram of Capture and Rescue Terrestrial Fauna), b) Waterbird Monitoring Program; c) Aquatic Biota Monitoring Program; d) Cetacean Monitoring Program; e) Chelonia Monitoring Program; f) Monitoring and evaluation program for the colonization of the Itapoá Harbor Bridge and Pier Structures; g) Coastal Strand Monitoring Program; h) Oceanographic Parameters Monitoring

Program; i) Babitonga Bay Waters and Sediments Quality Monitoring Program; j) Mangrove System Monitoring Program; k) Coast Line Evolution Monitoring Program; l) Monitoring Wildlife Diversity Program.

All programs are successfully being developed by the Sponsor.

#### 4.7 Indigenous Peoples

The ESIA identified the presence of an indigenous community (Yvy Ju/Reta) located 5 kilometers from the Itapoa Port, on the other side of the Babitonga Bay. The Brazilian governmental agency responsible for indigenous people (FUNAI or Fundação Nacional do Índio) has not officially recognized the area as belonging to this indigenous group (composed of 11 families). During the environmental licensing process, FUNAI did not manifest an opinion, even though officially requested by IBAMA.

Secondary data shows that the Yvy Ju/Reta group is varied and the adults perform several subsistence activities, such as sugar cane cultivation and sales of handicraft goods. It was not foreseen that the port expansion could cause impacts to this community.

#### 4.8 Cultural Heritage

The ESIA did not identify archeological sites in the direct and indirect affected areas of the project. IBAMA has not requested monitoring programs related to archeological protection.

#### 5. Local Access of Project Documentation

([https://sei.ibama.gov.br/controlador\\_externo.php?acao=usuario\\_externo\\_logar&id\\_orgao\\_acesso\\_externo=0](https://sei.ibama.gov.br/controlador_externo.php?acao=usuario_externo_logar&id_orgao_acesso_externo=0))

#### 6. Environmental and Social Action Plan (see Related Files).

#### Contact Information

For inquiries about the Project, contact

Client Contact name: Christiano José de Anhaia Pereira

Title: Safety and Environmental Supervisor

Phone number: +55 (47) 9 9650-8687 / +55 (47) 3443-8517

email address: [christiano.pereira@portoitapoa.com](mailto:christiano.pereira@portoitapoa.com)

For project inquiries, including environmental and social questions related to an IDB Invest transaction please contact the client or IDB Invest using the email [requestinformation@idbinvest.org](mailto:requestinformation@idbinvest.org). As a last resort, affected communities have access to the IDB Invest Independent Consultation and Investigation Mechanism by writing to [mecanismo@iadb.org](mailto:mecanismo@iadb.org) or [MICI@iadb.org](mailto:MICI@iadb.org), or calling +1(202) 623-3952.