

# Environmental and Social Review Summary (ESRS) PPP Vial Circuito 5 - URUGUAY

Original language: Issuance date: Spanish August 18, 2020

### 1. General Project information and scope of BID Invest's environmental and social review

The Uruguayan Ministry of Transportation and Public Works (MTOP <sup>1</sup>), acting as Executory Unit of the National Road Office (DNV), called for bids in September 2017 regarding a contract to design, build, operate (including exploitation and maintenance) and finance the road infrastructure in the public domain belt on the section of Route 14 between Sarandí del Yi and Route 8, and between José Pedro Varela and Lascano on the section of Route 15 between Lascano and Velázquez. The road sections mentioned above run across the Departments of Florida, Lavalleja and Rocha in Uruguay (the "Project"). In January 2019, once the competitive bidding process was concluded, the contract was granted to the consortium formed by ALDESA Construcciones S.A., COALVI Renovables S.L. and Ramón C. Alvarez S.A. (the "Consortium").

In order to prepare the Environmental Impact Assessment (EIA), the Project was divided as follows:

- Lot 1: Including section N1 between Routes 6 and 7, section N2 between Routes 7 and 108, and section N3 between Routes 108 and 8. It covers 105 km of works including changes in the layout, building a railway bridge and two road junctions (with Route 7 and Route 8) and, in addition, two by-passes in José Batlle y Ordóñez and Zapicán.
- Lot 2: It covers Route 14 between Averías and Lascano (including the so-called Road Section 305). It entails building three new bridges, modifying the existing bridge over the Cebollatí river and building an elevated section on the flood plain of the Cebollatí river.

For Lot 1, the Consortium has prepared the related EIA and submitted it to the National Highway Administration (DNV<sup>2</sup>), which in turn sent it to the National Environmental Agency (DINAMA<sup>3</sup>) of the Ministry of Housing, Land Management and Environment (MVOTMA<sup>4</sup>) to obtain the prior environmental authorization (AAP, for its acronym in Spanish). In the case of Lot 2, it was necessary to prepare an EIA only for the elevated section of the road and the bridges on the Cebollatí river. The AAPs for both lots are expected to be issued in October 2020. Meanwhile, in August 2020, the MTOP published the related assessments (*Manifiestos*) to enable the citizen engagement process.

The Project also includes the section between José Pedro Varela and Averías (Section 304) and Route 15 between Lascano and Velázquez (Section 311 and Section 310) for which no EIA is required.

<sup>&</sup>lt;sup>1</sup> MTOP - Ministerio de Transporte y Obras Públicas

<sup>&</sup>lt;sup>2</sup> DNV – Dirección Nacional de Vialidad

<sup>&</sup>lt;sup>3</sup> DINAMA – Dirección Nacional de Medio Ambiente

<sup>&</sup>lt;sup>4</sup> MVOTMA – Ministerio de Vivienda, Ordenamiento Territorial y Medio Ambiente



The Project provides for the installation of a construction site on Route 14 at the intersection with Route 7 and a second construction site on Route 14 at a site adjacent to Zapicán. The construction sites will be built on one level of 80 m x 70 m and they will include office spaces, personnel services, stockpiling of aggregates, a concrete plant, a warehouse and a maintenance workshop.

The aggregates for the Project will come from 18 quarries (7 between Sarandí del Yi and Route 8, 7 between José Pedro Varela and Lascano, and 4 between Lascano and Velázquez). The water for the construction will be extracted from surface sources (after being authorized by the National Water Office (DNA), and electric power will be obtained directly from the supplier company's network (UTE)). Electric power generators will be installed at each construction site and in strategic points at each section of the Project to supply power in the event of power cuts.

The Project will take about 36 months and at its highest point of demand (around month 17) it will require 482 workers.

For the Environmental and Social Due Diligence (ESDD) of the Project carried out in August 2020, virtual meetings were held with Consortium personnel and officials from the Topography Office of the MTOP. The technical information analyzed in this process relates to the preliminary design phase; consequently, there could be changes regarding the Construction Project to be approved and validated by the DNV.

### 2. Environmental and Social Classification and Rationale

Under BID Invest's Environmental and Social Sustainability Policy, the Project was classified as a Category B project since its environmental and social impacts, as well as the occupational risks related to the construction phase are deemed medium-sized, reversible and manageable through management plans and programs well-known in the sector.

The Performance Standards (PS) triggered by the Project are: PS1: Assessment and Management of Environmental and Social Risks and Impacts; PS 2: Labor and Working Conditions; PS 3: Resource Efficiency and Pollution Prevention; PS 4: Community Health, Safety and Security; PS 5: Land Acquisition and Involuntary Resettlement; PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; and PS 8: Cultural Heritage.

### 3. Environmental and Social Context

Route 14 is located at Cuchilla Grande, which crosses over the national territory from east to west, to the south of the Negro river. The Project is located on the basins of the Negro river and Merín lagoon, the basin of the Yi river, basin of the Olimar river and basin of the Cebollatí river. The main landscape is a rural-river area with grasslands, planted areas for sheltering and seasonal crops. Within this landscape it is possible to identify differentiated sectors characterized by specific vegetation (riverine forests and wetlands), white sand beaches and rice fields. The main environments within the Project area are the aquatic environment, wetlands, riverine forest and natural prairie. The habitats deemed as critical since they host threatened species are scrublands, prairies and wetlands. The median annual temperature at the Project location is 16.5° C to 17.0° C. The annual relative humidity range is 75% to 77% while annual precipitation is between 1,200 mm and 1,300 mm.



There are four important towns in Lot 1: Sarandí del Yi, Nico Pérez, José Batlle y Ordóñez, and Zapicán. Although Sarandí del Yi is not located on Route 14, it is the town which would be most impacted by the Project works due to its closeness and available services (as per the 2011 census, its population was 7,200). In Lot 2, the main towns are Averías (also known as 19 de Junio), Lascano and Velázquez.

Route 14 is used mostly for the forestry activity. To a lesser extent, there also are agricultural activities. In the Nico Pérez and José Batlle y Ordóñez area there is mining activity (iron mining) which brings about truck traffic in the nearby roads. During the summer, Averías is a tourist area characterized by fine sand beaches and its visitors come mainly from the towns of José Pedro Varela and Lascano. In the Project area there are some historical constructions which would not be affected by the changes in the route layout. There is a chance that archeological findings occur during the construction works.

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

### 4.1 Assessment and Management of E&S Risks and Impacts

### 4.1.a Environmental and Social Management System

Both Aldesa and Coalvi, members of the Consortium, have in place environmental and health and safety systems certified by international standards; they thus evidence that they have the necessary resources to implement a specific environmental and social management system (ESMS) for the Project, as required by PS 1.

The Consortium will prepare and implement an Integrated Environmental, Social and Health and Safety Management System (ESMS) for the Project which will be structured under the provisions of PS 1 and will incorporate –in the form of operational plans and procedures– the components and programs in the Executive Environmental Management Plan and the Occupational Health and Safety Plan of the Consortium for the construction phase.

The ESMS will be led by a full-time Project Environmental, Social, and Health and Safety Manager. He/she will report to the Technical Management Area and, in addition, directly to the Consortium Management. His/her responsibilities will include representing the Consortium before the appropriate local authorities, financing entities and third parties. The Consortium will also appoint a full-time Project Health and Safety professional who will lead the works health and safety technicians and supervisors team and will report to the ESMS Manager; likewise, the Consortium will incorporate a full-time Social specialist technician to lead the social aspects of the Projects and will provide for the potential hiring of an archeologist to get involved in the event of chance findings.

### 4.1.b Policy

Both Aldesa and Coalvi have corporate environmental and health and safety policies in place which are substantially aligned with PS 1 requirements. In compliance with PS 1, the Consortium will prepare and adopt an Environmental, Social, and Health and Safety Policy specific for the Project.



## 4.1.c Identification of Risks and Impacts

To systematize the compilation and assessment of the environmental, health and safety aspects, the Consortium will design a matrix to identify and assess environmental and social aspects and a matrix to identify and assess occupational risks. Both matrices, which will cover all the facilities and activities of Consortium personnel and contractors, will consider the results of the environmental assessment studies of the Project; also, impacts and risks will be identified and assessed on an ongoing basis.

### 4.1.d Identification of Legal Aspects

On the basis of the existing procedure (PGA-PRLCAMA-07 Legal Requirements), the Consortium will design and implement a legal aspects identification and assessment matrix, including those related to the Performance Standards of the International Finance Corporation ("IFC") and to the IFC's Environmental, Health, and Safety Guidelines applicable to the Project.

# 4.1.d.1 Direct and indirect impacts and risks

The main impacts and risks expected during the construction phase include generation of noise and airborne dust, temporary impact on traffic, increase in the probability of traffic accidents, temporary impact on activities such as local tourism, loss of vegetation (especially the native forest), potential impact on archeological heritage (due to excavations) and potential impact on the quality of the surface water bodies and the soil as a result of potential spills of pollutants. The potential adverse effects related to the operational phase include changes in the dynamics of the flood plain of the Cebollatí river, which would occur as a result of the construction of the elevated section of Route 14.

### 4.1.d.2 Cumulative impacts

The cumulative impact on the annual average daily traffic of Route 14 arising from the operations of the new UPM (<sup>5</sup>) plant (a cellulose plant) in 2022 was considered upon designing the Project. However, the Project as such does not have a cumulative impact analysis.

### 4.1.d.3 Analysis of Alternatives

In the case of Lot 1, where layout changes and bypasses are expected, modifications were made on the original design submitted in the Project Communication. These modifications in the road layout arise mainly from suggestions from the neighbors where the original design sectioned certain private plots or historical constructions, or it was too close to houses or sites with high potential for archeological findings. Notwithstanding the above, since the Project relates to an improvement in an existing road corridor, it was not necessary to analyze alternatives.

### 4.1.e Management Programs

The Environmental Management Plan for the construction phase prepared by the Consortium and filed with environmental authorities includes the following programs: i) air emissions management; ii) effluents

<sup>&</sup>lt;sup>5</sup> United Paper Mills Ltd.



management; iii) stormwater management; iv) construction waste, vegetation remains, debris, metals, oils, filters and lubricants management; v) environmental noise management; vi) native bushes use management (Vegetation Restoration Plan); viii) management of physical presence related to civil works and vehicle and machinery traffic; ix) overturns, fires and chemical substance spills; x) emergency response plan; and xi) environmental monitoring plan.

The main components of the Occupational Health and Safety Plan for the Project construction phase include: i) training plans; ii) substandard conditions and acts reporting program; iii) labor risks prevention program; iv) contingency and emergency response plan; v) occupational health and safety monitoring program; vi) medical and health monitoring program; vii) performance monitoring and measurement; viii) nonconformity monitoring and detection and correction programs; ix) investigation of quasi-accidents and accidents; and x) recordings and audits.

These programs will be incorporated into the ESMS in the form of operational procedures meeting legal requirements and those included in any applicable Performance Standards.

# 4.1.f Organizational Capacity and Competency

The Environmental Management Program for the construction phase prepared by the Consortium includes a training program with recording forms to follow up on the number of training sessions, attendance sheets and training verification. The Occupational Health and Safety Plan covers training and induction activities, bi-weekly chats at the beginning of the workday and for raising personnel awareness, and occupational safety incentive programs.

The Consortium will prepare a Bi-Yearly Training Plan on environmental, social, and health and safety issues including the training sessions set forth in the Environmental Management Program and the Occupational Health and Safety Plan. In addition, such plan will include the courses deemed necessary based on the significant impacts and risks identified by applying the related matrices, those related to potential technology changes and those associated with the health and safety of the community potentially impacted by the construction works. A special focus will be given to safety in vehicle and machinery operation on and off the construction works by payroll and outsourced personnel.

### 4.1.g Emergency Readiness and Response

The Environmental Management Plan for the construction phase includes a Contingency Management Plan while the Health and Safety Plan includes a Contingency and Emergency Response Program in the case of fires, spills and accidents. The Consortium also has in place an Emergency Planning Procedure although it does not consider emergency situations from natural causes.

Although the documentation prepared for emergency preparedness and response is considered appropriate to provide general guidelines, the Consortium will prepare an Emergency Preparedness and Response Plan at each site or facility making up an operational unit (for example, construction site, quarry, etc.) stating: i) specific emergency scenarios for the site (spills on the soil or in the water, explosions, fires, floods or landslides as a result of intense rains, labor protests, etc.); ii) actions aimed at preventing and addressing the emergency; iii) personnel responsibilities in the light of the plan (including those related to holidays and weekends); iv) the identification of external players potentially involved during the



emergency (hospital, firefighters, police, civil defense, etc.); and v) the communications and authority flowchart for decision making. When applicable, it will draft an evacuation plan indicating in a sketch: i) meeting points; ii) emergency exits; and iii) location of fire extinguishing equipment and facilities, flammable materials warehouses and electric power cut points, among others. The involvement of personnel in the event of the scenarios determined in the plans will be subject to ongoing and random drills.

## 4.1.h Accident Management

The Contingency and Emergency Response Program of the Occupational Health and Safety Plan for the construction phase includes the primary management of personal accidents while the investigations of accidents are set forth in a separate document. The Consortium will prepare and implement a specific accident management procedure which will include the issues indicated in the Occupational Health and Safety Plan, comply with legal requirements and be applicable to payroll as well as outsourced personnel. The procedure will indicate the actions to be taken immediately after the accident, the record of the nature and severity of the accident, the formalities related to the basic legal aspects, the forms to prepare the accident investigation report, and the identification of the preventive and corrective measures adopted to avoid repetition.

### 4.1.i Management of contractors

The Consortium expects to hire 10 companies to provide laboratory, transportation, soil movement and paving, signaling and construction of structures, bridges and drainage services. It also expects hiring 12 suppliers of different materials, such as reinforcing bars, aggregates, asphaltic cement, geotextile, concrete pipes, construction sheds, cranes, concrete, auxiliary machinery, neoprene and concrete prefabricated material.

The Consortium has prepared a specific procedure to evaluate suppliers (PGA-PYC-01). Based on such document, the Consortium will prepare standards for goods and services providers which will indicate that providers should meet the Consortium ESMS requirements relevant to their activity. Especially those operating quarries will need to manage all the environmental and social impacts and occupational risks in conformity with the Consortium ESMS. The standards will include i) Environmental, Social, and Health and Safety Policy and Human Resources Policy of the Consortium specifically prepared for the Project; ii) minimum environmental, social, and health and safety professional resources of the provider including at least one environmental and social professional and one health and safety professional; iii) list of all the programs, plans and procedures of the construction Consortium's ESMS; iv) training requirements; v) road safety plan; vi) good coexistence standards with the community aligned with the Communications Plan, vii) grievance and claims reception channels for hired workers.

# 4.1.j Monitoring and Evaluation

The implementation of the Environmental Management Plan for the construction phase will be controlled by the DINAMA while the execution of the Occupational Health and Safety will be controlled by the General Labor and Social Security Inspection of the Ministry of Work and Social Security.



As established by the Environmental Management Plan for the construction phase, the Consortium will monitor: i) air quality at specific points (bi-yearly); ii) environmental noise at specific points (bi-yearly); iii) quality of effluents from the washing of mixer trucks (frequency to be determined); iv) stormwater (occurrence of precipitation); v) waste (weekly); and vi) vibrations from blastings (sampling points and frequency to be determined).

In addition to the monitoring requirements of the Environmental Management Plan for the construction phase, the Consortium will prepare and implement an Environmental, Social, and Health and Safety Monitoring Plan to follow up the following parameters: i) number of community claims received and resolved per month; ii) contents and number of training courses taught per month (including the number of people trained); iii) labor noise levels at critical work positions (e.g. rock grinding and scribing machine shed at intervals to be determined); iv) quality of drinking water (by-yearly); v) frequency and severity rates of personal accidents occurred to payroll and outsourced personnel (monthly); vi) grounding resistor values for switch panels (bi-yearly); and vii) logs of incidents and unsafe working conditions detected during periodic control visits to construction fronts (monthly). The follow-up will include an analysis of the possible causes and will provide management measures necessary for cases in which median values exceed the limits accepted by current legislation or the applicable IFC guides.

# 4.1.k Stakeholder engagement

As agreed with authorities from the DNV and the MTOP, during the communication phase of the Project, Consortium personnel have engaged in dissemination and consultation activities in connection with the Project addressed to neighbors impacted by the original layout. In those cases where the productive capacity of plots could be affected or cases of potential impact for houses, personal assets or areas with high probability of archeological findings, the Consortium incorporated changes to the original layout in order to avoid such impacts.

### 4.1.k.1 Information Disclosure. Informed Consultation & Participation

The related public assessments (*Manifiestos*) were carried out for Lot 1 and for the bridges and elevated section of Lot 2 in August 2020 and in accordance with legal requirements. To this end, the MTOP published a short text to disseminate the Project in the Official Journal (Diario Oficial) and in the main national and departmental newspapers. The text published also provides the link to access the related Environmental Summary Report for each Lot. After the publications and for 20 days, the public is expected to send its comments and opinions to the DINAMA. Once 20 days have elapsed, the DINAMA will issue the related AAP for each Lot.

### 4.1.1 External Communication and Grievance Mechanism; Ongoing Reporting to Affected Communities

During the construction and operational phases of the Project, the Consortium will implement a grievance mechanism for third parties potentially affected by the future works. Likewise, the Consortium will disseminate information related to the Project to members of the community through a Communication Plan.



# 4.2 Labor and Working Conditions

### 4.2.a Working Conditions and Management of Worker Relationships

In compliance with Decree 125/014 "Health and Safety in the Construction Industry", the Consortium will have an in-house occupational safety service incorporated into the company structure and present during the whole workday. Also as required by current legislation, workers will choose at least one Works Health and Safety delegate to represent them, whose tasks will be focused on collaborating with the company's Health and Safety Service promoting personnel awareness, cooperating in identifying risks, in inspections and recording in the logbook any suggestions or opinions deemed appropriate.

### 4.2.a.1 Human Resources Policies and Procedures

The Consortium will draft a Human Resources Policy for the Project, aligned with PS 2, which will be applicable to all payroll and outsourced personnel.

### 4.2.a.2 Working Conditions and Terms of Employment

The general health, safety and wellbeing of the working and housing camp facilities are established in Decree 89/995 on Construction Health and Safety. The health and safety management tools available to the Consortium are deemed appropriate and sufficient to provide a service that is compliant with current legislation.

### 4.2.a.3 Workers' Organizations

In Uruguay there is a single construction sector union: the SUNCA (<sup>6</sup>), which acts at a national level in search of salary improvements (through collective bargaining agreements), to obtain benefits for the sector and adopt improvements in labor health and safety.

### 4.2.a.4 Non-discrimination and Equal Opportunity

The Consortium has in place a personnel Recruiting and Selection Policy indicating the two main principles of the Human Resources Policy: i) hiring the best personnel available on the market based on Project needs; ii) not allowing discrimination based on origin, nationality, race, religion, gender or age. This policy should be updated by the Consortium to explicitly include the non-discrimination and equal opportunity principles.

### 4.2.a.5 Retrenchment

Before the end of the construction phase, the Consortium will analyze the retrenchment alternatives (such as employee skills development programs) and will develop and implement a demobilization plan for any personnel meeting the legal and contractual requirements and mitigating any adverse impacts from employment termination.

<sup>&</sup>lt;sup>6</sup> SUNCA: Sindicato Único Nacional de la Construcción y Anexos



### 4.2.a.6 Grievance Mechanism

The Consortium will prepare and implement a specific procedure to receive and resolve payroll and outsourced personnel grievances and claims, which will include the possibility of receiving anonymous grievances or claims. The procedure will clearly establish the assignment of responsibilities and the terms to evaluate and respond to any issues reported by personnel.

#### 4.2.b Occupational Health and Safety

In Uruguay workers compensation insurance is compulsory for the employer and it is provided by Banco de Seguros del Estado (BSE). Thus, when an accident is reported to the healthcare provider chosen by the worker, the representatives of BSE are the ones in charge of approving the leave of absence of the person who suffered the accident and the type of medical treatment to be followed. On the other hand, the employer is criminally liable if his/her company fails to take the measures necessary to prevent grave dangers to the life, physical integrity and health of his/her workers and, under Law No. 19,196, he/she may be subject to imprisonment from 3 to 24 months should he/she fail to meet the above provisions.

#### 4.2.c Supply Chain

Quarries are the most important supply chain component due to the degree of significance of the potential environmental and social impacts, as well as the related occupational risks. A total of 11 quarries were identified for Lot 1 while 7 additional quarries are expected for Lot 2. Each quarry should be subject to an EIA and obtain the related AAP and operational environmental authorization (AAO, for its acronym in Spanish).

The AAPs and AAOs for 3 quarries located in sections 310 and 311 of Lot 2 are expected to be obtained in September and October 2020, respectively. The rest of the quarries would obtain their licenses during 2021. None of the quarries are owned by the Consortium; therefore, they will all be hired. The environmental, social, and health and safety management of each quarry should meet the requirements of the Consortium's ESMS.

#### 4.3 Resource Efficiency and Pollution Prevention

#### 4.3.a Resource Efficiency

The Consortium will implement awareness programs among payroll and outsourced personnel to make a rational use of water and electric power. It will also incorporate waste segregation practices at source into waste management procedures based on its type, promoting if possible, recycling and reuse.

#### 4.3.a.1 Greenhouse Gases

The Consortium will prepare a greenhouse effect gas (GEI) inventory for the construction phase and will file on an annual basis the estimation of emissions for the subsequent year as well as the calculation for the prior year.



### 4.3.a.2 Waste, Pesticides and Hazardous Materials, and Pollution Prevention

The Environmental Management Plan for the construction phase provides for the management of solid and liquid waste, civil works waste (debris, remaining materials, scrap, wood, etc.), waste akin to domestic waste and hazardous waste from the workshop through specific management measures. Such measures provide for the reuse of wood stockpiled at the construction site and recycling of scrap. Specific management is set forth for used batteries and tires no longer used. The Consortium will prepare and implement a specific procedure to manage waste whereby it will comply with current legislation and the IFC's Environmental, Health and Safety Guidelines, April 2007. Such procedure will include log forms allowing to quantify and record the amount and type of managed waste per related month or period.

Likewise, the Environmental Management Plan for the construction phase establishes the storage and management of fuels and hazardous substances through specific instructions. The Consortium will prepare a specific procedure to manage hazardous substances in accordance with current legal requirements and those resulting from the application of the IFC's Environmental, Health and Safety Guidelines, April 2007. Such procedure will expressly indicate that the Consortium will not acquire or use pesticides or chemical substances including any Class Ia (extremely hazardous) or Class Ib (highly hazardous) components as classified by the WHO.

The Consortium does not expect to generate any polluting spills resulting from the refurbishing and construction works of the bridges over the Cebollatí river or the bridge on the Sarandí ravine, since it will avoid working directly on the riverbed and, in the case of the Sarandí ravine, the course will be bypassed to build on one side of the bypass and vice versa.

### 4.4 Community Health and Safety

#### 4.4.a Community Health and Safety

As required by the DINAMA, the Consortium, together with the departmental authorities from the corresponding sites, shall prepare and implement a Road Safety Plan for Lot 2. The Plan will focus in increasing the road safety in the proximity of Averías, where a construction site will be set up. In the summer, given the touristic activity around Averías, it will be extremely important to coordinate preventive actions for road machinery and truck traffic.

The Consortium will prepare and implement a Road Safety Plan to be applied throughout the Project construction and to be obligatorily complied with by all payroll and outsourced personnel. The Plan will consider the indications already established in the Road Safety Plan prepared upon the request of the DINAMA, and will include: i) mandatory defensive driving lessons for all payroll and outsourced machinery and truck drivers; ii) random checks for alcohol and drugs among payroll and outsourced machinery and truck drivers; iii) identification of sensitive sites along the routes of trucks and light vehicles driven by payroll and outsourced personnel (for example, schools, hospitals, and largely crowded touristic spots) and determination of specific driving guidelines, including maximum speeds for certain sections and the obligation to drive with the lights on; and iv) good behavior rules to be observed by payroll and outsourced drivers with the members of the community.



As required by the DINAMA, the Consortium shall prepare and implement a Communications Plan for Lot 2 to assure the community members that are likely to be directly affected by the construction works are effectively and timely informed of the Project progress.

The Consortium will also prepare and implement a Communications Plan to be applied throughout the Project construction sphere. The Plan will consider the indications already established in the Communications Plan prepared for DINAMA, and will involve: i) preparing and maintaining a Project stakeholders map; ii) planning Project dissemination actions to the members of the community, which show the progress of the significant Project construction works and its related aspects; iii) managing quarry blasting actions (with the precautions as indicated in Decrees 125/2014, 1230/1943 and 2605/1946), delivering in advance the information about the day, time and duration of each blast to the nearby settlers as well as the precautions they need to take to avoid personal and property damage; and iv) preparing and implementing a grievance mechanism for third parties. The Communications Plan must be complied with by the companies managing the quarries affected by the Project.

#### 4.4.b Security Personnel

The Consortium shall hire unarmed security personnel to protect the facilities.

### 4.5 Land Acquisition and Involuntary Resettlement

#### 4.5.a General

Route 14 is mostly used by timber trucks and, to a lesser extent, by trucks carrying agricultural produce. There is also little private vehicle traffic.

Laying out the new sections and widening the public domain belt in Lot 1 will require expropriating 73 rural lots; however, initially people will not need to be displaced and property will not need to be relocated. This is due to the fact that the changes will occur within the corresponding public domain belt. Nevertheless, the changes laid out for two of the stretches are actually detours for Nico Pérez and Zapicán, respectively, where the affected land is smaller and more likely to be used for less extensive activities.

#### 4.5.a.1 Project Design – Community Engagement

In June 2019, representatives of the Consortium and authorities from the Ministry of Transportation and Public Works together held meetings with representatives from Florida town council to discuss changes to the original Project layout and the requests made by the owners of the affected land. It was then decided that the original Project layout would be changed so as not to affect three houses located at markers i) 58+750 (Register N° 5767); ii) 67+300 (Register N° 16.763) and iii) 69+600 (Register N° 872). Likewise, the layout was corrected to avoid affecting an estate (a house and an agricultural business) located between markers 95+600 and 97+300.

### 4.5.a.2 Compensation and Benefits for Displaced Persons

The expropriation process will be carried out by the Topography Office of the MTOP. The process starts with the approval by the DNV of the Project planimetry. The expropriated property will be compensated for in the terms of Act 19,355, with the payment of the price of the lot, the improvements made and the eventual damage caused.



The Consortium will record and follow the expropriation and livelihood restoration plan prepared by the government, and will collaborate with the authorities, to the extent of what is allowed, to assure the outcome of the process is consistent with PS 5.

## 4.6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

### 4.6.a Protection and Conservation of Biodiversity

The Project is mainly located on a landscape unit called "Planicies del Este" (eastern plains), where there are grassland and remains of riverine forests and wetlands, which belong to an area called "Bañados del Este y Franja Costera" (eastern wetlands and coastal strip); the latter is one of the three areas included in the Ramsar Convention in Uruguay. These permanent and semi-permanent wetlands, associated to freshwater woody wetlands and watercourses, are located in an IBA (Important Bird Area, Bird Life International).

Although the Project is not based on any of the areas included in the National System of Protected Areas, Route 14 is laid out to run across two areas (or sections) of "conservation priority" <sup>7</sup> (Strategic Plan 2015 -2020. National System of Protected Areas in Uruguay [SNAP]); one of them is characterized as native bushes and the larger one as a natural flood plain (Sarandí creek environment). It is also worth mentioning that, as per the Sustainable Development and Territorial Planning Guidelines of the Department de Lavalleja, the area where Averías is located, will be probably categorized as protected.

The natural flood plain around the Sarandí creek environment will not be significantly altered by the Project as the projected works will be carried out on the existing road.

The native bushes area that will be mainly impacted is about 60 m wide by 7,200 m long; only 16% (about 7 ha) of that will be taken by the new road. Vegetation will be removed from the area once it is approved by the Uruguayan General Office of Forestry. The unoccupied area will be restored with such actions as included in the Vegetation Restoration Plan.

Wiegmann's tree lizards (Anisolepis Undulatus) were found in the area where the native vegetation will be removed; although the species is considered vulnerable in the International Union for Conservation of Nature (IUCN) red list, it will not be affected thanks to its great mobility.

The Project-impacted areas are not critical habitats.

### 4.6.b Sustainable Management of Living Natural Resources

The Environmental Management Plan for the construction phase as prepared by the Consortium will implement a Vegetation Restoration Plan with the following actions: i) keeping the first 20 to 30 cm of soil with the vegetation to be reused at the final restoration of the public belt and the construction site area; ii) compacting landfill to prevent erosion; iii) analyzing the soil properties to determine the compaction

<sup>&</sup>lt;sup>7</sup> The areas of conservation priority are those that might be further included in the SNAP's network of protected areas for their wealth in species and the presence of threatened ecosystems and ecosystem services.



level; iv) profiling the land in harmony with the landscape; v) removing all traces of occupancy at work end; vi) de-compaction of the soil at the construction sites at work end; and vii) placing a thin layer of fertile soil at work end. These actions will be supported by adding new native specimens. In Lot 1 specimens will be planted in 20 specific places in 3 flood plains (permanent or semi-permanent watercourse sides), but vegetation restoration activities are expected to be fully extended in each area, as needed. In Lot 2 native specimens will be planted in specific places in 4 riverine forest and wetland areas. The Plan involves monitoring the natural revegetation process, with an analysis of the structure and functionality of the developed communities (focus on the ecosystem connectivity). During the first year, monitoring tasks will be carried out bimonthly whereas in the second and third years, it will be done every four months.

El Construction Consortium will prepare and implement a Vegetation Restoration Plan as described in the corresponding summary environmental reports for Lots 1 and 2, including the actions to control invasive alien species. The procedure will include the creation of records that will allow for monitoring the completed actions and the results.

#### 4.6.b.1 Invasive Alien Species

In order to control the invasive alien species in the riverine forest along river Cebollatí, and therefore keep the structure, composition and function of the native bushes, the Consortium has planned to implement actions based on the recommendations in Uruguay Native Bushes Management Manual (MGAP, 2018). These actions include removing alien species (especially privet and ash trees), implanting native ones and monitoring revegetation activity bimonthly in the first year and every four months in the second one.

### 4.7 Cultural Heritage

### 4.7.a Protection of Cultural Heritage in Project Design

These are the buildings with cultural value as identified in the Project area: i) ruins of the main buildings of a farm with historical importance, located 60 m away from the existing layout and 260 m away from the new one; the remains are fully built in stone and organized into rectangular modules, including a 13 mdiameter stone farmyard; ii) the Correa family mausoleum located 200 m away from the road; iii) railway station Etiopía, 25 m away from the road; iv) a chapel to be located 11 m away from the new layout; v) Bedolla historical cemetery, located 75 m away from the existing layout and 360 m from the new one; vi) a mausoleum located 120 m away from the existing road; and vii) a stone farmyard at El Grillo estate, located 70 m away from the new layout. These will not be affected by the construction works as long as the necessary preventive measures are in place, such as limiting specific exclusion zones for buildings.

### 4.7.a.1 Chance Find Procedures

While all Lot 1 presents medium probability of archaeological findings, sections N2 and N3 are especially sensitive. The Consortium has taken preventive actions by commissioning a field Archaeological Impact Assessment, including: i) subsurface archaeological prospection; ii) archaeological diagnosis; iii) archaeological assessment and heritage status, considering the impact assessment; and iv) mitigation and conservation measures for the archaeological heritage.



The Consortium will prepare and implement a chance find procedure, applicable for the sites along the layout and the quarries. The report shall be based on the considerations in the Archaeological Impact Assessment of the Summary Environmental Report prepared for Lot 1. An archaeologist shall supervise its preparation and implementation.

### 5. Local Access of Project Documentation

The documentation relating to the Project can be accessed at the following link:

https://www.dinama.gub.uy/oan/manifiestos/.