

# Environmental and Social Review Summary (ESRS) Troncal del Magdalena I - COLOMBIA

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# **1.** General Information of the Project and Scope of IDB Invest's Environmental and Social Review

The Troncal del Magdalena I project (the "Project") is the third project of the Fifth Generation (5G) concession program led by the Government of Colombia through its National Infrastructure Agency ("ANI")<sup>1</sup>. This Project, originally awarded to another concessionaire which was forced to return it to the State without having concluded it, was reawarded through a public competitive bidding process to Autopista Magdalena Medio S.A.S. ("AMM", the "Concessionaire" or the "Client"), formed by KMA Construcciones S.A. (50%) and Ortiz Construcciones y Proyectos S.A. (50%).

The Project entails the financing, construction, improvement, rehabilitation, and operation and maintenance ("O&M") of the Puerto Salgar–Barrancabermeja stretch (the "Corridor"), running along 259.6 km, out of which 146.5 km relate to the construction of a second road, 148 km to road improvement and 5 km to road rehabilitation. The Project also includes the construction of 8 new bypasses, 17 footbridges, 20 bridges, 8 overpasses, as well as the operation of 2 existing toll plazas and 2 weighing stations.

The Project seeks to improve the connectivity of the Colombian Caribbean Coast with the interior of the country by improving and expanding one of the main cargo corridors. It specifically aims at optimizing the connectivity between the towns of Puerto Salgar in the Department of Cundinamarca and Barrancabermeja in the Department of Santander. The Project is estimated to generate 40,000 direct, indirect and induced jobs, runs along 7 municipalities<sup>2</sup> located in the Departments of Cundinamarca, Boyacá and Santander and, once concluded<sup>3</sup>, will reduce the current travel time by 2 hours.

<sup>&</sup>lt;sup>1</sup> The Project was originally part of a prior concession to Ruta del Sol S.A.S. (CORUSOL) – Sector 2, which was suspended after some stretches of the dual roadway were completed. Thus, several works were left unfinished in several stretches of the road.

<sup>&</sup>lt;sup>2</sup> Puerto Salgar, Puerto Boyacá, Bolívar, Puerto Parra, Cimitarra, Simacota and Barrancabermeja.

<sup>&</sup>lt;sup>3</sup> Jointly with the Project Troncal del Magdalena II.

For construction purposes, the Project was divided into 14 stretches or functional units (FUs)<sup>4</sup> and 3 phases of execution: (i) Pre-construction, which started in late 2022 and which, among other activities, includes preparing and submitting the Layout and Geometric Design Studies, Project Schedules of the works at the FUs, as well as the formalities with state and environmental authorities to obtain the permits, licenses, authorizations and concessions required at the beginning of the construction; (ii) Construction, which will start in December 2023 and will last 47 months; and (iii) O&M, which will last 25 years as from December 2022.

The Environmental and Social Due Diligence (ESDD) process included the following, among other aspects: (i) meetings with Concessionaire personnel; (ii) a visit to the site, which included technical meetings with contractors and subcontractors, and interviews with the stakeholders, workers, landowners, and community and municipality representatives; and (iii) the review of the information made available by the Client, such as environmental licenses and permits, Environmental Impact Assessments (EIAs), E&S management plans and programs, among other important documents.

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

The Project has been classified into Category A, in accordance with IDB Invest's Environmental and Social Sustainability Policy because it will likely generate the following negative E&S impacts and risks during its construction phase: (i) dust and gas generation; (ii) increase in noise levels due to the use of heavy machinery and increase in traffic; (iii) domestic and industrial wastewater; (iv) compacting of surfaces due to machinery traffic; (v) potential soil pollution; (vi) generation of solid waste (excavation waste, leftovers from surfacing, debris, paper, woods, metallic debris, oily rags, etc.); (vii) road blocks and interruptions; (viii) use of hydric resources; (ix) removal of the vegetation cover; (x) physical and economic displacement of the population to free up or make up the road easement; (xi) generation of expectations regarding the employment opportunities that could result from the planned activities. Likewise, during its O&M phase, it may generate the following impacts and risks: (i) alteration of surface water quality; (ii) production of sediments; (iii) generation of erosion processes; (iv) alteration of air and noise quality; (v) changes in the

UFO Puerto Salgar-Barrancabermeja, related to the O&M of the stretches to be used at the beginning of the Project; UF1 El Trique-Dos y Medio, running along 9.83 km and related to the construction of the two bypasses and two 50-meter bridges on the Velázquez river; UF2 Batallón Bárbula–PR52, running along 59.85 km and related to the construction of a by-pass in San Pedro de la Paz and the improvement of the Puerto Berrío interchange; UF3 PR52–Puerto Araujo, extending along 13.55 km and related to the construction of an additional road at the populated centers of PR52 and Puerto Araujo; UF4 Puerto Araujo-Cimitarra, running along 10 km and related to the construction of the Palmas de Guayabito by-pass; UF5 Puerto Salgar-Cimitarra, related to the improvement of the existing roadway of 65.87 km and the rehabilitation of the current roadway which is 5.04 km-long; UF6 Puerto Parra-Aguas Negras, running along 8.57 km, related to the construction of the new roadway and O&M of the roadway; UF7 Aguas Negras-Puerto Nuevo, running along 13.78 km, related to the construction of the Aguas Negras by-pass and the bridge over the Opón river; UF8 Puerto Nuevo-PR107+00RN4511, running along 10.69 km, including the construction of a new roadway and O&M of the roadway; UF9 PR107+000 RN4511–Campo 23, running along 10.69 km, related to the construction of the Campo 23 by-pass and the bridge over La Colorada river; UF10 Campo 23-Rancho Camacho, running along 10.31 km, related to the construction of junctions at the intersection of Rancho Camacho and the construction of on-ramps and junctions on Vía Yuma Pk 14+1410; UF11 Puerto Parra-Barrancabermeja, running along 84.63 km, including the improvement of the current roadway and O&M of the road; UF12 Barrancabermeja-La Lizama running along 21.11 km, related to the construction of the new roadway and O&M of the road; and UF13 La Lizama-Río Sogamoso extending along 9.80 km, related to the construction of the new roadway and O&M of the road and La Fortuna interchange

landscape; (vi) loss of domestic and native animals due to roadkills; and (vi) traffic accidents. These impacts are deemed to have medium-high to high importance.

The Performance Standards ("PS") triggered by the Project are: (i) PS1: Assessment and Management of Environmental and Social Risks and Impacts; (ii) PS2: Labor and Working Conditions; (iii) PS3: Resource Efficiency and Pollution Prevention; (iv) PS4: Community Health, Safety, and Security; (v) PS5: Land Acquisition and Involuntary Resettlement; (vi) PS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; and (vii) PS8: Cultural Heritage.

# 3. Environmental and Social Context

# **3.1** General characteristics of the Project's site

The Project is strategically located in the center of Colombia. It is the hub between the interior of the country and the Atlantic Coast which also has land (roads and railways), river and air connectivity.

The Department of Cundinamarca, whose capital is Bogotá (which is also the capital city of Colombia), is located in the center of the country. It covers an area of 24,210 km<sup>2</sup> (equivalent to 2.12% of the national territory) and its population is 2.9 million, out of whom 52% are women and 48% are men<sup>5</sup>. Politically and administratively speaking, it is formed by 116 municipalities, 14 *corregimientos*, 15 provinces and 117 police districts<sup>6</sup>.

The Department of Boyacá, whose capital is Tunja, is located in mid-east Colombia. It has an area of 23,189 km<sup>2</sup> (equivalent to 2.03 % of the national territory) and a population of 1.2 million, out whom 52% are women and 48% are men<sup>7</sup>. Politically and administratively speaking, it is formed by 123 municipalities, 3 *corregimientos*, 49 villages, 75 police districts and 57 hamlets<sup>8</sup>.

The Department of Santander, whose capital is Bucaramanga, is located in the north east of Colombia. Its area is 30,537 km<sup>2</sup> (equivalent to 2.7 % of the national territory) and its population is 2.3 million (the fourth most populated department in Colombia), out of whom 51% are women and 49% are men<sup>9</sup>. From the political and administrative point of view, it is formed by 87 municipalities, 57 *corregimientos*, 104 villages, 78 police districts and 30 hamlets.

The Project is located in the Magdalena mid-valley basin between the central and eastern mountain ranges of Colombia. The existing road runs mainly along flat areas and dissected hills. The average temperature during the year does not vary much, which is characteristic of areas located between 100 m and 200 m above sea level. Average temperatures range from 27.5 °C to

<sup>&</sup>lt;sup>5</sup> <u>https://sitios.dane.gov.co/cnpv/app/views/informacion/perfiles/25\_infografia.pdf</u>

<sup>&</sup>lt;sup>6</sup> <u>https://www.cundinamarca.gov.co/</u>

<sup>7</sup> https://sitios.dane.gov.co/cnpv/app/views/informacion/perfiles/15\_infografia.pdf

<sup>&</sup>lt;sup>8</sup> <u>https://www.boyaca.gov.co/</u>

<sup>&</sup>lt;sup>9</sup> As per the last National Population and Housing Census carried out by the National Administrative Statistics Department (DANE, for its acronym in Spanish).

29.4 °C annually. The hydrographic network located in the Project's direct and indirect areas of influence runs along the mid valley of the Magdalena River on the right bank, and surface currents and ground water currents crossing it go by predominantly flat areas, draining mostly to the north-west and west towards the Magdalena River<sup>10</sup>.

In the region the soil is mainly used as natural grasslands or are managed grasslands for extensive and intensive cattle rearing; however, it is used for other purposes, such as: (i) natural secondary forest intervened and vegetation in small isolated patches with strong anthropic intervention; (ii) gallery forests; (iii) areas abandoned from agricultural activities with destruction of the secondary natural forest under natural regeneration processes; (iv) intensive agricultural activities (commercial agriculture with permanent crops and livelihood agriculture); (v) areas for extracting construction materials, such as sand from the rocks and gravel, causing environmental degradation; (vi) some unused areas with bad soil conditions, such as erosive processes or mass landslides; (vii) dams, lakes and water reservoirs for agricultural activities; and (viii) oil concession areas.

# 3.2 Contextual risks

Historically, the area where the Project is located was extremely important for guerrilla groups, drug dealers and paramilitary groups due to the easy access in terms of river transportation (along the Magdalena River) and land transportation (along the then-called Panamericana road).

Such guerrilla and paramilitary groups have subscribed a peace agreement with the National Government and undertook to enter into a voluntary disarmament process. However, criminal gangs are still operating in the area; consequently, violent events still occur in this region<sup>11</sup>.

The contextual risk analysis carried out as part of the Project's ESDD process identifies 5 components with a high or moderate risk level in the Departments of Cundinamarca, Boyacá and Santander: (i) security and conflict, (ii) political risk, (iii) cohesion, (iv) retaliation, and (v) labor rights.

Therefore, the Client will perform a Security Risk Assessment which will include: (i) identification of potential security and violence risks (group or collective violence, violent crimes and retaliation) and other contextual risks; (ii) analysis of any additional risks arising from the security measures implemented for the people inside and outside the facilities; and (iii) security personnel training and equipment needs.

<sup>&</sup>lt;sup>10</sup> Source: EIA (FUs 1,2,3,4,6,7,8,9,10,12 and 13) Stretches 2,3 and 4 (partial).

<sup>&</sup>lt;sup>11</sup> Molano, Alfredo. "En medio del Magdalena Medio" (In the middle of the Mid Magdalena). Centro de Investigación y Educación Popular, CINEP. 2009.

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

# 4.1 Assessment and management of environmental and social risks

# 4.1.a E&S assessment and management system

The Client has in place an Integrated Management System (IMS), which: (i) covers sustainability, environmental, quality and occupational health and safety (OHS) aspects; and (ii) is aligned with ISO standards 9001:2015 (quality), 14001:2015 (environment) and 45001:2018 (OHS); and (iii) includes ongoing improvement procedures.

The Client will update and implement the IMS in order to ensure that the following items are included in the construction and O&M phases of the Project: (i) measures to verify the implementation of environmental aspects in all the activities of the Concessionaire, its contractors, subcontractors and main suppliers; (ii) objectives, scopes, responsibilities; (iii) Plan implementation tools, such as (a) labor audits, (b) field inspections, (c) OHS verification protocols, (d) equipment certification, (e) skill verifications of equipment and machinery operators, (f) reporting requirements (including frequency), (g) training needs and (h) key performance indicators (KPI), follow-up and monitoring of actions, among others; (iv) field audit requirements; and (v) third-party support requirements (consultants, experts and technical advisory services) when deemed appropriate.

The Project has a published Corporate Governance Manual<sup>12</sup>, which establishes the provisions and mechanisms to ensure that the rights of all shareholders and investors are respected, as well as the adequate management and control of the Concession issues focused on transparency in managing the Project, rules of conduct and the mechanisms to be followed by the shareholders, payroll and outsourced employees and supply chain workers.

#### 4.1.b Policy

In its IMS the Client has established a policy ratifying its commitment to: (i) road safety; (ii) customer satisfaction; (iii) the identification of E&S risks and impacts; (iv) health and safety; and (v) care of the community's property. In addition, it has specific policies on: (i) prevention of corruption; (ii) road safety; (iii) labor harassment; (iv) physical safety; (v) prevention of psychoactive substances consumption; and (vi) the System for Self-Control and End-to-End Management of the Risk of Asset Laundering and Financing of Terrorism (SAGRILAFT, for its acronym in Spanish).

Nevertheless, the Client will update its Integrated Environmental and Social Management System ("ESMS"), including in its policy commitments related to the identification and management of social impacts, stakeholder engagement, non-discrimination, inclusion, and gender equality, and

<sup>12</sup> https://autopistamagdalenamedio.com.co/wp-content/uploads/2023/07/20230630.-Manual-de-Gobierno-Corporativo.-rtainterventoria.pdf

zero tolerance for gender-based violence and harassment ("GBVH"). Likewise, AMM will communicate and disseminate this update among all its internal and external stakeholders.

#### 4.1.b.i Direct and indirect impacts and risks

To date, the Concessionaire has two (2)Environmental Impact Assessments ("EIA") prepared by the prior concessionaire and the related environmental licenses granted by the National Authority of Environmental Licenses ("ANLA"), for the straight stretches<sup>13</sup> and five (5) EIAs and the related licenses for the nine (9) bypasses<sup>14</sup> in the Corridor, out of which one (1) is for the already built and operational bypass and four (4)for new bypasses to be built by the Client as part of the scope of the concession. Out of the total environmental licenses (7), 4 relate to the 8 bypasses to be built which were already issued for AMM while the remaining one, for the straight stretch to be built, is under review by the ANLA.

The Project has in place an Environmental Guidance Adaptation Plan ("PAGA", for its acronym in Spanish)<sup>15</sup> for O&M activities (removal of landslides, vegetation clearing and cleaning of the rights of way, patching) of the FU 0. This document was last updated in September 2023; therefore, all the activities being carried out by the Concessionaire in the Corridor (pre-operations, operations, maintenance, rehabilitation and improvement) correspond to those outlined in the current PAGA.

Although (a) the Project design and alignment have not changed substantially as compared to the original ones (prior concession) and (b) all the studies related to the EIAs cover the same footprint and impact area, considering the time elapsed between the execution of those studies and the obtainment of the environmental license by the old concessionaire, the Client will update the E&S baselines and will compile updated information on the physical, biotic, E&S aspects along the Corridor in order to assess the E&S conditions present to date and identify new impacts requiring additional monitoring controls or activities.

In addition to those identified in the EIAs, the PAGA and the licenses, the Concessionaire has in place an E&S aspects and impacts assessment to evaluate, measure and manage the E&S impacts and risks arising from all its activities. These impacts and risks are booked in an E&S aspects and impacts identification and assessment matrix detailing the type of risk or impact for each activity and an assessment of the importance, size and probability of occurrence. In addition, the Client has a system to identify and manage all the E&S regulatory requirements allowing it to follow up on the legal obligations and monitor the compliance thereof.

<sup>&</sup>lt;sup>13</sup> Straight stretches to be built from Caño Alegre to the Sogamoso river, granted through Resolution 0997 of November 2012; and FU 0 (built) from Puerto Salgar to Caño Alegre, granted by Resolution 861 of May 2011.

<sup>&</sup>lt;sup>14</sup> Unbuilt bypasses: (1) El Trique, Dos y Medio and San Pedro de la Paz at FUs 1 and 2 (Resolution 1372 of November 2014); (2) Palmas de Guayabito at FU 4 (Resolution 0960 of August 2014); (3) Aguas Negras and Campo 23 at FUs 7 and 9 (Resolution 0287 of March 2014); km 28 and Puerto Araujo at FU 3 (Resolution 0295 of 2014). The already built bypass of Puerto Libre at FU 0 (Resolution 0439 of June 2012).

<sup>&</sup>lt;sup>15</sup> The APEG is a document establishing the environmental management programs or projects for road works considering the E&S impacts that could be generated.

However, in order to improve the identification and record of E&S risks and impacts, and enable monitoring the compliance with all its E&S commitments in a systematic and centralized manner, the Client will update the E&S impacts matrix for the Project's construction phase including: (i) management measures to prevent, minimize or offset any undesired impacts; (ii) control measures required by the EIAs, licenses, PAGAs and other E&S studies; and (iii) measures to ensure the compliance with the International Finance Corporation ("IFC") General Environmental, Health and Safety ("EHS") Guidelines.

#### 4.1.b.ii Analysis of alternatives

Since the Project is focused on replacing or repairing an existing asset<sup>16</sup>, no alternatives to the original layout of the road were considered. However, the Client would request the ANI for a change in the layout of the La Fortuna bypass<sup>17</sup> (FU 13) since at present the plots on which the construction will take place seem to have been occupied by settlements. In spite of the fact that, to date, the ANI has not as yet issued a formal response to this request, the Concessionaire has started the plot and social survey in order to establish the baseline of the population that would be potentially affected.

#### 4.1.b.iii Cumulative impact analysis

The Client has prepared a quick cumulative impact assessment. Therefore, it selected the following valued ecosystem components ("VEC") from the group of environmental components which would be affected in any way by the activities to be carried out under the related EIAs or PAGAs: (i) air quality (gases and particles); (ii) water quality (agrochemicals and other chemical products on the road); (iii) wildlife (roadkills); and (iv) residential or commercial area (risk of accidents). Subsequently, since the effect of past projects was already incorporated into the Project's baseline and there are no projects currently under execution within or close to the area of influence which are generating any material incremental effects on the selected VECs, it identified a group of 6 projects (2 are energy-related, 1 is a poultry farm, 2 are fish farming projects and 1 relates to agriculture) which will be executed in the future and could give rise to these effects on the chosen VECs. It thus identified the impacts that each of the selected projects could have on each VEC and generated a cumulative impact mitigation plan ("CIMP") and, although such plan should be mainly executed by the project developers included in the analysis, it will be closely monitored by the Client.

However, the Client will update the analysis following IDB Invest's "Practical Guide for Cumulative Impact Assessment and Management in Latin America and the Caribbean". With the results of this update, if necessary, it will adjust the CIMP accordingly and execute or follow up on the activities included in such plan.

<sup>&</sup>lt;sup>16</sup> Known as "yellowfield".

<sup>&</sup>lt;sup>17</sup> Area known as "Vereda La Fortuna".

#### 4.1.b.iv Gender risks

In its Corporate Governance Manual, the Project explicitly commits to guaranteeing equal work opportunity and granting fair treatment to all the persons, in compliance with effective local regulations. The Manual bars discrimination and any form of harassment based on race, color, religion, country of origin, gender, age, disability, sexual preference, marital status, trade union enrolment or political affiliation. Notwithstanding the above, the Client will draft a Code of Conduct applicable to all employees, contractors and subcontractors, which will include provisions related to: (i) prevention of GBV; (ii) explicit bar on sexual or moral harassment; and (iii) the expected behaviors with surrounding communities.

Although the Client trains its female employees in gender issues, it will expand these practices to all its employees regardless of gender.

The Project has a Workplace Conduct Labor Coexistence Committee ("WLC") which, under Colombian regulations, periodically handles any employee grievances or claims, as well as the cases which could be considered as unaccepted behaviors, such as labor harassment. The Client will also update its internal and external grievance mechanism to include: (i) safe channels to receive confidential or anonymous grievances; and (ii) specific provisions to guarantee that GBV claims are adequately addressed using a victim-centered approach.

At present, the Project has 717 employees including payroll and outsourced personnel, out of whom 24% are women<sup>18</sup>. Through the Workforce Engagement Protocol, the Client establishes its commitment to generate work positions guaranteeing gender equity and equal opportunity for women. The Protocol also provides the following goals to incorporate female labor to the Project: 10% in the pre-construction and construction phases, and 30% in the O&M phase.

Construction activities will include night shifts which, some of which, will entail activities in remote regions and badly lit areas and, in some cases, without cellular phone reception<sup>19</sup>. Under these circumstances, female employees are more vulnerable to violence or harassment.

The Client will mitigate these risks by developing a Gender Risk Plan which will include, among others: (i) adequate prevention and management measures to ensure the female workers' safety, considering the isolated job positions, night shifts, work environment, transportation and access to gender-based restrooms; (ii) actions to minimize the risk of social conflict and GBV; (ii) measures to prevent the sexual exploitation of children, women and other vulnerable groups; and (iii) actions to prevent the spread of transmissible diseases and infections.

<sup>&</sup>lt;sup>18</sup> A total of 29 women as follows: 5 have management positions, 14 are coordinators and 54 are managers.

<sup>&</sup>lt;sup>19</sup> For example: (i) women in charge of night traffic whose closer workmates are over 100 m away and working in sites with bad visibility; and (ii) women in mobile offices usually located in sites with bad or no cellular phone reception, and working in enclosed spaces.

#### 4.1.b.v Climate change exposure

The Project is deemed as aligned with the provisions of the Paris Agreement based on the analysis performed in line with the IDB Group's Paris Alignment Implementation Approach<sup>20</sup>.

The following climate change threats (considered high and moderate) were identified in a 5-km stretch to both sides of the road layout: (i) droughts, moderately present in 22% of the area; (ii) heat waves, highly present and with an upward trend; (iii) floods, highly present in one third of the road, not concentrated in one place but happening in different stretches of the Corridor; and (iv) significant change in rainfall pattern, a risk that will probably intensify over time through the Project lifecycle.

The Client will conduct a climate study to: (i) assess the climate variability risks and opportunities; (ii) identify adaptation measures to reduce such risks; and (iii) define any potential mitigation measures. The latter will seek to ensure that: (i) the Project design includes flood and waterflow modeling; (ii) the Project incorporates the necessary controls resulting from the modeling, thus preserving human life and the assets during the construction phase; (iii) the protocols to be followed in the event of natural disasters are drafted and disseminated; (iv) training events are held for personnel regarding climate change mitigation; and v) the Project can anticipate and react duly in the event of any climate change-related event.

#### 4.1.c Management programs

The Client has in place the following programs, plans and instruments to manage its undesired risks and impacts: (i) identification of impacts; (ii) disaster risk assessment; (iii) control of emissions; (iv) solid and hazardous waste control; (v) environmental noise; (vi) vegetation management; (vii) environmental compensation; (viii) reforestation; (ix) wildlife management; (x) emergency preparedness and response; (xi) workforce management; (xi) equal opportunity; (xii) E&S and OHS training; (xiii) contractors management; (xiv) land acquisition; (xv) community awareness; and (xvi) stakeholder engagement and grievance mechanisms. These include details on how and when to implement the related actions, as well as on how to engage in monitoring actions (frequency, indicators and review processes, among others).

The social management plans included in the environmental licenses, which are aimed at mitigating the Project's E&S impacts and improving the benefits for the community, consider the following programs: (i) E&S management; (ii) environmental education and training for Project personnel; (iii) community information and engagement; (iv) land acquisition and resettlement; (v) support to institutional management capacity; (vi) environmental training and education for the surrounding communities; (vii) local workforce hiring; (viii) support to local companies; and (ix) road safety promotion. The protocols defined in these programs are based on engagement, governance, social inclusion, social management of infrastructure, assets and public services, and social management in general.

<sup>&</sup>lt;sup>20</sup> Document GN-3142-1.

The Client will also draft an E&S management program for its contractors applicable to the Project's construction phase and including E&S goals and KPIs following the applicable performance levels and the measures required by the IFC's "Good Practice Note: Managing Contractors' Environmental and Social Performance".

# 4.1.d Organizational capacity and competency

The Concessionaire's E&S management is broken down in 5 positions: (i) Environmental Director, in charge of AMM's environmental management to whom the environmental coordinator, 2 field supervisors, 2 environmental associates, 1 GIS professional, 1 archaeologist and 1 biologist report; (ii) Social Director, in charge of all the social and community management aspects to whom 3 coordinators, 4 social officials, 3 social representatives from the field mobile offices and 1 lawyer report; (iii) Plot Management Director, in charge of the acquisition and compensation of the rights of way, to whom 1 technical coordinator, 1 legal coordinator, 1 plot coordinator, 1 social & plot management coordinator, 4 social & plot management technicians and 1 land associate report; (iv) Administrative Director, in charge of OHS issues to whom 1 OHS coordinator and 2 field supervisors report. The Human Resources area also reports to the Administrative Director.

However, the Client will: (i) make sure that the organizational structure and resources assigned to the implementation of E&S management of the Project are adequate and enhanced for the construction phase in OHS and social terms; and (ii) define the roles, duties and authority to implement and follow up on the Integrated Management System (IMS) of the contractors and subcontractors.

#### 4.1.e Emergency preparedness and response

The Project has a general Emergency Preparedness and Response Plan ("EPRP") which details possible scenarios generated by internal and external risk factors, such as spills, fires, and natural disasters. However, the Client will develop specific plans for the construction and O&M phases, which: i) consider the most likely risk scenarios (including those that could affect neighboring communities or civil or labor disturbances); ii) include the most relevant potential emergencies (including climate risk and natural disasters); iii) define the roles and responsibilities of the Company, its contractors and subcontractors; iv) define the flow of internal and external communications (with community leaders and government authorities) during emergencies; v) specify the response equipment to be used and the protocols to be followed during an emergency; and vi) are based on Good International Industry Practices ("GIIPs"), and the applicable recommendations of the IFC's Environmental, Health, and Safety (EHS) General Guidelines and Environmental, Health, and Safety Guidelines for Toll Roads.

#### 4.1.f Monitoring and review

The Project prepares monthly technical compliance reports for its Management which include the EHS performance assessment and compliance with the KPIs established in the PAGA. It also prepares other legal compliance reports. The EHS performance and compliance results are reported on a quarterly basis to the Board of the Concessionaire and the IMS is assessed annually (the first review will take place in December 2023).

In addition, the Client will update its assessment and monitoring processes by developing and implementing an E&S legal matrix for the construction and O&M phases of the Project to include: (i) all the E&S and OHS national regulatory requirements; (ii) the contractual financing obligations and requirements; and (iii) provisions for the timely review and monitoring of such obligations and requirements.

#### 4.1.g Stakeholder engagement

The Project has in place a Community Information and Participation Program ("CIPP") establishing the mechanisms to: (i) identify the stakeholders and social organizations; (ii) assess their interests and expectations; and (iii) define the engagement actions and management strategies for relevant issues<sup>21</sup>. The Client maintains relationships with local authorities and the communities of the direct areas of influence, mainly through the Community Action Groups ("CAG").

The Client is also preparing a Stakeholder Engagement Plan ("SEP") which will include: i) a protocol for mapping stakeholders and updating it periodically; and ii) strategies, tools, and mechanisms for sharing information and consulting with each mapped stakeholder group in a culturally appropriate manner.

#### 4.1.g.i Disclosure of information

The Client has a Social Management Plan ("SMP") in place including actions to keep the communities and stakeholders informed about the Project.

The Client also has a Comprehensive Internal and External Communications Matrix establishing: (a) the content to be communicated; (b) the sender; (c) the receiver; (d) the means of communication; and (e) the frequency with which the communication should be issued. As part of its communication initiatives, the Client has developed and distributed informative brochures and videos on the internet to report on the Project's general characteristics as well as its potential impacts and benefits.

Also, by implementing the SMP and the CIPP, the Client holds periodic meetings with the local communities and authorities at the departments, municipalities and districts in the direct area of influence of the Project to disseminate the general information on the progress of the works, details on its E&S management and development for specific works. The meetings are held at the beginning, during and at the end of the interventions. Extraordinary meetings are carried out based on the needs of each group of interest or at their request.

<sup>&</sup>lt;sup>21</sup> Such as voluntary divestment, the places where they could submit their queries, grievances, claims and suggestions.

4.1.g.ii Informed Consultation and Participation

In accordance with Colombian legislation, the development of EIAs included stakeholder consultations. As a result of this process, where the concerns and suggestions of community members were registered and analyzed, some changes were introduced in the design of the Project, such as the general location of the pedestrian bridges and the community commercial areas, among others.

Currently, as part of its social management and the CIPP, the Client continues to consult with communities and other stakeholders to: i) adjust the location of pedestrian bridges; ii) review other pedestrian mobility measures; and iii) minimize negative impacts and improve the social and economic benefits of the Project, including labor relations issues.

4.1.g.iii Private Sector Responsibilities Under Government-Led Stakeholder Engagement Process

During the structuring of the concession contract, the Colombian Government consulted with communities to: i) identify specific needs; ii) adjust certain characteristics of the Project to guarantee pedestrian and vehicular mobility; and iii) prevent or reduce impacts on local commerce.

The ANI is the government entity responsible for communicating with communities and stakeholders regarding toll issues, including the assignment of differentiated rates and annual rate changes by category. In this regard, the Concessionaire will support the ANI in the planning, implementation, and monitoring of the information to be provided to the communities, propose the communications strategy, and provide the databases and contact details of key stakeholders.

#### 4.1.h External Communication and Grievance Mechanisms

In accordance with its contractual commitments and Colombian legislation, the Project has implemented a Costumer Service System ("CSS") whose objective is to establish a system to receive, address, and process questions, complaints, grievances, and suggestions ("QCGS") from road users and the communities within the area of influence. This mechanism has different channels for receiving QCGS: telephone, email, through the Operational Control Center ("OCC"), through the user service offices (main office, mobile offices, and satellite offices), website, and verbally to the Concessionaire's personnel. The program establishes, for each QCGS received: i) the response time;<sup>22</sup> ii) the flow of information to the areas responsible for its resolution; iii) the response to the complainant in writing; and iv) closure of the QCGS, both physically and electronically. It should be noted that the CSS allows QCGS to be registered anonymously.

The Project also has a permanent community relations office and two mobile offices that travel daily to different communities within the Project area to provide information and resolve queries from users and affected communities. However, the Project will update its Costumer Service System to ensure: i) culturally appropriate access for affected communities and other

<sup>&</sup>lt;sup>22</sup> 15 working days, as set forth in Law 1,755 of 2015, which regulates the Fundamental Right of Petition.

stakeholders; ii) that all communications are registered, analyzed, assessed, and responded to in a timely manner; iii) timely resolution with the shortest possible response times for QCGS filed by vulnerable communities and resettled persons; iv) the option of filing confidential and anonymous complaints; and v) that complaints of gender-based violence ("GBV") and harassment are adequately addressed.

# 4.1.h.i Provisions for Addressing Vulnerable Groups' Grievances

Through the permanent office, mobile offices, and community meetings, the Project's social team provides timely attention to the affected communities and addresses situations that require immediate or specific actions. The Costumer Service System facilitates the submission of complaints from all types of population groups and guarantees fair and transparent treatment. However, the system does not have a differentiated procedure for vulnerable communities or population groups.

# 4.2 Labor and Working Conditions

The Project's headcount is 717, out of which 131 are direct employees and 586 are contractors. About 24.4% of the workforce is made up of women, while 76% of employees and workers come from the direct area of influence. Since the Project is still at the pre-construction phase, it is estimated that the workforce will get to about 3,000 workers during the construction peak periods.

4.2.a Working Conditions and Management of Worker Relationships

# 4.2.a.i Human Resources Policies and Procedures

The Project has in place a set of Human Resources policies and procedures including: (i) a hiring and onboarding procedure; (ii) a training plan including, for example, working conditions and labor relations; (iii) a strategic direction and corporate values document; and (iv) a sexual harassment policy, among others.

Likewise, the Client will design a Code of Conduct describing the set of principles, values, rules, labor expectations, behavior and relationships applicable to its payroll employees, and those of its contractors and subcontractors in line with: (i) Colombian regulations; (ii) corporate policies and requirements; (iii) IDB Invest's Sustainability Policy; (iv) IDB Invest's "Gender Risk Assessment Tool" ; and (v) any provision related to the prevention of gender-based violence and harassment ("GBVH"), inflow management and health and safety, among others. The Code of Conduct will explicitly mention zero tolerance to discrimination, sexual and moral harassment and GBVH.

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

The Concessionaire has signed work agreements with all payroll employees, specifying the labor conditions in accordance with current local regulations, thus securing the labor rights required, which include transportation assistance, premiums, dismissals and healthcare and pension payments. The salaries are being paid when and as stipulated in the related contracts.

#### 4.2.a.iii Workers' organizations

The Concessionaire acknowledges the right to form and enroll in trade unions. In this sense, in its Good Corporate Governance Manual, it bans discrimination for being enrolled in a trade union. At present, there are no labor organizations or workers' unions present in the Project. There have been no collective bargaining processes either.

However, the Code of Conduct will expressly mention the right to association, requiring that this principle be disseminated among all the workers. The Client will provide the conditions necessary for collective action if so, requested by the workers.

#### 4.2.a.iv Non-Discrimination and Equal Opportunity

The Corporate Governance Manual bars discrimination in all the employment terms, conditions and privileges, any form of harassment based on race, color, religion, country of origin, gender, age, disability, sexual preference, marital status, union membership or political affiliation; it also sets forth the Concessionaire's commitment to guaranteeing equal opportunity on the job and fair treatment for all individuals.

The Concessionaire has in place a recruitment program including provisions on hiring local individuals and it establishes the goal of 10% and 50% for qualified and non-qualified labor force, respectively.

#### 4.2.a.v Retrenchment

The Personnel Hiring and Termination Procedure establishes the guidelines for terminating contracts, the causes for termination and the termination with a fair cause and by unilateral decision of the hiring party in conformity with Colombian legislation. The Concessionaire does not expect to keep personnel upon concluding the construction stage; it will therefore draft a retrenchment plan to support the workers under labor relocation and reinsertion into the labor market.

#### 4.2.a.vi Grievance Mechanism

As required under Colombian regulations, the Workplace Conduct Committee ("WCC"), is in charge of periodically handling the grievances and claims from the Concession's employees. The WCC duties include receiving and resolving grievances, analyzing cases, holding periodic discussions, drafting improvement plans for the parties in conflict and preparing quarterly management and follow-up reports, among others. The WCC is formed by representatives from the Concessionaire and the workers.

The Concessionaire will update the internal grievance mechanism to include: (i) an itemized list of the means to receive grievances and concerns (including confidential, anonymous and specific GBV-related grievances); (ii) a strategy to disseminate this mechanism; (iii) a grievance recording and monitoring system; (iv) KPIs allowing to follow up on and file reports; (v) specific provisions to

guarantee that GBVH grievances are handled adequately using a survivor-centered approach; and (vi) a non-retaliation commitment to the individuals filing grievances.

# 4.2.b Protecting the Workforce

The Good Corporate Governance Manual establishes principles and guidelines to secure the workers' labor rights and promote work with dignity and fair treatment. The Manual bans forced labor and hiring individuals aged under 18.

#### 4.2.c Occupational Health and Safety

The Concessionaire's IMS, certified under the ISO 45001:2018 standard, covers procedures to identify and analyze OHS risks in connection with the activities carried out by employees and contractors. The IMS also includes OHS management programs with the following activities: onboarding and training; OHS inspection and maintenance; emergency response; road safety; occupational risks management; management of hazardous substances; investigation of incidents; identification of risks; and use of personal protection equipment ("PPE").

In order to guarantee that the OHS management programs are implemented effectively and promote adequate protection for the employees and contractors, the Client will design an OHS management plan for the activities in the construction phase of the Project, which will include: (i) field inspections at the different work fronts to assess OHS conditions and identify any improvement opportunities adequately; (ii) the identification of any non-mitigated risks; (iii) the protection of workers from physical or traffic risks; and (iv) the improvement of the following processes: (a) identification and communication of safety risks, (b) assessment and certification of equipment operator skills, (c) safety inspections of the equipment, (d) emergency response protocols and communications, and (e) monitoring of health and safety in the field.

# 4.2.d Workers Engaged by Third Parties

The engineering, procurement and construction ("EPC") contractor for the Project is Consorcio Constructor Autopista Magdalena Medio, made up by KMA Construcciones S.A.S. (50%) and Ortiz Construcciones y Proyectos S.A (50%). At present, about 82% of the workforce is formed by workers hired by third parties.

The Concessionaire has in place a comprehensive manual for contractors, subcontractors and suppliers establishing the contractors' and subcontractors' obligation to meet the Project's E&S management requirements. With this manual, the Concessionaire: (i) evaluates contractors, service providers and suppliers prior to hiring them; and (ii) reviews the E&S performance and practices, OHS, work conditions and the quality control of contractors and subcontractors. The E&S requirements and procedures to be observed by the contractors and subcontractors are included in the related contracts.

The Concessionaire will disseminate and guarantee that the workers of their contractors and subcontractors have access to the internal grievance mechanism. Likewise, considering that the

Project foresees hiring workers from other areas, the Concessionaire will implement an accommodation conditions rulebook establishing: (i) the minimum accommodation infrastructure requirements (maximum number of workers per bedroom, one bed per worker, a leisure area, Wi-Fi, etc.), (ii) minimum cleanness and maintenance conditions; (iii) safety requirements; and (iv) follow-up, reporting and recording procedures for any news from personnel camps and accommodation sites.

# 4.2.e Supply Chain

The Comprehensive Manual for Contractors, Subcontractors and Suppliers requires that all the suppliers have effective environmental licenses and certificates authorizing them to render services or exploit resources.

# 4.3 Resource Efficiency and Pollution Prevention

# 4.3.a Resource Efficiency

The water required by the Project will be obtained from 22 superficial sources (water bodies). Each FU has a water extraction point with intake volumes approved by the ANLA. In addition, it has in place the Water Efficiency and Saving Program<sup>23</sup> ("WESP") establishing water consumption reduction and saving goals through five programs: inspection of equipment, reduced consumption of the water taken in; water reuse; use of rainwater; and educational campaigns. However, this Program only considers the O&M phase of the Project; consequently, the Client will update it for the construction phase.

The energy used at present by the Project comes from the national grid, but, during the construction phase, the Client expects to generate electric power using small-capacity diesel-fed mobile generators. It should be noted that the Project has in place an Energy Efficiency and Saving Program.

Nevertheless, t the Client will also develop an Efficiency Resource Plan adapted to the Project's construction and O&M phases to identify improvements and define measure to improve energy, water and supply efficiency. This Plan will address the following aspects: (i) efficiency strategy; (ii) identification of consumption, demands and saving opportunities; (iii) implementation programs; and (iv) measures follow-up and assessment program.

#### 4.3.a.i Greenhouse Gases

AMM does not have any projections on the greenhouse gas ("GHG") emissions expected for the construction and O&M phases; consequently, it will develop an annual inventory of GHG emissions

<sup>&</sup>lt;sup>23</sup> The Water Efficiency and Saving Program is a tool aimed at enhancing water use formed by a group of projects and actions that users requesting to be connected to a water source should prepare and adopt in order to contribute to the sustainability of this resource. (see https://www.minambiente.gov.co/gestion-integral-del-recurso-hidrico/uso-eficiente-y-ahorro-del-agua/).

which will include the significant sources of its direct emissions (scope 1) and indirect emissions of the consumed energy (scope 2) for each of the Project phases.

# 4.3.b Pollution Prevention

Pollution prevention is integrated into the Company's environmental management system. AMM has developed and implemented different management and monitoring plans to ensure that its activities minimize the adverse impacts on human health and the environment, including the areas under its direct control and those managed by contractors and subcontractors. The Project's EMPs consider management plans with control measures following the mitigation hierarchy.

Thus, for example, in order to mitigate the impacts on air quality and prevent noise generation, the Client will implement actions to manage emission and noise sources for the industrial plants (crushing, asphalt, concrete, soil and electricity) to be located in El Hato, Nuevo Mundo, Carare, La Unión and Santa Lucía; it will also implement explicit management measures for the asphalt plants, such as more frequent emissions monitoring to determine mitigation measures and the use of insulation to mitigate noise. It should be noted that the Project has a water quality baseline in four points, which was updated in May 2023.

To manage the environmental noise from motor vehicle traffic, the Project design prioritized the introduction of bypasses to avoid crossing urban areas and places with sensitive receptors. The width of the road easement (60 m) favors a significant reduction in traffic noise levels in the nearby homes. The Project has a noise baseline (updated as of May 2023) of 7 points located along the Corridor, but close to the populated areas.

In order to decrease the impact on the soil, the EMPs have handling checklists for different aspects, such as: (i) excavation waste management and disposal; (ii) slope management; (iii) morphological and landscaping management; (iv) biotic management; (v) vegetation cover removal and ground clearing management; and (vi) revegetation program. The measures to avoid erosion, and soil pollution, and restore the initial conditions of the intervened area are established in these checklists. At present, the Concessionaire monitors the water quality (upstream and downstream) in 17 points where the road is intersected.

The direct areas of influence of the Project more prone to be impacted by the soil quality component are: (i) areas for scraps disposal; (ii) materials source or quarry; (iii) gas stations; and (iv) areas running across oil & gas pipelines.

The Concessionaire has 37 authorized areas for the disposal of 3.6 million cubic meters of material scraps. Even when the current planning does not establish the use of all of such areas, the Project has checklists to ensure the stability, compacting levels required and adequate management of material in such areas.

Between quarries and mines, the Project has 25 sites authorized for the extraction of materials<sup>24</sup> (mainly stone) for its works, 15 of which already have an environmental license.

The Project will intervene plots where gas stations are currently operating, which will be closed to build the dual roadway. In all of those that remain open, it will adjust the accesses so that the users of the Corridor may get fuel safely.

Since the Concessionaire is "inheriting" an asset which was partially built and abandoned by the old concessionaire, the Client will prepare a technical study to identify, document and assess any potential environmental liability<sup>25</sup> which may have been left unsolved before the exit of the prior concessionaire. This study will document the liabilities and serve as reference to define the way in which they will be managed and by whom.

The Project will run across several pipelines transporting hydrocarbon products (gas and multiproduct pipelines), mainly in the Department of Santander. Although the responsibility for managing this interference lies with third parties (the pipelines owners or operators), the Client will coordinate with them to establish adequate and safe EHS protocols and will only start its construction activities once the areas have been freed by the responsible entities.

Finally, and to prevent soil and water pollution, during the O&M activities, the Client will develop and implement an Environmental Management Plan for Road Paving, Repaving and Painting which will describe the mitigation measures and controls to be implemented to meet Colombian standards, the environmental instruments (EIAs, PAGA, etc.), the IFC's EHS Guidelines for toll roads and IDB Invest's Sustainability Policy.

4.3.b.i Wastes

The Client maintains the following related programs and strategies to reduce, recover and reuse all types of solid and liquid wastes, including hazardous solid wastes: (i) End-to-End Waste Management Program; and (ii) Waste Delivery Program, consolidating good practices for the disposal by third-parties. The EMPs of each license mention the support of authorized managers who will collaboratively work with the Concessionaire for the correct management of wastes (transportation, final disposal and treatment).

#### 4.3.b.ii Hazardous Materials Management

The Client's Solid Waste Management Program considers the procedures to manage hazardous materials, which include provisions to be safely transported, handled, labeled and stored, as well as to respond to emergencies. In addition, the Company has specific procedures to contain and collect hazardous substance spills.

 $<sup>^{24}</sup>$  About 20 million m<sup>3</sup>.

<sup>&</sup>lt;sup>25</sup> These include gas stations and materials quarries.

4.3.b.iii Management and Use of Pesticides

The Project will be in charge of road easement maintenance tasks (cleaning, pruning and cutting vegetation) to be mainly performed manually through the contractor's cleaning teams. The use of pesticides for this activity is expected. However, when they are required, the Client will verify that they are not included in the "la" (extremely hazardous) and "Ib" (highly hazardous) categories as per the World Health Organization's ("WHO") Recommended Classification of Pesticides by Hazard.

# 4.4 Community Health, Safety and Security

# 4.4.a Community Health and Safety

To date, the Client is preparing the final designs and road safety strategies for the Project's construction and O&M phases. These designs incorporate the road safety measures required by Colombian legislation: footbridges, underpasses, accesses and interconnections, considering the interaction of the different players from the community and the users along the Corridor (pedestrians, cyclists, motorcyclists, light vehicles and heavy vehicles).

The Concessionaire has in place a Road Safety Policy and a Road Culture Program; the latter aims at training the population close to the Project, the road users (pedestrians, cyclists, drivers and passengers) as well as children and teachers from nearby educational centers in issues related to road safety and traffic signs, among others.

Supplementarily and in order to secure the safety at the work fronts and interactions with pedestrians and drivers, as well as the community health and safety, the Client will draft a Community Health and Safety Plan with measures to, among other things: (i) safely transport and manage wastes and hazardous materials; (ii) manage the impacts of the road users, including road regulations and speed control, to guarantee a minimum disruption of the regular traffic flow and reduce the risk of accidents; (iii) minimize the risk of social conflict and GBVH; (iv) prevent the risk of greater sexual exploitation of boys, girls, women and other vulnerable groups owing to the possible immigration of workers due to the Project; and (iv) prevent the spread of transmissible diseases owing to the possible Project-related immigration of workers and persons seeking jobs and opportunities raised by the construction of the Project.

#### 4.4.a.i Hazardous Materials Management and Safety

In the pre-construction phase, the risks associated with the use of hazardous materials are related almost exclusively to the asphalt mixture production processes. During the construction phase, however, the Project's activities include the handling of asphalt emulsions, additives, stone materials, oils, and machinery maintenance fluids (even though this would be performed at authorized external sites). As such, the OHS Management Programs will include measures such as: an inventory of hazardous materials; handling procedures; and storage areas, among others, to ensure the safety of employees and contractors, and also reduce community exposure to this type of materials.

#### 4.4.a.ii Community Exposure to Disease

Although the Project includes measures to prioritize local hires, many employees and contractors will arrive from other regions or from abroad<sup>26</sup>. In order to mitigate the community spread and exposure, the Community Health and Safety Plan will include measures to prevent the spread of transmissible diseases.

#### 4.4.a.iii Emergency Preparedness and Response

The Project has in place an Emergency Prevention, Preparedness and Response Plan. This considers communication, dissemination and training measures, and involves third parties (firefighters, the Civil Defense, the Red Cross, healthcare and community services) interacting with AMM for emergency events management.

#### 4.4.b Security Personnel

The Project has entered a contract for the provision of private security services at its facilities (toll stations) with a company duly accredited by the Colombian authorities. In total, 10 unarmed guards are located at its road operation centers along the road.

In addition, the Client will develop a Security Plan to manage the private security forces, which: (i) includes measures to avoid any potential damages to the employees, communities and other stakeholders; (ii) is aligned with the IFC's "Good Practice Handbook: Use of Security Forces: Assessing and Managing Risks and Impacts. Guidance for the Private Sector in Emerging Markets"; (iii) is applicable to contractors and subcontractors; (iv) includes formal procedures to inform, address and document security incidents; (v) includes training requirements on the use of force and GBVH prevention and management; (vi) includes the procedures to review the security records of the security contractors; and (vii) includes procedures to screen the requestors of security guards.

#### 4.5 Land Acquisition and Involuntary Resettlement

#### 4.5.a General

The implementation of the Project, including the FU 0, requires the intervention of 807 plots. However, given the interruption of the land acquisition and involuntary resettlement processes launched by the prior concessionaire, the status of these plots is as follows: (i) 22 have purchase processes finalized and verified for social and plot-related issues; (ii) 246 have processes to be verified for social and plot-related issues <sup>27</sup>; and (iii) out of the 539 related to FUs 1 to 13, 450 have not initiated the purchase process and 89 are held by the ANI. The plots mostly include small portions of medium and large farming ventures. The land acquisition process will give rise to the

<sup>&</sup>lt;sup>26</sup> During the ESDD visit, major presence of contractors from the Colombian coast were identified and, to a lesser extent, of Venezuelan workers.

Processes began by the prior concessionaire but were paused in 2017, including: (i) processes with a percentage paid to the owner; (ii) processes with partial advances but without a formal purchase offer; and (iii) expropriation processes underway.

displacement of about 1,742 persons grouped in 866 social units (SU). This figure will be adjusted once the related authorities have approved the new designs submitted by the Client.

To date, the Project is awaiting the non-objection to the detailed designs by the Interventoría (audit office) of the Project and the approval by the ANI of the modification of the strategic points of the road, particularly, of the La Fortuna bypass<sup>28</sup>. It is also expecting the approval of the Plot Acquisition Plan by the Interventoría. Such plan includes the following activities: (i) technical, legal and physical investigation of the required real property; and (ii) social and economic characterization of the affected owners and third parties.

The Project has a comprehensive land acquisition strategy consistent with Colombian legal requirements for social and economic compensation, monitoring and support. Nevertheless, the Client will develop: (i) a Land Acquisition, Compensation, and Resettlement Framework ("LACRF")which will describe the principles and measures to be applied to all the persons affected by the Project<sup>29</sup>; (ii) a study to verify the social and economic conditions of the persons affected by the Project whose resettlement process was interrupted<sup>30</sup>; (iii) a technical study to assess the state at which the prior concessionaire left the land acquisition and involuntary resettlement process; (iv) a program for the persons affected by the Project focused on the vulnerable families<sup>31</sup>; and (v) an external audit to assess the social and economic conditions of the resettled individuals.

4.5.a.i Compensation and Benefits for Displaced Persons

Under Colombian regulations<sup>32</sup> and contractual obligations, the Project is executing an Economic Compensation Plan. This plan calculates, through an independent third party, the compensation value of the assets required for the Project through a process appraising the value of the real property at a "new" value and subsequently applies a depreciation factor to take it to a market value, thus guaranteeing a value slightly higher than replacement value. Consequently, the Client makes sure that the affected party is able to acquire an asset equal to or better than the one being assigned<sup>33</sup>.

#### 4.5.a.ii Community Engagement

The Project has in place a Social and Land Management Support Plan to monitor the resettled individuals and allow for adjusting the interventions consistently with the specific needs of each social unit.

<sup>&</sup>lt;sup>28</sup> If approved, the modification of the bypass La Fortuna could prevent the displacement of about 30 homes.

<sup>&</sup>lt;sup>29</sup> Landowners, persons with recognized or recognizable legal rights on the land and the assets located therein and the informal occupants without any legal or recognizable right in the land acquisition process.

<sup>&</sup>lt;sup>30</sup> 91 social units (SU) received compensation.

<sup>&</sup>lt;sup>31</sup> The vulnerability criteria include, without limitation, the following factors: gender, age, literacy level, physical or mental disability, poverty or underprivileged status, and dependence on unique natural resources.

<sup>&</sup>lt;sup>32</sup> Law No. 1682 of 2013; Resolution No. 620 of 2008 and Resolution 898 of 2014 of the Instituto Geográfico Agustín Codazzi (IGAC); and Decree No. 1420 of 1998.

<sup>&</sup>lt;sup>33</sup> IGAC Resolution No. 898 of 2014.

However, as part of the LACRF, the Concessionaire will draft a Stakeholder Engagement Plan enabling consulting with and reporting to the community about the implementation of the land acquisition, compensation and resettlement processes and it will include conditions ensuring: (i) the involvement of women in consultation activities; (ii) the access of women to the land acquisition processes; and (iii) access to the Resettlement Action Plan ("RAP") and the Livelihood Restoration Plan ("LRP").

#### 4.5.a.iii Grievance Mechanism

Through the Customer Care Program and the community relations office, the Project receives the QCGSrelated to the land acquisition, compensation and resettlement processes. However, the Client will establish specific procedures to guarantee the timely management and suitable response times for the persons affected by the Project, vulnerable communities and persons under land acquisition, compensation and resettlement processes.

4.5.a.iv Resettlement and Livelihood Restoration Planning and Implementation

The Plot Acquisition Plan<sup>34</sup> establishes the framework for the land acquisition process which includes guidelines to monitor the conditions and livelihood of the resettled persons and requires that at least three follow-up visits to every SU take place during the year after their resettlement. However, the Client will supplement this plan with: (i) RAPs; (ii) LRPs; (iii) a land acquisition and resettlement monitoring program, which will consider independent quarterly monitoring of the RAPs and LRPs; and (iv) an external audit, which will be carried out three to five years after the resettlement.

#### 4.5.b Displacement

4.5.b.i Physical Displacement

To date, 331 Resident Social Units (RSU) have been identified for resettlement. However, the Client will prepare a social, economic and cultural diagnosis of all the RSUs affected and will determine, communicate and disseminate the term to record them in the RAP.

There are also 21 plots included in the Record System of Abandoned and Forcibly Dispossessed Properties, regarding which formalities were initiated to return the title to the victims of the armed conflict in Colombia<sup>35</sup>. Therefore, the Client will prepare a social and economic assessment of the status of the current social units benefiting from the title normalization process and will determine the measures to be implemented with them.

<sup>&</sup>lt;sup>34</sup> Pending approval by the Interventoría.

<sup>&</sup>lt;sup>35</sup> Law No. 1448 of 2011 establishes the guidelines for the restitution of lands on account of the armed conflict.

#### 4.5.b.ii Economic Displacement

The Project has not identified yet the number of Productive Social Units (PSU) along the Corridor with economic activities that would be affected due to the potential reduction of the vehicle traffic arising from the construction of bypasses. Therefore, the Client will identify them and subsequently characterize them based on: (i) the type of the goods and service offering; (ii) the type of demand (users of passenger transportation, tourists, inhabitants of direct areas of influence and cargo transportation drivers); (iii) potential people affected; (iv) degree of vulnerability (level of literacy and disability); (v) time used in each economic activity; (vi) the amount of workforce involved in the activity; and (iv) characteristics of the property (family home, owned or leased).

In addition, the Client will: (i) prepare technical and economic feasibility assessments to generate a range of compensation measures for the PSUs; and (ii) define the specific compensation measures to be provided to each PSU affected<sup>36</sup>.

The works will directly affect two social infrastructure buildings (schools)<sup>37</sup>. In this sense, under Colombian regulations, the Client will provide the applicable in-kind compensations.

4.5.c Private Sector Responsibilities Under Government-Managed Resettlement

The Concessionaire is responsible for conducting land acquisition, compensation, and resettlement activities in its capacity as a representative of the State, on behalf of the ANI. Nevertheless, the responsible for the processes always requires validation and approval from the ANI to carry out any action associated with land acquisition.

Although most of the lots will be acquired through purchase and sale agreements at market prices, in some cases the sale may take place through an expropriation process, either because the owner rejects the purchase offer or because, despite the owner's willingness to sell, there are legal impediments on the property that make it impossible to carry out a voluntary sale process. In these cases, the Government is responsible for the process and compensation<sup>38</sup>. However, the LACRF will include specific provisions for third parties affected in the process (e.g., tenant Social Units) and implement measures to avoid the impoverishment persons displaced through expropriation.

<sup>&</sup>lt;sup>36</sup> Such as the construction of community commercial areas where it could be moved.

<sup>&</sup>lt;sup>37</sup> Escuela de Santa Ana PR 103+000 RN 4511 (located in the Agua Blanca district in the Municipality of Simacota) and Escuela Álvaro Bonilla López PR 135+700 RN 4511 (located in the Zarzal district in the Municipality of Barrancabermeja).

<sup>&</sup>lt;sup>38</sup> In the case of persons resettled due to plots acquired through an expropriation, the compensation payment will depend on the ruling by the court in charge of the process in accordance with Colombian regulations.

# 4.6 Biodiversity Conservation and Natural Habitats

#### 4.6.a General

The Corridor runs along the following ecosystems: (i) dry forests in the Valle del Sinú; (ii) alpine forests in the Valle del Magdalena; and (iii) rainforest ecoregions in Magdalena-Urabá. The landscape mainly presents modified habitats and small areas with forest remnants scattered and mainly related to rivers (gallery forests). These fragile ecosystems are under pressure owing to the expansion of the settlements, cattle rearing, the introduction of exotic invasive species and the extractive activities performed in the region.

#### 4.6.b Protection And Conservation Of Biodiversity

The Project runs across three legally protected areas in its northern section: (i) the Integrated Management Regional District Serranía de los Yariguíes (IUCN Cat VI<sup>39</sup>, with an area of about 8 km; (ii) the Integrated Management Regional District San Silvestre wetland (IUCN Cat VI), with an area of about 30 km; and (iii) the Magdalena River Forest reserve, along 34.5 km<sup>40</sup>. In addition, in a segment which is about 2-km long of the new La Fortuna bypass, the Project runs across a corner of an Important Bird and Biodiversity Area ("IBA" Cat A1 A2<sup>41</sup>) Serranía de Los Yariguíes, which is also an Alliance for Zero Extinction ("AZE") area since it is the habitat of the wine robber frog (*Pristimantis bacchus*), which presents a significant population in the area<sup>42</sup>. However, the vegetation related to the AZE area is mostly a modified habitat with presence of the African oil palm (*Elaeis guineensis*) and grasslands.

Owing to this, the Client performed a quick environmental assessment to determine the presence of the wine robber frog. The results of this assessment show that neither the species nor its habitat is present in this section of the Project.

There are two (2) other legally protected areas close to the Corridor: (i) the Integrated Management Regional District Cuchilla de San Antonio (IUCN Cat VI); and (ii) the Natural Reserve of Sociedad Civil Finca Agroecológica el Paraíso (IUCN Cat VI).

The priority values related to the natural habitat scattered along the Corridor include numerous species of wildlife, such as: (i) the gray-bellied night monkey (*Aotus lemurinus*); (ii) the white-footed tamarin (*Saguinus leucopus*); (iii) the neotropical otter (*Lontra* longicaudis); (iv) the jaguar (*Panthera onca*); (iv) the leopard or oncilla (*Leopardus spp*); and (v) the anteater (*Tamandua mexicana*), in addition to 13 species of endemic flora.

<sup>&</sup>lt;sup>39</sup> Protected area with sustainable use of natural resources.

<sup>&</sup>lt;sup>40</sup> The Project was approved by the Regional Autonomous Corporation of Santander (Technical Concept SGA #0202-13) to build the dual roadway at the abscissas running along the San Silvestre wetlands and the Serranía de los Yarigüíes. Likewise, it has the definitive approval of the definitive subtraction of the Rio Magdalena Forest Reserve established by Second Law of 1959 for the construction of the tranche related to the crossing of Aguas Negras between Puerto Araujo and La Lizama. As a condition for this approval, the Concessionaire needs to restore an area of the same size and implement measures to protect the local wildlife in accordance with Resolutions 0172-2014 and 1810-2012.

<sup>&</sup>lt;sup>41</sup> Important Bird and Biodiversity Areas (IBA): A1. Globally threatened species and A2. Restricted area species.

<sup>&</sup>lt;sup>42</sup> However, records locate the species 1,700 m above sea level while the Project is located between 1 and 10 m above sea level.

The Project will result in the conversion of about 24 ha of natural habitat due to the road easement. The construction material will be obtained from quarries and it will include material repositories located in degraded areas. To date, the Client has designed mitigation measures based on the results of an ecosystem fragmentation assessment seeking to: (i) avoid the natural habitat by locating completely new crossings and temporary construction sites; (ii) implement animal crossings to improve connectivity through the existing road; and (iii) minimize the number of roadkills. These measures will be supplemented based on the update of the Project's biotic baseline<sup>43</sup>, an activity including the characterization of the natural habitat patches potentially affected by the Corridor layout.

For the construction of the dual roadway, the scraps disposal areas, the bypasses, the quarries, the spoils banks and repositories, the Project expects the removal of about 24 ha of forests<sup>44</sup>, a portion of them in natural habitats and a major part in modified habitat. These areas will be compensated as required in the EIA, the environmental licenses and Colombian legislation.

The Client will also develop a Biodiversity Action Plan (BAP) which will include: (i) a characterization of the areas with significant value for biodiversity in the natural habitat remnants; (ii) a calculation of biodiversity losses and gains (considering the compensation plan required by Colombian legislation); (iii) a strategy to meet the requirements of zero net loss of biodiversity; and (iv) a plan to assess and monitor the implementation of such strategy.

The Client will adopt measures to protect these ecosystems, and reduce or minimize the footprint, such as: (i) refraining from using invasive exotic species upon revegetating areas for erosion control and landscaping; and (ii) implementing fauna crossings to improve biological connectivity and prevent roadkills, which location will be updated based on the results of the biodiversity baseline study.

#### 4.6.c Management Of Ecosystem Services

The Client will identify ecosystem services (provisioning, regulatory, cultural and support) which could be materially affected by the Project's activities and will implement the measures necessary to protect them.

# 4.7 Indigenous Peoples

The Client has obtained certifications<sup>45</sup> confirming that no indigenous communities, ethnic groups or afro-descendent peoples are present in the direct area of influence of the Project. In addition, this has been confirmed by the social team.

 $<sup>^{43}</sup>$  The baseline assessments in the EIAs are dated over 10 years ago.

<sup>&</sup>lt;sup>44</sup> Authorized by Forest Use permits from different Regional Autonomous Corporations; such permits should be updated by the Concessionaire.

<sup>&</sup>lt;sup>45</sup> Certifications issued to Ruta del Sol 2 in 2011 and 2012 by the Instituto Colombiano de Desarrollo Rural (INCODER) and the Ministry of Interior and Justice.

# 4.8 Cultural Heritage

The Concessionaire submitted the Report on the Final Closing of the Archaeological Intervention Authorization, approved by a resolution issued by the Colombian Institute of Anthropology and History ("ICANH", for its acronym in Spanish), describing the results of the monitoring and rescue phase of the Archaeological Management Plan.

Under the guidelines of the ICANH, the Client will draft a Cultural Heritage Management Plan which will include: (i) an archaeological monitoring program; (ii) chance find procedures; (iii) an archaeological site protection program; (iv) a chance find training program with procedures for workers engaged in soil disturbance activities; and (v) guidelines to publish the results of the archaeological rescue excavations, as the case may be.

Regarding the archaeological vestiges recovered before the Client's involvement in the Project<sup>46</sup>, the prior Concessionaire had performed the following activities: (i) classification; (ii) analysis; and (iii) dissemination of the results to the communities in the area of influence.

The Project has not identified and will not generate any impact on the critical cultural heritage, nor does it consider the possibility of removing any reproducible or irreproducible cultural heritage.

#### 5. Local Access of Project Documentation

The documentation related to the project may be accessed to using the following link: <a href="https://autopistamagdalenamedio.com.co/">https://autopistamagdalenamedio.com.co/</a>

<sup>&</sup>lt;sup>46</sup> The Centro Cultural Biblioteca Pública Luis Carlos Galán Sarmiento from the Municipality of Puerto Boyacá and the Archeological Museum of Curumaní are temporarily holding the archeological material recovered in such period.