1. General Information of the Project and Overview of Scope of IDB Invest’s Review

The Santana – Mocoa – Neiva Concession (the “Project”) involves some of the projects that Colombia’s federal government has been carrying out through the National Infrastructure Agency (ANI) by means of a public-private partnership (PPP). The Project, which runs for a total of 468.3 km and is operated by Concesionaria Ruta al Sur S.A.S (the “Concessionaire” or RAS), is located in the departments of Putumayo, Cauca and Huila, and will guarantee that the southern departments are connected to the north of the country.

This Project involves the rehabilitation of a 329.57 km of roadways, and the construction of a new 59.68 km-long road, and 96.39 km of geometrical improvements and four new toll plazas. For execution purposes, the Project has been divided into seven functional units (FU): i) FU1, which is 22.6 km-long and runs from Neiva to Campoalegre; ii) FU2, a 70.4 km-long stretch running from Campoalegre to Gigante, iii) FU3, a 35 km-long road leading to Garzón; iv) FU4, which is 112.21 km-long and goes from Garzón to San Agustín; v) FU5, a 63.6 km-long road between Pitalito and San Juan de Villalobos; vi) FU6, which is 75.1 km-long and goes from San Juan de Villalobos to Mocoa; and vii) FU7, running for 89.4 km-long from Mocoa to Puerto Asís.

As part of the environmental and social due diligence (ESDD) documents and information provided by the Concessionaire were analyzed, such as: i) the environmental impact assessments (EIAs) for FI1, FU2 and FU3; ii) Plans to Adapt to the Environmental Guidelines (PAEGs) for FU1, FU2, FU3, FU4, FU5, FU6 and FU7; iii) the environmental compliance reports (ECRs) for the Campoalegre and Hobo by-passes; and iv) the Environmental and Social Responsibility Plan (ESRP) for the Concessionaire. The ESDD included the information obtained from other documents and public sources, as well as from interviews with the Concessionaire’s representatives and community stakeholders. La DDAS was complemented with a visit to the worksites to assess how the Concessionaire was managing the environmental, social and occupational health and safety aspects of the Project.

The Project is under a 12-month standardization period (finishing in July 2022) which has focused on the corridor maintenance, emergency response and the identified critical sites, and the operation of the existing toll plazas. Once this phase is over, the Project construction phase will start.

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1 The PAEGs are guidelines for the environmental and social management of roads as established by the Instituto Nacional de Vías (INVIA), an agency of the Colombian Ministry of Transport.

2 This visit took place on March 19-20, and involved the following: i) a visit to all seven FUs; ii) a review of the status of the critical points under execution; iii) a meeting with the indigenous community Inga de Mocoa (governor and leaders); iv) a visit to the work fronts and camps; v) a visit to the camp in Pitalito; vi) a visit to the new road construction area; and vii) a visual inspection of the EPC camp.

3 Priority works to recover the adequate transit of the corridor. There are 36 critical sites, 12 of which have a responsibility waiver event (RWE) recognized by the ANI.
2. Environmental and Social Categorization and Rationale

According IDB Invest’s Environmental and Social Sustainability Policy, the Project has been classified as Category A because it can generate, among other things, the following impacts and risks: i) generation of dust and air emissions; ii) increase in the environmental and work-related noise due to the use of machinery during the construction phase and of traffic during the operation phase; iii) generation of domestic and industrial wastewater; iv) surface compacting due to heavy traffic during construction; v) potential soil, and surface and groundwater pollution; vi) waste generation; vii) traffic disruption during the construction; viii) use of water resources; ix) removal of vegetation coverage; x) physical and economic displacement of the population; xi) potential impact on indigenous populations, and xii) employment expectation among the population. These impacts and risks are deemed to be of medium-high and high intensity.

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; vii) PS7: Indigenous Peoples; and viii) PS8: Cultural Heritage.

3. Environmental and Social Context

3.1 General characteristics of the Project’s site

The Project runs across 16 municipalities of the departments of Huila, Cauca and Putumayo, in the southwest of Colombia. The Department of Huila takes up an area of 19,900 km² and is divided into 37 municipalities where almost 314,526 people live. The Department of Putumayo comprises 24,885 km² and is divided into 13 municipalities, with 48,422 inhabitants. The Department of Cauca, in turn, is a 29,308 km² territory divided into 42 municipalities, with a population of 277,270.

Both FU1 and FU2 occupy 93 km of the Project layout and are located in the tropical dry forest biome. Its area of biotic influence is characterized by signs of easy adaptation to water shortage and rich endemism. This type of ecosystem renders the following services to the communities: hydrologic regulation, soil retention and carbon capture regulating the climate and the availability of nutrients and water.

It is worth mentioning that there are indigenous communities settled along the Project corridor, especially within FU6 and FU7. FU6 has the following indigenous communities: i) “resguardos indígenas” (similar to indigenous reservations) Inga Camentzá in Mocoa, Yanacona Villa Maria de Anamu, Camentza Biyá and Inga in Mocoa; ii) “sesgos indígenas” (special public administrative bodies with indigenous representatives) Inga José Homero of the Inga group and Yashay Wasi of the Yanacona group and iii) “capítulo indígena” (similar to an indigenous council) Siona Jai Ziaya Bain. The FU7 includes the following indigenous communities: Nasa Kwe’sk Tata Wala of the Nasa people and Dimas O’Nel Majin of the

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4 Data from the census performed by the National Administrative Department of Statistics (DANE) in 2018.
5 Tropical dry forests in Colombia (humboldt.org.co)
Yanancona people. Considering the above, the Project completed 9 prior consultations with indigenous peoples along the affected corridor; such processes were certified by Colombia’s Ministry of Interior.

### 3.2 Contextual risks

In the Department of Huila —located to the southeast of Colombia and, given its location, connecting the center of the country to the south— there are several armed conflict and illegally armed groups, such as Asociación Nacional de Usuarios Campesinos (ANUC), the Colombian Revolutionary Armed Forces (FARC) and the National Liberation Army (ELN). Conflict intensified in the Department of Huila because of the consolidation of the peace consisting of four municipalities in the Department of Meta (Mesetas, Uribe, Vistahermosa and La Macarena) and one belonging to Caquetá (San Vicente del Caguán), all bordering with Huila.

In the 1990s, drug dealers appeared in the territory, acquired land and joined the self-defense forces; their presence led to break the peace zone. The emergence of armed groups ignited fights over the military, political, economic and social supremacy in the territory, driven also by the strategic location of the department and its wealth in natural resources.

Because it is part of a strategic corridor in the south Amazonia region, the Department of Putumayo became a strategic retreat zone for the FARCs: from there they could control the area and develop the drug dealing activities (also because of their control over the coca growing areas). Despite the peace treaty and the efforts made by the Colombian government to control the dissidence between these armed groups, the social situation of the corridor is still tense.

The Concessionaire identified an opposition from the communities of the Media Bota Caucana for the entry of the Project to intervene twelve Critical Sites located in this territory. The conflict identified is the absence of the State in this area of the corridor, which hinders the meeting point between the requests of the communities with the contractual scope of the concession. As a result, the ANI granted the Concessionaire a Responsibility Waiver Event (“RWE”) in May 2022, which considers the implementation of an “Action Plan to address the conflict with the Communities of the Media Bota Caucana” aimed at overcoming the RWE and maintain good relations with the communities. The Concessionaire is responsible for the implementation of this plan and generates weekly progress reports on the agreed activities.

### 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 Project has an Integrated Management System (IMS) manual prepared in February 2022. The document comprises the policies and processes to be added into the management system, including:

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planning, monitoring and control; operation and maintenance; health, safety, environment and quality (HSEQ); social management; prior consultation inclusion; archeology; and administrative and legal management. Moreover, the Good Governance Manual can be found on the website; the document helps enforcing the mission, vision and goals.

The Project currently has all environmental authorizations and permits either active or pending in compliance with Colombian laws. It also has a team in charge of getting the authorizations and permits as needed. To date the Project has no active penalties imposed by any environmental authority.

4.1.b Policy

The IMS manual includes its own policy. It states RAS’s commitment to the environment, security, occupational health and safety, and the communities near the Project. The policy is disclosed to all workers during the onboarding process.

Also, the following corporate management instruments can be found in the Project official web site: i) Personal Data Management Policy; ii) Policy to Prevent Risks of Asset Laundering, Terrorism Financing and Mass Destruction Weapons Proliferation Financing; iii) Code of Ethics and Corruption Prevention in Concesionaria Ruta del Sur S.A.S, and iv) Good Governance Manual. The latter comprises the IMS policy and goals, with a focus on social, environmental, quality and occupational health and safety responsibility.

4.1.c Identification of Risks and Impacts

The Project has five environmental impact assessments (EIAs) as required by the National Authority for Environmental Licences (ANLA for its acronym in spanish): second road at FU1; Campoalegre by-pass at FU2; Hobo by-pass at UF2; South Betania at FU2, and Gigante by-pass at FU3. For the sections where rehabilitation and improvement tasks for all FUs will be performed, the Project will prepare PAEGs.

Nowadays the Concessionaire is developing the EIAs to request the environmental licenses for the Timaná, Mocoa, Villa Garzón and Puerto Caicedo by-passes. Each EIA will suitably identify the impacts generated by the Project and establish management measures deemed suitable for their magnitude and intensity.

4.1.c.i Direct and indirect impacts and risks

The environmental assessments (EIA and PAEG) identify the following activities as the most impact-generating ones: i) the acquisition of land for road easement purposes on the new roads or extensions; ii) the physical and economic displacement of population as a result of the road easement process; iii) the effects on indigenous communities; iv) the removal of vegetation coverage, resulting from the road easement area clearing and cleaning; v) the construction of camps and accesses; vi) the construction of viaducts and new roadways; and vii) earthworks in general, with the impact on the vegetation and biological species.

The impacts generated by the Project are being handled with the environmental management plans (EMPs) established for each FU. There is no evidence of environmental or social liabilities as generated by the Project.
4.1.c.ii  Analysis of alternatives

Given the characteristics of the Project, which will basically use the same corridor where the existing road is today, the analysis of alternatives focused on assessing the construction methods that would prevent or mitigate unwanted impacts. This analysis did not consider any alternative layouts, as the Project was to be developed on a predefined corridor.

4.1.c.iii  Cumulative impact analysis

The identification and assessment of impacts included in the EIA was carried out as instructed by Decree 1076 of 2015 of the Ministry of Environment and Sustainable Development (MASD), which is based on the proposed methodology modified by Vicente Conesa Fernández in 1997 and adapted to the Project conditions. However, given this analysis does not, as matter of fact, analyze cumulative impacts as the value components to base the analysis upon or other projects that may be exacerbating the conditions of these components were not identified, the Concessionaire will update the initial assessment.

4.1.c.iv  Gender risks

The Project’s EIAs and PAEGs did not assess gender risks. However, the hiring protocol within the Contractual Social Management Plan states the commitment to create employment assuring gender equity and equal opportunities for women, whether it is qualified or non-qualified labor, in compliance with Colombian legislation.

To date, the existing mechanisms, such as the Labor Coexistence Committee, the internal and external grievance mechanisms, have not captured significant grievances related to this issue.

4.1.c.v  Climate change exposure

Given the characteristics of the area where the Project is located, it has a low exposure to climate change risk. Likewise, is has a moderate exposure to physical risk, considering that most of the works will be carried out in an area with high exposure to river flooding and landslides caused by soil saturation.

The hydraulic analyses include climate change risks through safety factors. Thus, the return period for the hydraulic structures is expected to be: i) 100 years for complex or critical structures, and ii) 50 years for basic or less complex structures.

4.1.d  Management Programs

The Project has environmental and social management plans that address how to handle the environmental and social impacts and risks identified. These plans include: i) environmental management plans for each EIA and PAEG, which in turn include management programs for: morphology and landscaping; temporary storage; domestic, special solid and liquid waste; body-of-water crossings; noise sources; vegetation coverage and clearing; fauna; forest use; habitat conservation and protection; revegetation and/or reforestation of special areas; conservation of plant species under protection; conservation due to biodiversity loss; training of involved staff; user care program; reporting and communication with the communities, road users, organizations and local authorities; support for
interinstitutional management capacity and regional economic strengthening; safe mobility in the areas near the work fronts and infrastructure control; and archeological heritage; ii) Contractual Social Management Plan; iii) Social and Economic Compensation Plan; iv) Environmental and Social Responsibility Plan; v) Land Compensation Plan; and vi) Plan for Compensation due to Biodiversity Loss.

4.1.e Organizational Capacity and Competency

The Project has kept a whole environmental and social management team during the standardization stage, with enough skilled professionals for each required function. The team is made up of 8 professionals managing environmental issues; 8 professionals dealing with occupational health and safety matters; 17 professionals working in the social area, 1 archeologist, and 26 professionals in facilities management. The organization has 80 workers, including professionals, technicians, clerks and legal staff.

4.1.f Emergency Preparedness and Response

The Project’s risk management plans (RMPs) identify the main risks and threats, and set forth the emergency prevention and response measures. These measures include: signage, logistic support, equipment and infrastructure, next steps and an overview of the responsibilities of the people executing the plan.

The risk analyses focused on the following aspects, among others: fires, explosions, traffic accidents, machine operation malfunction or errors, seismic movements, mass wasting, geotechnical instability, fallen trees and public disorder (demonstrations and protests). The analyses concluded that the main risks the Project is subject to are fires, explosions, substance spillage, traffic accidents, machine operation malfunction or errors.

The Concessionaire has a communication plan in place as part of the training, dissemination and implementation of the provisions in the RMPs. They also perform response drills for different types of emergencies, which are usually attended by national and local risk management authorities. Assessing these exercises helps to improve the instrument on an ongoing basis. The Concessionaire has an Emergency and Contingency Plan in compliance with local legislation (Law No. 1523 of 2012).

4.1.g Monitoring and Review

The environmental assessments (EIsAs and PAEGs) provide for plans to monitor and follow up on the following matters: i) execution of measure for morphological and landscaping management; ii) management of temporary storage, leftover materials —debris and construction equipment—; iii) liquid waste handling, treatment and disposal systems; iv) waterbody crossing management; v) air emissions, air and noise quality; vi) flora and fauna; vii) revegetation or reforestation, conservation, and compensation; viii) community engagement and timely communication and user care; ix) social management programs; and x) social conflict.

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7 The RMP complies with the terms of reference for road construction projects issued by the Ministry of Environment and Sustainable Development (MADS) through Resolution 0751 of May 26, 2015.
The Project’s monitoring and assessment system is comprised by a number of internal and external players. The Concessionaire, the main contractors and the Inspectorate are the internal ones. The external ones include the ANI, Corporación Autónoma Regional del Alto Magdalena (CAM), Corporación Autónoma Regional del Cauca (CRC), Corporación para el Desarrollo Sostenible del Sur de la Amazonia (CORPOAMAZONIA), the ANLA, and topic-specific government agencies, such as Colombian Institute of Anthropology and History (ICANH) for archaeological and cultural heritage questions, the National Authority for Previous Consultation (ANCP for its spanish acronym) among others. In addition to the monitoring management plan, the Project sponsors carry out monitoring actions directly through an independent environmental and social consultant (IASC).

4.1.h Stakeholder Engagement

4.1.h.i Disclosure of Information

The environmental assessments have a description of the information that was shared with the communities while they were prepared. The Concessionaire now promotes access to Project information and encourages the community to give feedback on the Project through: (i) the Community Engagement and Communication Program, (ii) the User Care Program, and (iii) the Media Management Plan. Additionally, the Project keeps the community informed through its physical offices (Mocoa, Pitalito, San Juan de Villalobos and Neiva), mobile offices, suggestion boxes, social networks, an email address, a website, a dedicated telephone line and a call center. These channels provide information about the works, including about the environmental and social aspects.

4.1.h.ii Informed Consultation and Participation

During the standardization phase, the Project has had ongoing meetings with the communities and stakeholders from each FU. At these events, the participants have trained in matters such as impact identification and assessment; natural resources use and management; waste disposal, and available strategies and mechanisms for community engagement.

4.1.h.iii Indigenous Peoples

The Ministry of Interior is in charge of the prior consultation with the indigenous communities in Colombia. This process involves some specific steps to enter protocol-compliant agreements with the communities, such as request of certificate of presence of the indigenous communities, socialization with the communities, consultation activities, workshops, pre-agreements, meeting to set up protocols, compliance with agreements and process sign-off.

In compliance with Colombian regulations, the Project implemented nine free prior and informed consultations with local indigenous communities, certified by the Ministry of Interior and living near the Project location; the Project could materialize eight agreements. The ninth one is with Resguardo Indígena Inga de Mocoa, still waiting for final approval from the community in full to be formalized.

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8 Equivalent to an occupational health and safety, and social and environmental supervisor. The Project Inspector is CONSORCIO INTERVENTORÍA NMS.
9 https://rutaalsur.co
The concessionaire prepared an "Action Plan to address the conflict with the Communities of the Media Bota Caucana" which involves eight lines of action that seek to address the opposition to the execution of Project works by indigenous, peasant and Afro-descendant communities of the Media Bota Caucana and maintain good relations with them. This Plan is framed within an RWE, which is why the concessionaire maintains weekly progress reports that are reported to the ANI and the Project’s Inspectorate.

4.1.h.iv Private Sector Responsibilities Under Government-Led Stakeholder Engagement

Given the characteristics of the Project, there has not been a government-led stakeholder engagement process.

4.1.i External Communication and Grievance Mechanisms

4.1.i.i External communication

The Project addresses its external communications with a Media Management Plan, comprising communication and media management strategies and a tool to use multiple channels of external communication, including the TV, radio, newspapers, corporate web page, email and official social media. These communication channels are daily, quarterly or annually updated. It is worth mentioning that this process is supported by advertisements, leaflets, and daily and weekly communications in its four physical offices, two mobile units, the web page and social media.

4.1.i.ii Community grievance mechanism

The Concessionaire has an information mechanism to address petitions, grievances and claims (PGC), which seeks to support community engagement; this system has different communication channels, such as the Concessionaire’s official email address (included in RAS’s website) and the telephone lines at the user service offices.

The PGC mechanism follows these steps: i) reception: community requests are received through the abovementioned means (web page, telephone lines, physical offices); ii) record: each PGC is recorded in the specific form; iii) classification: each PGC is classified and allocated a response time based on the type of communication; iv) follow-up: each recorded PGC is followed up until resolution; v) notification: the requester is notified of the result of the PGC; and vi) sign-off: the PGC is signed off with proof that it has been dealt with.

4.1.i.iii Provisions for addressing vulnerable groups’ grievances

The PGC mechanism offers multiple channels of access to several sectors of the community. As part of the preparation of the Community Information and Engagement Plan and the User Service Program, the Concessionaire compiled the social and economic information about the identified stakeholders, including the vulnerable groups, as represented in the ethnic communities involved.

While the PGC mechanism of the Project has a specific procedure to receive and resolve PGCs from vulnerable groups, this type of grievances is usually received by the Concessionaire’s social team, who
continually visits the neighboring communities. Additionally, several of the grievances filed by the vulnerable groups are received through the mobile user service offices or the civic observers\textsuperscript{10}.

4.1.i.iv Ongoing Reporting to Affected Communities

The Project keeps the community informed through videos, messages and infographics which are distributed in the media (radio, newspapers, corporate web page, email and official social media) as well as in regular meetings.

4.2 Labor and Working Conditions

4.2.a Working Conditions and Management of Worker Relationships

4.2.a.i Human Resources Policies and Procedures

The Project has a hiring program aiming at: i) contributing to improve the living conditions of the people in the Project’s area of influence; ii) giving priority to employing local population, with no distinction of gender for the job to be performed; iii) establishing the necessary communication mechanisms to disseminate calls for CVs and recruitment opportunities; iv) having a system to deal directly with the workers; and v) hiring qualified and non-qualified vulnerable labor (when being reintegrated or displaced).

The Concessionaire also has a salary policy that establishes fair pay and complies with the legal provisions and requirements, as well as a human resources policy that allows workers to have personal and professional development opportunities based on their abilities and performance. Nonetheless, the human resources policy will be updated to be more specific in terms of workers’ rights.

4.2.a.ii Working Conditions and Terms of Employment

Colombia’s regulatory framework is very strict and thorough in terms of the working conditions that shall be observed nationwide. The Project has a Code of Business Ethics and Labor Coexistence that declares that the hiring process will be strictly observed under Colombia’s labor regulations. Therefore, both forced labor and child labor are forbidden. The Project also has measures in place to establish the working hours, the probationary period, annual leave and overtime, as well as regulatory provisions in connection with the workers’ health and safety; women are provided for and assured protection with mechanisms like the Labor Coexistence Committee\textsuperscript{11}.

\textsuperscript{10} Civic observers are a type of democratic mechanism of representation that allow citizens or community organizations to control the public administration.

\textsuperscript{11} By virtue of Law No. 1010 of 2006, the Labor Coexistence Committee, made up of people working for a public agency or a private company, is in charge of receiving and addressing the grievances that include situations of potential harassment in the workplace.
4.2.a.iii  Workers’ Organizations

Colombian laws protect the workers’ right to establish workers’ organizations. All Project workers may be part of the Occupational Health and Safety Committee (COPASST for its Spanish acronym)\textsuperscript{12}. For this reason and in line with the legislation in force, the Project has created a Labor Coexistence Committee.

4.2.a.iv  Non-discrimination and Equal Opportunity

The Project has a hiring program focused on the transparency of the staff search and retention process. The Concessionaire has a Code of Business Ethics and Labor Coexistence that declares that the hiring process will be strictly observed under Colombia’s labor regulations. Moreover, depending on the availability of the required profiles, the Concessionaire is perfectly able to hire employees with disabilities.

4.2.a.v  Retrenchment

The Project has not yet prepared a program to reintegrate workers into the labor market so that they are not left unemployed once the works finish.

4.2.a.vi  Grievance Mechanism

In compliance with Colombian legislation, the Labor Coexistence Committee is responsible for managing the grievance mechanism through a pre-defined process to receive, address and resolve them. However, the Project currently also has different ways for workers to express a concern or ask questions; some are the communication channels on the website, email and suggestion boxes. RAS also informs about the existence of these mechanisms when onboarding new workers, at the workers’ routine training sessions, and with frequent emails to the workers. The internal grievance mechanism guarantees the identity of the complainant will remain anonymous (if they prefer so) and prevents any type of retaliation or persecution they may suffer.

4.2.b  Protecting the Workforce

4.2.b.i  Child Labor

The Concessionaire’s hiring program complies with the Colombian legal framework\textsuperscript{13} as: i) it does not allow hiring minors; ii) it promotes work standards that are compatible with all types of voluntary work or service, thus prohibiting coerced or forced labor; iii) it states only people over 15 years old can be hired for non-dangerous jobs, and over 18 for dangerous jobs; and iv) it does not allow hiring children in any way that may constitute economic exploitation, that interferes with their education or that may be dangerous for their physical, mental or social development. There was no indication in the ESDD that minors have been hired for the Project (the Concessionaire, the Inspector, and contractors and subcontractors).

\textsuperscript{12} According to Resolution No. 2013 of 1986 from the Ministry of Work and Social Security, and the Ministry of Health, the COPASST comprises workers’ and employees’ representatives to promote and monitor compliance with occupational health and safety standards.

\textsuperscript{13} Article 67 of the Constitution of 1991; sections 28 and 35 of Law No. 1098 of 2006.
4.2.b.ii  Forced Labor

Colombian regulations are strict in terms of prohibiting forced labor. The ESDD did not find any evidence of involuntary work, forced labor or unpaid work in the Project (the Concessionaire, the Inspectorate, contractors and subcontractors).

4.2.c  Occupational Health and Safety

The Project’s Occupational Health and Safety Management Plan (OHSMP) includes a regulatory framework; defines the responsibilities to manage occupational health and safety (OHS) issues; specifies the need for health check-ups among the personnel; creates an epidemiological surveillance system; requires health monitoring actions; sets forth hygiene measures; requires signage and delimitation of work areas; has a hazard and risk assessment process that establishes the risk control mechanisms; and demands the use of personal protection equipment (PPE). Likewise, the Project has a comprehensive quality, occupational health and safety, environmental and social responsibility policy.

The Concessionaire’s OHSMP, which comprises all the management elements needed to prevent and mitigate risks, and seeks to guarantee a safe, healthy workplace for the employees, was based on identifying and assessing risks from different perspectives. Its implementation scope and extent guarantee that all staff working for the Concessionaire (direct, indirect, partners, EPC, etc.) know, address and manage the risks associated with their activities. This is achieved through onboarding and monitoring, and control over the execution of activities.

Moreover, the Concessionaire has in place a procedure to report and investigate accidents, incidents and environmental emergencies, which looks into all occupational accidents, diseases or incidents happening within the Project and produces results that are used to prevent or manage similar situations in the future.

4.2.d  Provisions for people with disabilities

Although the Concessionaire has not yet determined quotes of disabled people to be hired, it does not have in place any restrictions or impediments to employ people with disabilities either.

4.2.e  Workers Engaged by Third Parties

In line with the legislation in force and the applicable standards, the process for hiring workers for the Project by third parties has the same conditions and restrictions as for those hired directly by the Concessionaire, i.e., it guarantees the principles of no discrimination, no exploitation, no child labor, decent pay and work security. The workers engaged by third parties have —broadly speaking— the same benefits and obligations as those hired by the Concessionaire.

4.2.f  Supply Chain

The information that has been analyzed, as well as that gathered during the in-person visit, does not show significant supply chain issues.
4.3 Resource Efficiency and Pollution Prevention

4.3.a Resource Efficiency

4.3.a.i Greenhouse Gases

The Concessionaire has no Greenhouse Gases Management Plan in place and, therefore, no measures to reduce the emissions. Even though the Project has estimated the volume of greenhouse gases (GHG) produced, it will be updated to include all significant sources of emissions.

4.3.a.ii Water Consumption

The Project does not expect to abstract surface or underground water for their construction processes. Instead it expects to acquire specific volumes of water from suppliers with concessions authorized by the corresponding environmental authority and enough water available.

4.3.b Pollution Prevention

The demand for natural resources as well as their utilization and effects on them have been established for Project execution. The measures required to minimize or prevent air, water and soil pollution were also identified. Moreover, the monitoring indicators for the most representative parameters were set.

The Concessionaire performed physical and chemical analyses of the most significant water bodies, as well as assessments on the noise levels and air quality. The results—including the sampling methodology and points, and the values derived therefrom—were under the threshold provided for in the Colombian regulations.

4.3.b.i Wastes

The Project EMPs include programs to manage domestic, industrial and special solid waste, as well as provisions to train workers in waste classification, reduction at source, temporary storage and final disposal. The EMPs also include measures for the temporary storage and transportation of hazardous and non-hazardous waste, and for reusing the waste that could be beneficial for other activities. Duly certified companies will be in charge of disposing of hazardous waste.

4.3.b.ii Hazardous Materials Management

The hazardous materials identified in the Project’s EMP include, among others, fuel for vehicles and machinery, oils, grease, paints and explosives. The EMPs include measures for the use, storage, handling and disposal of this type of material.

4.3.b.iii Management and Use of Pesticides

Broadly speaking, the Project will not use any pesticides. However, if need be, the Concessionaire will check that they are not mentioned in the internationally used list of forbidden pesticides.
4.4  Community Health, Safety and Security

4.4.a  Community Health, Safety and Security

The Project’s environmental studies include the necessary provisions to minimize the risks the communities near the road would potentially be exposed to, with the necessary preventive and control measures. The Project EMPs define the measures to move safely within the areas near the work fronts, and to raise the users’ awareness around road safety. The Concessionaire also has a Road Education Program to promote the correct use of the road infrastructure.

4.4.a.i  Infrastructure and Equipment Design and Safety

As part of the concession agreement, apart from carrying out all the civil works, the Concessionaire must provide users with assistance on the road, put up horizontal and vertical signage on the road, clean the ditches and other hydraulic structures, and graze the road vegetation, etc.

In this regard, and as part of the Road Education Program, the Concessionaire has adopted road safety measures for all types of users and orchestrates actions to reduce traffic accidents with the Huila Traffic and Transport Institute and the Putumayo Traffic Authority.

4.4.a.ii  Hazardous Materials Management and Safety

The transportation, handling and use of hazardous materials are regulated in Colombia through Decree No. 1609 of 2002 and the standards from the Colombian Institute of Technical Standards and Certification (ICONTEC for its spanish acronym). Both legal bodies regulate, among others, the following aspects: i) the packing method; ii) the type of label to be used depending on the hazard level of the material to be transported; iii) the minimum requirements for packing hazardous materials; iv) the requirements for vehicles transporting hazardous cargo; v) the minimum amount of devices vehicles must have to avoid sparks; vi) the emergency equipment each vehicle has to carry depending on the hazardous cargo; and vii) the certificates any natural or artificial person driving hazardous material must have.

Colombian legislation also states that, when hazardous waste is to be transported past the border, it shall be done in the terms of the Basel Convention\(^\text{14}\), as ratified by Law No. 253 of 1996. In this regard, the Concessionaire has been implementing the UN Globally Harmonized System of Classification and Labelling of Chemicals.

4.4.a.iii  Ecosystem Services

The most significant ecosystem services for the communities as identified in the environmental assessments include: i) water supply; ii) the supply of agricultural and livestock systems; iii) climate regulation; iv) nutrient fixation regulation; and v) biodiversity regulation. None of these services will be significantly impacted by the Project.

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\(^{14}\) The Basel Convention on the Transboundary Movements of Hazardous Waste and Their Disposal intends to safeguard people’s health and the environment from the damaging effects of hazardous waste, by means of provisions to reduce the generation of hazardous waste, to promote the environmentally rational management of hazardous waste, to limit transboundary movement of this waste and to enforce a system that stipulates what is allowed in terms of moving this type of materials.
Community Exposure to Disease

As the Project will hire workers mostly from the surroundings of the corridor, no additional exposure of the population to disease is expected. Nevertheless, and because of the COVID-19 sanitary emergency, the Project has adopted biosafety measures to prevent spreading the disease internally (among workers) and externally (onto the communities). They include, among others: i) using face masks at all times in offices and work fronts; ii) cleaning and disinfecting all areas; iii) ventilating closed spaces; iv) preventively isolating everyone showing symptoms and their work group; and v) carrying out education and awareness campaigns to show the community different ways to prevent COVID-19 in alignment with Colombian regulations. The Project has only reported 2 symptomatic positive cases, who to date are recovered.

Emergency Preparedness and Response

The Project has a Risk Management Plan based on the thorough risk analysis prepared for the construction and operation phases. The plan describes the potential risks (spills, fires, explosions, natural disasters, work-related accidents or demonstrations); establishes next actions; determines who is responsible for executing those actions in case any of the identified risks gets to materialize; and sets up the communication and orchestration lines with the communities and local authorities. Likewise and, in compliance with guidelines in the RMPs, the Concessionaire, in order to address these emergencies with the support of the corresponding entities, has developed an Emergency and Contingency Plan to respond to emergencies caused by earthquakes, landslides, floods, fallen trees, collapse of the civil works, mass wasting, forest fires, traffic accidents and roadblocks due to public disorder, among others.

For unexpected situations, the Concessionaire has created emergency brigades. They are meant to carry out at least one drill (previously notified or on the spot) every six months at each FU, which will help test the whole emergency preparedness and response system (procedures, chain of command, evacuation routes, protocols, etc.). The results of these exercises will help improve the RMPs.

Security Personnel

The Project has a 24-hour private security system, provided by the following cuatro companies: i) Seracis Ltda; ii) Protección de Infraestructura Colombia- Protinco Ltda, iii) Seguridad Canada Ltda and iv) 3+ Security Colombia. However, security plans and strategies have not as yet been prepared so as to supplement the measures to prevent, protect, and preserve the physical integrity of the Project facilities and personnel.

Land Acquisition and Involuntary Resettlement

General

The management of the Project land is performed following the updated version of the Land Acquisition Plan. The document includes a detailed plan with all the actions needed to manage the land that must be completed before the road easement release.
4.5.a.i Project Design

Even though the Project design sought not to affect the population, for road easement purposes, it was necessary to acquire 837 plots and to impact 646 social units (348 were residential, 247 were productive and 51 were used for other purposes). Two properties in FU6 are located in the indigenous communities with whom discussions are underway as part of the prior consultation process.

As of May 2022, the Project has identified all the needed plots (837); 124 deeds had been reviewed; 70 deeds were under review; 16 plots had a drafted offer (2%); 107 plots had been acquired by the ANI (13%) whereas 42 had been handed over beforehand. The 149 available plots constitute 25% of the total length required for the road for the execution of new roads and improvements of the existing one.

According to RAS’s Land Acquisition Plan, the procedure to acquire the land required for the Project is as follows: the Project assesses and analyzes the records of property registration associated with plots required as well as the related legal documents. The records identify the holder of the rights over the plot and determine the status of the rights in rem affecting the property. The Project prepares a record for each plot (ficha predial) in which, in order to guarantee a successful acquisition process, the area, measurements and boundaries are checked and compared to the information in the registration record, the information on site with land survey and the information about measurements and boundaries included in the related deeds. The Concessionaire informs the owner on how to update the area and boundary information as per the guidelines issued by the property registration authorities.

The preparation of a social file is also carried out, in line with the provisions of Resolution No. 545 of 2008 issued by the National Institute of Concessions (INCO for its spanish acronym) and/or the standard of socio-property recognitions in accordance with the indicated in the technical appendix 8 of the Concession Contract 12 of 2015 and, taking into account the socio-property diagnoses issued by the competent social professionals. This is done to ensure the foundation for possible compensation, which is done after an appraisal. Therefore, the management framework is aimed at safeguarding the integrity of the properties to be used by the Project, as well as adequate compensation for the communities that reside on them.

There are six properties required by the Project that are related to the Land Restitution Unit (URT for its spanish acronym) because they are in overlap with areas requested from this unit. For this reason, these properties cannot be acquired or intervened (including easement, lease processes) until the URT resolves the process. To date, one of them is in the judicial stage\[15\], four are in the administrative process (formal studies\[16\]) and one is in registration\[17\]. For this reason, the Project will initiate the expropriation process with respect to those properties that have land restitution measures registered or in judicial process of land restitution.

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\[15\] The judge begins the collection of information to determine if the demandant can gain ownership of the property, or if it remains in the hands of the current owner.

\[16\] The URT identified that the investigation proceeds after having identified that the applicant was at some point linked to the ownership of the property.

\[17\] A person indicates that he has the right to initiate the investigation on the current ownership of the property.
4.5.a.ii  Compensation and Benefits for Displaced Persons

RAS’s Land Acquisition Plan, which complies with the legal and constitutional requirements in Colombia\(^\text{18}\), considers the following aspects, among others: i) the recognition, for compensation purposes, of formal and informal owners; ii) measures to guarantee that affected houses will be replaced with others of the same or better quality; iii) guidelines for the land transfer process, including (a) the voluntary sale supported with purchase offers if the owner so desires, or (b) forced lawful expropriation of the property if the owner refuses to sell; iv) corrective procedures for the plots with deed and customary issues.

The land acquisition procedure identifies the residential or productive social units located within the area required for the Project development and, through a social and economic assessment, determines the social and economic compensation factors that should be considered to mitigate the impacts generated by the transfer, provided the corresponding regulations are observed.

To date, the Land Acquisition Plan and the property registration research have progressed as expected. Social reports (\textit{fichas sociales})\(^\text{19}\), which describe the process that was followed and are the base for the social and economic assessment of the people living in each required plot, have been prepared together with the title registration process, which identifies the leaders and legal representatives of the communities. The Project checks with the owners the contents of the reports and land maps for boundaries, built areas and an inventory of improvements and crops or flora species.

If the landowners reject the offers and all instances of amicable negotiation to transfer the title for the property are exhausted, the land is expropriated in the terms of the national laws. However, even in these cases, the Project is committed to keeping the livelihood, the economic activities and the standard of living of those who will be involuntarily displaced, so that the individuals who are relocated after an expropriation can have the same compensatory benefits as those who have relocated voluntarily.

4.5.a.iii  Community Engagement

The Project has a 27-member teams working on land management, with a dedicated group to support the homes affected by involuntary displacement. The Project offices in Neiva and Mocoa deal with about 250 and 350 properties each, whereas Pitalito serves 90.

The Project Land Acquisition Plan was developed including the communities. In this sense, the Project notified every community of the impacts the resettlement would cause and about the measures the management plans considered to tackle them and to keep the population informed about the progress in the land acquisition process. Part of this engagement process is included in the social reports, which not only identify the physical characteristics of the homes to be relocated, the houses to be removed, the appraisal for each case, and the intended compensation, but also a description of the conditions in each...
social unit (the level of education of the people to be displaced, the number of people at each unit, the composition of each unit, etc.). This has enabled the Concessionaire to define how vulnerable the people in the social units to be displaced are.

4.5.a.iv Grievance Mechanism

The Project has in place a grievance mechanism, which helps manage the grievances related to the land acquisition and involuntary resettlement processes. The contact information of the entities deemed relevant for the users and communities in the area of influence, including the ANI, the Transport Superintendency, the Directorate of Traffic and Transport and the Inspectorate can be accessed at the Concessionaire’s web page. Additionally, the web page shows the office hours, addresses and telephone numbers as well as email addresses that can be used to contact the Project and to manage PGSs or send a question. The system requires name and email address for the grievance to be processed though.

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

Carrying out the resettlement and livelihood restoration actions is based on the measures set forth in the EMP, more specifically on the actions concerning the management of the social and economic environment, by supporting the social and land management. This support involves: i) preparing the social, economic and cultural assessment of the affected social units; ii) providing social support to the social units in the required land; iii) implementing the social compensation measures preventing and mitigating the impacts generated by land acquisition; iv) relocating the social units away from the affected areas so that the works can be carried out; v) reviewing the land use plans of the areas where people displaced by the Project would be relocated; vi) assessing the availability of suitable land for the family units; vii) identifying the interest and the need of each home with respect to the relocation locations; viii) supporting actions to identify the economic constraints of households to acquire new property and to search for alternatives; and ix) monitoring their adaptation to the new place and their access to the social and public services.

The Monitoring Plan also has measures to guarantee the impacts on people’s livelihoods are managed after the relocation. The measures therein seek to assess the effectiveness of and the trends in management plans in time. These measures include executing: i) a housing inventory, which involves gathering the information to determine the general characteristics of the buildings, the number of residential social units and the social and economic conditions of each one, and ii) a population census, which involves an in-person visit to the residences by a Project social professional to get supplementary information, and to record and geolocate the presence of social infrastructure in the area of interest. According to this information and the number of affected units and infrastructure, additional management measures will be established.

4.5.b Displacement

4.5.b.i Physical Displacement

The Project Compensation Plan identified 837 lots of land that must be acquired to develop the road works. Not all plots host social units that need to be relocated, but there is still not a complete inventory of the people to be relocated. The EIA give details about the relocation process and the number of events
held to discuss the land acquisition procedure where 243 resident social units will be resettled by the Project. However, the number of families that should be relocated within the same plot of land or displaced somewhere else is still unknown.

The environmental management plans and the Monitoring Plan underline the fact that families must be displaced to the unaffected remains of their own plot whenever possible, and the Project shall make sure that every displaced owner or resident has access to public services and their plot.

4.5.b.ii Economic Displacement

The Project has measures in place to assure the relocated people can keep their economic activity, depending on how vulnerable they are. Their vulnerability level is established during such activities as the land inventory, the title assessment, the preparation of the social and land reports, and the corrective procedures for the plots with deed issue. The economic assessment of the activities is derived from interviews and inspection visits, as well as from the censuses and inventories prepared before the displacement.

The Project identified as potential economic displacement cases the businesses located on each side of the existing road, because they would presumably cease to earn any income or see their income reduced due to the detour and the decreased traffic flow generated by the operation of the by-passes included in the Project. Thus, the Concessionaire is preparing a list of the businesses settled along these road sections to be included as beneficiaries of the Program to Support Institutional Management Capacity and Regional Economic Strengthening.

4.5.c Private Sector Responsibilities Under Government-Managed Resettlement

By virtue of the relevant concession agreement, the facility acquisition process is the full responsibility of the Concessionaire, who must gather data and appraise the assets, submit the offer, negotiate them and acquire the necessary plots for the Project. A state-appointed auditor reviews the inventory and appraisals carried out by the Concessionaire and requests changes or corrections, if needed. Only with the auditor’s approval the Concessionaire can submit an offer to a home or individual that will be resettled.

4.6 Biodiversity Conservation and Natural Habitats

4.6.a General

The Project EIAs include the Biodiversity Compensation Plans (BCP), which serve as reference, estimate the compensation value depending on the area affected by the Project, the type of affected habitats and ecosystems, and identify the actions to compensate the impacts identified and the monitoring requirements. Moreover, the EMPs present actions to prevent or manage the impacts on the biodiversity and the ecosystem services, included in the following programs: i) removal of vegetation coverage and clearing; ii) fauna management; iii) forest utilization; iv) habitat protection and conservation; v) revegetation or reforestation in special areas; vi) conservation of plant species under protection; and (vii) conservation due to biodiversity loss.
The abovementioned compensation plans seek to avoid a net loss of biodiversity. The following are compensation areas: FU1 second road, 106 hectares; FU2 Hobo by-pass, 17.06 hectares; FU2 new road, 36.29 hectares; FU2 Campoalegre by-pass, 20.43 hectares; and FU3 Gigante by-pass, 22.76 hectares.

4.6.b Protection and Conservation of Biodiversity

4.6.b.i Modified Habitat

The Project’s area of influence has a high proportion of grassland and crops, as well as other areas with strong human intervention located mostly in the large tropical dry forest biome, comprised of the tropical subxerophilic or alternohyric zonobiome of the upper Magdalena River and the large tropical rainforest biome made up of the lower Andean orobiome.

4.6.b.ii Natural Habitat

The Project runs across very small areas of natural habitats (tropical dry forest and tropical rainforest).

4.6.b.iii Critical Habitat

Some endangered species were identified when the fauna and flora of the area of influence were characterized. Therefore, the Concessionaire launched a process to identify the critical habitats as defined in the international standards. This process has not been concluded yet.

4.6.b.iv Legally Protected Areas and Internationally Recognized Areas

The Project’s FU2, FU3 and FU4 run across the Amazon Forest reserve; therefore, the Concessionaire applied for the complete subtraction of FU 4.1 and initiate the arrangements to subtract FU 3.1.

4.6.b.v Invasive Alien Species

The Project does not leverage invasive alien species.

4.6.c Management of Ecosystem Services

The ecosystem services identified in the Project environmental assessments include: i) water supply; ii) the supply of agricultural and livestock systems; iii) climate regulation; iv) nutrient fixation regulation; and v) biodiversity regulation. None of these services will be significantly impacted by the Project.

4.6.d Sustainable Management of Living Natural Resources

Along the 485.59 km to be leveraged by the Project, the Concessionaire has made their best efforts to prevent the generation of adverse impacts on the biodiversity and the ecosystem services, even though they are considered insignificant.
4.6.e Supply Chain

The materials required for Project construction are not expected to be extracted. Instead, the Concessionaire will purchase the necessary materials from local suppliers with the related valid environmental and mining licenses.

4.7 Indigenous Peoples

4.7.a General

4.7.a.i Avoidance of Adverse Impacts

In compliance with Colombian regulations, the Project implemented prior consultations with nine indigenous communities certified by the Ministry: resguardos indígenas Inga Camentzá in Mocoa, Yanacona Villa María in Anamu, and Camentza Biyá and Inga in Mocoa; sesgos indígenas Inga José Homero of the Inga group and Yashay Wasi of the Yanacona group; capítulo indígena Siona Jai jZiaya Bain; and the indigenous communities Nasa Kwe'sk Tata Wala of the Nasa people and Dimas O'Nel Majin of the Yanancona people.

4.7.a.ii Participation and Consent

The Project has carried out and keeps previous consultation activities with the indigenous communities located along the corridor, including preparing, implementing and monitoring the agreements entered into with them.

By the end of 2017, during the previous consultation process, agreements had been reached and registered with all indigenous peoples along the Project, with the exception of Resguardo in Ipiales. Early in 2022, the Concessionaire invited each one of the communities to discuss the Project, mentioning concession agreement in the form of a public-private partnership (PPP) No. 012, and stressing the full compliance with the formalized agreements.

To date, the Project has not yet succeeded in formalizing the agreement with resguardo Inga de Mocoa, which is still awaiting the final approval from the community in full.

As part of the RWE, the Concessionaire implements an "Action Plan to address the conflict with the Communities of the Media Bota Caucana". This Plan defines three strategic lines of action: i) interaction with the community in general, ii) strategies with peasant communities, and iii) strategies with indigenous and Afro communities. As part of the process of dialogue and conflict resolution in the area, three dialogue tables were also formed (environmental-property, social and management) where agreements are defined under the scope of responsibilities of the communities, the mayor's office, the government, Ministry of Transport and/or RAS.
4.7.b  Circumstances Requiring Free, Prior and Informed Consent

For the phase the Project is in, no private plot or customary land has been affected and no physical displacement of the community was necessary. The prior consultation with resguardo Inga de Mocoa has not concluded.

4.7.c  Mitigation and Development Benefits

With the exception of resguardo indígena Inga de Mocoa, the Project managed to formalize agreements with all indigenous communities settled along the road corridor. While the details about the agreements vary depending on the community, in general, they include such measures as: supporting cultural strengthening and self-government, building community infrastructure, financing production projects, holding general discussions and creating employment opportunities.

4.7.d  Private Sector Responsibilities Where Government is Responsible for Managing Indigenous Peoples Issues

The Concessionaire has managed the affairs related to the indigenous peoples in close coordination with the Ministry of Interior.

4.8  Cultural Heritage

4.8.a  Protection of Cultural Heritage in Project Design and Execution

4.8.a.i  Chance Find Procedures

In order to prevent the impacts on the archeological heritage that the expected works may generate, the Project has a Preventive Archeology Program that includes the following activities: i) archeological monitoring; ii) archeological rescue; and iii) training and education.

The Project has obtained permits for archeological intervention at the applicable FUs, except for FU5 and the 24 storage areas for surplus material.

The Project expects to rehabilitate the existing road leading to Archaeological Park San Agustín, which has been declared UNESCO World Heritage Site and later Biosphere Reserve.

4.8.a.ii  Consultation

The Project has consulted with the communities, the Colombian Institute of Anthropology and History (ICANH) and several academic experts to determine which intervened sites could have heritage or archeological vestiges. The results were included in the Preventive Archeological Program.

4.8.a.iii  Community Access

The ICANH will decide whether the community can access the elements found once they have been rescued.
4.8.a.iv  Removal of Replicable Cultural Heritage

Only the ICANH or any other person they choose may remove replicable or non-replicable cultural heritage in compliance with Colombian legislation.

4.8.a.v  Critical Cultural Heritage

To date, no critical cultural heritage has been reported as affected by the works performed by the Concessionaire nor has there been any indication of the existence and location of sites of recognized historical or cultural interest in the area of influence of the Project. However, the municipality of Timanán, considered one of the oldest in Colombia (founded in 1538), is located in the road corridor.

4.8.b  Project’s Use of Cultural Heritage

The Project is not expected to use any cultural heritage.

5.  Local Access of Project Documentation

The documentation related to the Project is available at:  https://rutaalsur.co