





7. Action Plan




As of June 2023, the Concessionaire has resolved some actions remaining from the previous biannual report’s action plan. The Concessionaire is making efforts to close gaps for actions still in progress. The action plan has been updated based on the site visit carried out in July 2023 and the desktop review. The status of the activities is shown in Table 6 and has been evaluated with the following color coding.

● Solved
 ● On Track
 ● Pending
 ● New action



Table 6. Action Plan





ID	Proposed Action	Deadline	Arup’s Observations on Status (up to June 2023)	Status
1	<p>Property Acquisition- Compensation mechanisms: The Concessionaire is complying with the resettlement processes and land acquisition according to the national Resolution no. 545, 2008 – ANI and the appendixes 7 and 8 for the Concession Agreement. The Concessionaire should evaluate economic, legal, and social aspects of the new resettlement properties and follow up the adaptation of their owners for at least one year.</p> <p>Arup request the Concessionaire to report in the next period all the strategies are being implemented for the relocation processes in UF 5, the approval of the EER regarding delays in the construction schedule and the results of the negotiation process (“ amigable componedor ”).</p> <p>UF: 5 PS/EP:PS5</p>	Biannual – Next E&S report.	During this period, the Concessionaire continued working on relocation of Social Units. To date, 98% of social units are relocated in UF 5. The signed agreements have helped to guarantee the socioeconomic compensation to the affected communities. This action is marked as “ on track ” until all resettlements and relocations finish and the Concessionaire completes the follow-up visits.	●
2	<p>Archaeology: On June 18th, 2019, archaeological rescue activities started in the area denominated “ El Indial ” (Tesalia intersection UF 2 – UF3.1). Considering that it is not possible to estimate a date of termination of the archaeological activities, since it depends on the findings of each exploration, the Concessionaire has an EER approved on December 20th, 2019, that gives additional 2 months and 24 days to complete works once archaeological activities are completed.</p> <p>Regarding La Caucana archeological site and considering the Concessionaire didn’t monitor the archeological material in an appropriate way, Arup requests the Concessionaire to continue reporting the progress and management of the archaeological activities and findings.</p> <p>UF: All PS/EP:PS8</p>	Biannual – Next E&S report.	<p>The activities have continued given Resolution 0401 which grants ownership to the Concessionaire and the inventory for archeological material recovered for UF 2.3, 3.1, 3.2 and 4 have been annexed to the information sent by the Concessionaire.</p> <p>For La Caucana archeological site, the Concessionaire should inform Arup of the actions to be taken with this material. The Concessionaire should seek the technical opinion of ICANH with regard to the exposed archeological material, and what actions should be taken to avoid the appearance of material that is not properly monitored in the intervened areas.</p>	●
3	<p>Environmental sanctioning process- Trompeta Bridge: In November 2018, ANLA opened a punitive process related to the construction of the Trompeta’s bridge piles in UF 1. It is within the licensed area, but the construction activity</p>	Biannual – Next E&S report.	The authority requested a face-to-face evidence presentation session in November 2022. As of today,	●






ID	Proposed Action	Deadline	Arup's Observations on Status (up to June 2023)	Status
	<p>was not allowed in the environmental license. In Arup's opinion considering that the UF 1 construction activities were finished, the sanctioning process does not represent a high risk in the development of the project. The Concessionaire must review the legal process and report the advances and response issued to the environmental authority in the next monitoring report.</p> <p>UF : 1 PS /EP: PS1</p>		<p>ANLA has not made any statement regarding the hearing that was developed.</p> <p>Arup will continue tracking this process until its official closure.</p>	
5	<p>Working conditions – work force layoff: Due to the end of construction works some of the UFs, during the evaluated period the Concessionaire began to implement the staff layoff programs which included different trainings. Arup request the Concessionaire to report all the programs, activities, statistics and effectiveness of the implemented measurements.</p> <p>UF: ALL PS/EP: PS2</p>	Biannual – Next E&S report.	<p>The Concessionaire reported that it manages communication and follow-up meetings to give advance notice to workers. This is a good measure according to Arup. However, once again for this period there is no summary of statistics of workers who have gone through this process or any analysis of the peaks in which there could be massive hiring or layoffs according to the project schedule.</p> <p>Arup expects to receive this information and therefore the action remains as “on track” for the next period. In this period, Corpocaldas concluded the Concessionaire must request only an occupation of watercourse permit, instead of the discharge permit. Hence, the Concessionaire is preparing such a request and it will be submitted by late August 2023 as they informed.</p>	
6	<p>Water treatment in Tesalia Tunnel: Due to the increase of infiltration water flow in the Tesalia Tunnel, the Concessionaire must (i) redesign the water treatment system, (ii) request ANLA a modification of the environmental license and (iii) construct the new system to comply with the discharge flows amount and quality.</p> <p>UF: 2.2 PS/EP: PS1, PS3</p>	Immediately – Next Technical report.	<p>Arup finds this action is appropriate; hence, the action is marked as “solved”</p>	
7	<p>Water management – El Cairo aqueduct: During the evaluated period, the Concessionaire received the PQR No. 10-78 (May 5th, 2019) related to the petition of information of the community El Cairo about the water flow of a waterbody near the entrance portal of Tunnel Tesalia. Arup requests the Concessionaire to submit all the technical studies about the watercourse lithology and water quality characterization and a report all the implemented measurements that guarantee the water availability and quality.</p> <p>UF: ALL PS/EP: PS1, PS3</p>	Immediately – Next Technical report.	<p>During this period, the Concessionaire requested extensions in time to answer the requirements by Corpocaldas. The last one was completed on June 2023, where the Concessionaire stated that a contractor will verify topographically the layout of the network, as well as the design of the withdrawal, conduction and storage works, under the flow rates granted. To date, the Concessionaire is advancing in these topography works.</p> <p>Arup will continue tracking this process until the official closure of the PQRS and final notification from Corpocaldas is relayed.</p>	
8	<p>Environmental sanctioning process- ready mix concrete plant: The Concessionaire has an environmental sanction procedure with ANLA (Resolution 02094, October 21st, 2019) that has not ended in economic sanctions but are a risk for the project's environmental compliance and reputation. This sanction procedure was due to the operation of a ready-mix concrete plant not approved in the environmental license of UF 2.</p>	Biannual – Next E&S report.	<p>In March 2023, a hearing was held, but ANLA has not made any statement to date.</p> <p>This action remains “on track”.</p>	




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	UF: ALL PS/EP: PS1, PS3			
10	<p>Flow rates decrease near Tesalia Tunnel: In August 2020, the communities (including El Cairo) raised several PQRS related to an alleged decrease in groundwater flow rates and the water supply near the Tesalia Tunnel. Immediately, the Concessionaire activated the mitigation measures approved in the Environmental License to guarantee communities water access and start developing a hydrogeological study to determine if this impact is caused by the construction of the Tunnel. Arup requires the Concessionaire to continue to provide the information related to (i) the hydrological and technical studies that determine the cause, impacts, and risks, (ii) mitigation and compensation implemented measures, (iii) interagency strategies, and the (iv) communications with environmental authorities, communities, and stakeholders. It is necessary to consider a scenario analysis and action plan in case of this issue is scaled up to a Court and the precautionary principle is declared.</p> <p>UF: 2.2 PS/EP: PS1-3-4</p>	Immediately-Next Technical report.	<p>The Concessionaire is still carrying out the appropriate control measure of the situation including workshops with communities nearby and advancing on the (i) pilot studies to connect communities to the region water supply and (ii) land acquisition to reduce water pressure in the area.</p> <p>The progress of the pilots as of June 2023 is as follows: two are complete, two are 80% complete, and one is still in the study phase. The Concessionaire has a constant presence in the area to ensure the maintenance of the existing community infrastructure to avoid losses and maximize the flow received by the users.</p> <p>Even though the Concessionaire has presented advances on this matter, in Arup's opinion, this item will continue "on track".</p>	
15	<p>Land acquisition and offset KPI near the Tesalia tunnel: During a previous field visit carried out by Arup, the Concessionaire reported that it was contemplating the acquisition of land near the Tesalia tunnel to reduce water pressure in the area due to crop cultivation. They also commented on implementing environmental offsets in that same property. The Concessionaire proposes this measure to contribute to the prevention of future impacts to the water body. This is also expected to contribute in some manner to the ecological restoration of the area. Arup recommends impact indicators for this measure if it is allowed and compensations for forestry use to be implemented. They can be considered for water quantity and flows, as well as for the development of plant species (e.g., percentage of survival).</p> <p>PS/EP: PS3-4</p>	Biannual - Next E&S report.	<p>The Concessionaire has submitted the KPI proposed within the environmental management plan approved by CORPOCALDAS as an example of the KPI established. Arup finds they are appropriated to measure the net gain of biodiversity and enrichment of the area.</p> <p>As of June 2023, acquired properties are La Torre, El Borinque, Agualinda, La Carolina, and El Porvenir. Considering the significant difference between the cost of the actual offsets and the amount available in the subaccount, property acquisition has been progressing at a slow paced.</p> <p>The action will be marked as resolved when the missing properties are acquired and KPI's on environmental offset are reported. Arup will continue tracking this. Offsets and biodiversity measures are essential to evaluate compliance with IFC PS No. 6.</p>	
19	<p>Update on Environmental Offsets: For previous period, Arup did not receive an update on the progress status of the Concessionaire's environmental compensation decreed by ANLA and local authorities. This is important for compliance with both national and international standards. Even though there are no effects on the schedule or fines up to June 2022, Arup must receive this</p>	Biannual - Next E&S report.	<p>Most environmental offset plans have not been executed yet, even though UF 1, 2, 3 and 4 are completed regarding constructive activities. The main reason for the delay on offset completion is the availability of economic resources from the ANI environmental sub-account.</p>	


ID	Proposed Action	Deadline	Arup's Observations on Status (up to June 2023)	Status
20	<p>information to validate the development of each of the compensation measures agreed by the Concessionaire. UF: All PS/EP: PS6</p> <p>Control over forestry use: For this period, Arup conducted a field visit and did not find evidence that the control measures for forestry use are being applied. The Concessionaire is requested to validate this situation and report it for the next monitoring period. UF: All PS/EP: PS6</p>	Biannual – Next E&S report.	<p>Arup will continue requesting updated information to each plan regarding:</p> <ul style="list-style-type: none"> Alternative approaches to entities (CARs, ANLA, Supervisor, etc.) and further announcements from them. All information related to the current environmental offset budget, environmental sub-account from ANI and workshops held with the Supervisor in order to reach a consensus in this issue. More detailed information concerning other environmental activities to be developed aside from only the land acquisition i.e. measurable conservation outcomes such as the number of trees to be planted, fauna/flora monitoring. Updates for applicable UFs should not only include indicator performance but descriptions on how the offsets will mitigate the impact the Project has on biodiversity and which specific actions (planting, restauration, rehabilitation, etc.) will take place, as this is what matters for compliance with PS6. <p>During this period the Concessionaire shared properties acquired, hectares acquired, costs and projected costs of missing offsets.</p> <p>The action will be marked as “on track” until all properties are acquired. The Concessionaire sent photographic record on forestry use this period. Additionally, the updates on PMA programs evidenced the number of trees cut during the period. Nevertheless, it would be favorable if the Concessionaire clarifies the projection on forestry use for next periods.</p> <p>The action is marked as "on track" .</p>	●
23	<p>Accidents: Considering the increase of accidents, especially from the contractors, Arup requests from this time forth the Concessionaire should report within every biannual report supporting information related to the breakdown of each of the accidents presented (type of accident, causes, consequences, action plan). Arup invites the Concessionaire to be proactive in H&S activities to prevent and minimize accidents in the Project. UF: All</p>	Biannual – Next E&S report.	<p>In this period, the Concessionaire stated that the process does not have a closing date because the payment depends on the proof of economic dependency provided by the beneficiaries. The Concessionaire must install security fences to improve the security conditions by suggestion of ARL.</p>	●

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25	<p>PS/EP: PS2</p> <p>Fauna protection and follow-up: Aside from the wildlife repelling and rescue, Arup found no information regarding the implementation and effectiveness of fauna passages along the Project. Arup considers it as one of the most important parts of the biodiversity assessment, as it can measure the impacts on biodiversity caused by the Project construction. Therefore, Arup emphasizes submitting this information, including analysis of the results obtained.</p> <p>UF: All PS/EP: PS6</p>	Biannual – Next E&S report.	<p>Arup opines the payment is beyond the concessionaire control. It is crucial to track down the reasons for the non-delivery of the proof and the payment process. Arup will follow-up the installation of security fences.</p> <p>This action will continue open until payments by the ARL (Laboral Risk Manager) are submitted or information related to further actions are submitted. Additionally, action plan and execution need to be delivered.</p> <p>The Concessionaire sent a summary report on the number of planned wildlife crossings and animal run over reports. As no wildlife crossings have been installed, runover reports do not identify what wildlife crossings are nearest to the accident or the type of crossing.</p> <p>No progress on construction of planned wildlife crossings was evidenced in this period. The action is marked as “on track” until construction of all wildlife crossings is reported.</p> <p>The IESC finds the wildlife crossings process is taking more time than expected. It is crucial that for next report that the Concessionaire has more progress on wildlife crossings as it is one of the measures that ensures fauna protection and mitigation of the impact of the project on biodiversity and therefore demonstrates compliance with PS6.</p>	
27	<p>Exotic invasive species: UF2.2 has reported presence of the exotic invasive species <i>Litobathes catesbeianus</i>. The Concessionaire's environmental team will need to report presence of this species in sites where it has not been reported yet. The information should be reported within the Anexo B. IFC as a compliance of the IFC PS 06.</p>	Biannual – Next E&S report	<p>The Concessionaire performed its first site visit to UF2 to monitor presence of the bullfrog in the area in August 2022. A monitoring report and photographic evidence was delivered to Arup. No bullfrog was seen during the site visit.</p> <p>For following periods, the Concessionaire shall continue with these site visits. The IESC recommends that monitoring is done more often and in other UFs than UF2 to see if there has been increase on the distribution of the bullfrog.</p> <p>The action is marked as “on track” as for next period it is expected that the Concessionaire continues with the activity.</p>	

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28	<p>Internal Grievance Mechanism: The Concessionaire reports having no significant claims from workers. However, Arup emphasizes for the following period to send information regarding the registration of these complaints in the Internal Complaints Mechanism. Complaints can be attached by type, major cause, whether they come from the EPC, Contractors, or the Concessionaire itself. Arup also expects to receive a report summarizing the management of each measure.</p> <p>UF: All PS/EP: PS2</p>	Biannual – Next E&S report	No internal grievance was reported this period. However, neither was a report summarizing internal grievances sent. The action remains on track for next period.	
29	<p>GHG emissions: The GHG calculation should be wider, including more aspects rather than only fossil fuel consumption. The quantification should be based on international methodologies such as GHG Protocol and include a document of data interpretation and Concessionaire's good practices. Also, considering the IFC PS3 requirements and the stage of the Project, Arup requires the Concessionaire to present the cost-effective alternatives to reduce GHG emissions during the operation of the Project.</p> <p>UF: All PS/EP: PS3</p>	Biannual – Next E&S report	The Concessionaire presented GHG calculation for the first semester of 2023. Even though, in Arup's opinion, the quantification should be wider considering the GHG Protocol, Arup understands that is the scope the Concessionaire has made. However, as of to date, Arup has received no information related to the cost-effective alternatives to reduce GHG emissions. This is an important requirement since the Project is near to the O&M stage for the entire corridor and strategies should be set before this. Active 2: The Concessionaire informed in the last report that they were pursuing a new Power Purchase Agreement with EPM to secure less expensive and renewable sources. However, no information regarding the progress on this was found for this semester. This information will be aligned with the IFC PS3 in implementing strategies/projects to reduce GHG emissions.	
30	<p>Water consumption: Arup requires the Concessionaire to present the strategies that aimed at conservation measures, alternative water supplies, water consumption offsets, among others. The Concessionaire may support a part of these requirements by presenting the strategies to comply with PS3 (KPI follow-up and monitoring evidence). Other strategies to reduce water that are not cover by the PUEAA should also be submitted by the Concessionaire.</p> <p>UF: All PS/EP: PS3</p>	Biannual – Next E&S report	The Concessionaire provided information on its water supplies for the Project as of June 2023. However, the Concessionaire does not provide specific information on consumption reduction strategies. It is important since a change of stage is coming from construction to O&M. Moreover, evidence of compliance and follow-up of the Program for the Efficient Use and Saving of Water (PUEAA- Spanish acronym) is required. Therefore, this action remains “on track” until the Concessionaire reports evidence of water consumption reduction measures and documental evidence of the PUEAA implementation and follow-up.	
35	<p>Use of glyphosate in weeds management: Arup evidenced in January 2023 the use of this substance for weeds management at the El Condor construction camp. For the following period, the Concessionaire should submit the Pesticide Management Plan associated with this substance, detailing the points of use at the</p>		The Concessionaire has shared information to close the gap such as the elaboration of a new management card related to this topic where they explicitly state the ban on the use of pesticides. Also, they have replaced the use of this pesticide for the use of lawn trimmer during weed	

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	cut-off date and the alternatives to avoid its implementation, such as mechanical and organic means, among others. UF: All PS/EP: PS3, PS4, EP2, EP3		management and control. Photographic record was submitted as evidence as well as an email where the information is communicated to the rest of the team. Arup finds this action is appropriate; hence, the action is marked as "solved"	
36	Internal Grievance Mechanism trainings: For next period, trainings on internal grievance mechanism should be performed. Workers need to learn how, why, and when to submit any claim, request, question, etc. UF: All PS/EP: PS2, EP2, EP3	Biannual – Next E&S report	No internal grievance was reported this period. However, neither was evidence on trainings performed. The action remains on track for next period.	
37	Activities to ensure mitigation of impacts to social actors affected by land acquisition processes: The concessionaire has implemented adequate acquisition, resettlement and compensation plans aligned with PS5. However, Arup considers the concessionaire should report an update on security of tenure for social units that have been relocated. UF: All PS/EP: PS5, EP2, EP3	Biannual – Next E&S report	The Concessionaire stated it is currently performing follow-up visits to social units that have been resettled. However, for the next period it is expected that information on the actions taken for guaranteeing their security of tenure. For the following periods the Concessionaire should share the records on the follow-up visits performed during the reporting period. This action is marked on track.	
38	Archeological Licenses: The IESC will need significant updates on ownership and communications with ICANH given termination of contract of archeology license holders. The respective licenses are: 6379, 5821, 5843, 5931 and 5868. Also information on how archeological material will be managed in case of findings in active work fronts. UF: All PS/EP: PS8, EP2, EP3	Biannual – Next E&S report	Archeological Licenses were approved by the ICANH through resolution 0401 of March 16, 2023, and the archeological plans have continued with monitoring, prospection, and laboratory activities. The ICANH has defined specific activities within this plan. This action is marked as solved.	
39	UF3.1 archeological updates: UF3.1 sites with soil removal that are not under ICANH licensing may impose a gap with PS8. In November 2022, ICANH informed the Concessionaire that given the soil works are because of a landslide and civil works to stabilize the area need to be done, the Project's archeological team, as a preventive measure, shall permanently accompany civil works. In case archeological material is found the team shall implement the "Protocol for the Management of Fortuitous Archeological Heritage Findings" established by the ICANH. The IESC will need detailed updates on communications with ICANH on the issue and reports on findings of archeological material an management of the situation and civil works. UF: All PS/EP: PS8, EP2, EP3	Biannual – Next E&S report	There are two archeological interest sites that due to landslides and civil interventions may have possible affectations. ICANH visited these areas in October and no further information on them has been given or updated. These sites correspond to Service Area La Caucana and El Portugal. It is important that the Concessionaire annex information of these processes for the next monitoring period and therefore this action will continue as "on track".	
40	Disaster Management Plan training: Arup considers that the Project has adequate measures for prevention and action in case of emergencies and disasters. However, the IESC considers that there could be improvements in the dissemination of information. Arup requests updated information or evidence	Biannual – Next E&S report	The Concessionaire has implemented social risk and hazard training given a public order event occurrence at one of the tolls. The training and socializations have been done towards collaborators. Although these measures	

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41	<p>related to trainings associated with the Disaster Management Plan and Contingency Plan and to report the community at least once a year on implementing on impacts, risks or matters that may affect them. UF: All PS/EP: PS1, EP2, EP3</p> <p>Identification of Climate Change Risk Assessment for the Project: Arup considers that rainfall and floods are having a significant impact on the Project, since the Concessionaire has repeatedly requested urgent measures to adapt bridges and other works to erosion, flooding and mass movements. It is important to carry out a risk study of climatic events, as they have an impact on the value of the Project and potential cost overruns, as well as on the safety of users and communities. The IESC recommends that the Concessionaire submit an analysis on this aspect for the next period, as well as documentary evidence on the actions taken between January and July 2023 to remedy the effects and prevent future damages. UF: All PS/EP: PS1, EP2, EP3</p>	Biannual – Next E&S report	<p>have been taken the Concessionaire has not updated information on emergency training and socialization, or on any of the drills that should be done towards the Disaster Management Plan.</p> <p>It is important that for the next monitoring period the Concessionaire update this information.</p> <p>During this period, the Concessionaire has shown the actions taken to prevent scour, landslides, and floods. For scours, the Concessionaire monitors the flows of water streams and their effects on the structures. For landslides, the Concessionaire monitors soil saturation from slopes. Monthly, there is a drone flight on critical slope points and principal streams like the Cauca and Risaralda rivers. However, for the next period, the Concessionaire should send evidence of the monitoring results, parameters, frequency, indicators, among others.</p> <p>Arup recommends the Concessionaire continues monitoring critical points and attending people's grievances about this matter.</p>	
42	<p>Air pollution prevention and road safety: Since the Concessionaire has used a type of dump truck similar to those used in mining with no tarp system covering the load, the Concessionaire should submit evidence of the strategies taken to comply with the measures established within the EMP which can prevent fine material and debris from flying out while driving. This action is not only related to pollution prevention, but also related to road safety. UF: All PS/EP: PS1, PS2, PS3 and PS4.</p>	Biannual – Next E&S report	New Action	
43	<p>Current update on Zodme Saibo contingency: Considering the information shared until this semester, the Concessionaire will keep Arup informed regarding the progress or management made for the Zodme Saibo contingency. The Concessionaire informed that it has not been possible to properly address the contingency because there is no authorization from the owner to access the property. UF: 4 PS/EP: PS3</p>	Biannual – Next E&S report	New Action	

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44	<p>Soil protection improvements: Considering the site visit findings, Arup requires evidence of the actions taken to improve soil protection management in all work sites open in the Project. It should include trainings and lectures to employees.</p> <p>UF: All PS/EP: PS3</p>	Biannual – Next E&S report	New Action	
45	<p>Water occupation- La Ley bridge: In Arup's opinion, a proper water management consists of canalizing and diverting the water body so that it would not come into contact with materials and the construction activity itself. Therefore, Arup requires the Concessionaire to submit documentation and photographic record to prevent water pollution in water occupation activities in the Project, especially at La Ley bridge in UF5.</p> <p>UF: All PS/EP: PS3</p>	Biannual – Next E&S report	New Action	