

**ENVIRONMENTAL AND SOCIAL REVIEW SUMMARY (ESRS)  
NAVOJOA SOLAR PV - 12402 – 01**

**Original language of the document: English**

**1. Scope of Environmental Review**

The Navojoa Solar PV Project (the “Project”) consist of the design, construction, commissioning and operation of a 199.99-megawatt (MW) solar photo-voltaic (PV) plant, that will connect into the Mexican Comisión Federal de Electricidad (“CFE”) national grid system; and all the associated transmission line and interconnection facilities which include a 3.3 km transmission line (TL). The Project has a 30-year life expectancy for energy production. According to X-Elio (the “Sponsor” or “the Company”). Project construction will take approximately 13 months.

IDB Invest together with RINA Consulting INC., as the Independent Environmental and Social Consultants (IESC), and two E&S officers of Bancomext reviewed, among other documents, the following environmental, health, safety and social documentation provided by the Company: i) environmental permits; ii) Environmental Impact Assessment (Manifestación de Impacto Ambiental - MIA) used to obtain the environmental permits; iii) Social Impact Assessment (Evaluación de Impacto Social -EVIS); and iv) Justification Technical Document (Estudio Técnico Justificativo -ETJ), among other documents. The Environmental and Social Due Diligence (ESDD) process included a field appraisal mission conducted between August 22 and August 24, 2018. Meetings include the Project site’s owners, land foreman and other stakeholders, including the Mayor of Navojoa.

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

According to IDB Invest’s Environmental and Social Sustainability Policy, the Project was categorized in Category B since its potential environmental and social risks are related to: a) relationship with the local community (e.g. social impacts on surrounding land users, and jobs expectations); b) contractor management; c) worker and community health and safety (including increased vehicular traffic during construction); d) one case of resettlement; e) presence of cultural heritage identified by the National Institute of Anthropology and History (Instituto Nacional de Antropología e Historia -INAH); f) the potential presence of an IUCN listed endangered species. All the impacts prone to be generated by the Project are deemed to be of medium magnitude and considered to be either reversible or easily manageable through standard mitigation measures.

No indigenous communities will be affected significantly or irreversibly by the Project. Moreover, its area of influence does not intersect any national or internationally recognized protected areas. Although the Project seems not impact any critical habitat (although there is a possibility that endangered species are present), biodiversity studies need to be undertaken to confirm this situation.

The Performance Standards (PS) triggered by the Project are: i) PS-1: Assessment and Management of Environmental and Social Risks and Impacts; ii) PS-2: Labor and Working Conditions; iii) PS-3: Resource Efficiency and Pollution Prevention; iv) PS-4: Community Health, Safety and Security; v) PS-5: Land Acquisition and Involuntary Resettlement; vi) PS-6: Biodiversity Conservation; and vii) PS-8: Cultural Heritage.

### 3. Environmental and Social Context

The Project is in the Municipality of Navojoa, at about 5 km from the Navojoa to Alamos highway, in the southern part of State of Sonora, Mexico. The site occupies approximately 656.99 hectares (Ha), with a perimeter of 19.8 kilometers (km).

The place where the plant will be located is uneven, sloping slightly to the North East but also with very steep areas. The land is currently vegetated with medium density native vegetation, which, according to the land owner, is used partially for livestock and recreational uses. The place is not a critical habitat or a special or unique ecosystem. Several different fauna species were observed during the site visit, especially birds. Various structures have been identified within the site boundaries including a home/farm worked by the family of the current landlord's foreman, and "*bordos*" or rainwater cisterns used by neighboring farmers. Some of the land appears to be partially used for pasture and agricultural activities and there is evidence of hiking and biking trails throughout, as well as a gas pipeline easement. The existing access road is currently in use by the local population to access neighboring properties, as well as by the foreman to access his house. There is an archaeological site identified by INAH within the Project site, called La Fortuna.

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

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

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

Based on information detailed in the Company's website, X-Elio has worked at a corporate level on the adaptation of its management system of quality, environment, safety and health to the latest versions of ISO 9001:2015 (quality management system), and ISO 14001:2015 (environmental management system) standards for the design, construction and commissioning of photovoltaic solar power installations. X-Elio's "Policy that integrates Quality, Environmental and Safety and Health at work", also available on its web site, states that the Company is committed to the conservation of the environment and to fulfill its obligations derived from national regulations, environmental impact studies and operational/activity licenses. The Company also extends this commitment to its supply and chains, by including environmental criteria in its contracts and the selection of contractors.

The Corporate Environmental and Social Management System (ESMS) and associated commitments, still need to be trickled down to the Project level. The Project's MIA and EVIS were prepared to comply with national Environmental and Social (E&S) legal requirements; its E&S Management Plan (ESMP) has been developed only at a conceptual level; and the baseline information contained in the MIA lacks detailed information related to flora, fauna, social aspects, air quality, soil and water information.

##### b. Policy

The Company has not yet prepared Project-specific policies that define the environmental, health and safety, labor and social objectives and principles, to guide the Project to achieve sound environmental and social performance, in line with this PS.

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

The Environmental Impact Assessments (MIA) and the Social Impact Assessments (EVIS) conceptually address the main Project's impacts. However, they contain no risk or impact analysis of the full area of influence (environmental, social, labor, health, safety, and security), including the associated facilities (transmission line, property neighbors or access roads) and possible impact to surrounding communities.

The hydrological study provided by the Company identifies a flooding area on the Project site, however, the project layout avoided risky areas in the PV panels' installation. The study concluded that a drainage system or protection structure is not necessary for the Project due the fact that the hydrological investigation properly evaluates the technical risks relative to industry practice but recommends a detailed hydraulic assessment of the natural drainage channels in order to determine if additional drainage works are necessary.

d. Management Programs

Since the Project's MIA and EVIS were produced to comply only with host country E&S legal requirements, ESMPs are either partially developed or have been prepared at the conceptual level and, therefore, need to be enhanced to comply with the minimum required standards outline in this PS.

e. Organizational Capacity and Competence

X-Elio has a basic organizational structure for its operations in Mexico. However, the Company has not yet established an organizational structure with defined roles, responsibilities, and authority to implement a project-specific ESMS. Nevertheless, based on existing Company's certifications and corporate organizational structure, it's very likely that the people to be hired or appointed to perform the tasks required will have the knowledge, skills, and experience necessary to generate an organizational structure capable of managing the E&S system.

f. Emergency Preparedness and Response

The Company has not yet prepared a Project-specific Emergency and Contingency Plan compliant with PS1 that contains: Organizational structure; Activation plan; Response procedures; Training and drills; Description of potential emergencies; Reporting / communicating the emergency; Responsibilities; Incident investigation and follow-up procedures; Contact information for emergency and support services; Map of the work place that shows evacuation routes and assembly locations; Location of emergency equipment; First aid station; Rescue plan evaluation; and Periodic revision of the plan.

g. Monitoring and Review

Pertaining monitoring and review, the Project is partially compliant with PS1. Hence, as part of the ESMS, the Company needs to ensure that procedures for monitoring and measuring the effectiveness of the management programs are put in place.

h. Stakeholder Engagement

The Company has not yet developed a Stakeholder Engagement Plan (SEP) capable of establishing and maintaining a constructive relationship with a variety of external stakeholders over the life of the project. X-Elio has a conceptual stakeholder feedback or grievance mechanism which has not been made available to local communities.

## 4.2 Labor and Working Conditions

Management and organization in relation to Organizational Health and Safety (OHS) are coordinated through the Company's Health, Safety and Environment Department, which establishes guidelines, plans and programs to be developed at the corporate and Project levels. For each country where the Company does business, X'Elio has appointed a Health and Safety Supervisor who is responsible for implementing the plans and programs that have been established, and for overseeing and monitoring the obligations derived from the Integrated Management System, and the applicable legal requirements for the Company's personnel and subcontractors.

As part of its OHS corporate guidelines, all workers receive risk prevention training in accordance with their category and functions. Additionally, the Company uses the UBYQUO platform (an automatized accountability software) that creates a common working area for contractors, OHS supervisors, and construction site/generation facilities, to exchange documents in a unified space in a simple, swift, and effective manner.

The Company is certified as OHSAS 18001:2007 for design, construction, and operation of PV facilities. Health and Safety plan actions are presented as part of the EVIS. However, at the time of this report, neither a comprehensive OHS Management Plan nor site specific OHS programs for the Project were provided for analysis.

According to the Company's corporate guidelines, X'Elio imposes the same safety requirements on its employees as it does its subcontractors. Thereafter, before they are allowed to begin their works, they need to have in place all the requirements to fulfill the local legislation. Meanwhile, during construction and maintenance, coordination meetings are held to detect any possible incidents, among other aspects. So far, based on the information shared by the Company, there is no evidence of a procedure for evaluating contractors and service providers, in relation to EHS at the Project level.

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

According to information from previous X-Elio projects, the Company has developed a "Manual of Good Environmental Practices on Site". This Manual discusses preferred management techniques or work patterns, with the objective of raising worker and management awareness, promoting a change in attitude and/or behavior to improve environmental performance, thereby decreasing impacts to the environment. However, the manual is not project-specific.

As reported in its Sustainability Report 2017, the Company measures consumption CO<sub>2</sub> emissions and waste at their offices, maintenance and construction activities, to analyze their efficiency and establish periodic improvement objectives to help minimize environmental impact. As part of the preparation of the MIA, considerations were given to background ambient conditions. However, Project specifications for water, energy demands and estimates of waste generation were not provided.

The Company has made commitments with the environmental authorities to implement measures to avoid, minimize, and control the release of pollutants to air, water, and soil; however, a comprehensive ESMP covering to all identified risks and impacts was not evident, and there was no baseline for ambient air conditions.

The presence or storage of fuels or oils on site is not addressed in the MIA. A Hazardous materials management plan has not yet been developed.

Even though the MIA does not anticipate that the Project will generate hazardous wastes, no waste management plan was available for review.

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

Although the EVIS includes some baseline information, impact assessment and a conceptual social management plan, there is no information in relation to community health and safety or emergency response planning.

Risks associated with construction activities include transport safety along roads and access corridors, transmission line, impacts to water quality and quantity, potential for inadvertent development of new vectors and for transmission of communicable diseases, plus potential community health related issues associated with the influx of labor to nearby communities during Project construction. Based on prior experience with other Company projects, it is very likely that a security company in charge of protecting the Project's assets and personnel will be retained. In Mexico, security companies usually establish procedures and provide a record of investigation for every employee; however, the Company should require access to employment records and other available records, including any criminal records; and include this procedure as part of a Security Management Plan.

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

The documentation reviewed suggests that no involuntary resettlement will be produced by the land acquisition process required for the Project. However, during the site visit, a permanent household and associated farm were identified inside the Project's site. The landowner's foreman and his family have occupied this house for about 15 years and operate a farm as part of their livelihood. In addition, neighboring farmers and settlers were identified, who may depend on access through the Project site, and could, therefore, be potentially affected by the Project.

At least two structures to store rainwater were found inside the Project area which are used for livestock and pig farms (aka *bordos*). Access roads through the Project site were identified during the site visit, which, according the stakeholders' interviews, are currently in use by local people. In addition, it was identified a network of biking and walking trails for recreational use within the Project area.

Despite the latter, no further documentation other than a land lease agreement (with purchasing option) signed with a private owner was provided. Therefore, it is difficult to assess the current land status since the following information has not been submitted: i) current legal land status for each of the project site, right of way for the transmission line, access roads and buffer zone; ii) description of the negotiation and compensation processes for land use, assets and any livelihoods affected by each case; iii) evidence of a compensation agreement for land use and any economic activities impacted by each case; and iv) analysis of alternatives to minimize impacts, and options for compensation examined and agreed with the affected people.

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

The MIA provides an overview of the biodiversity features of the area affected by the Project. However, the majority of habitats have only been classified in terms of "modified", and "natural". In

addition, there is no information relating to the area impacted by the transmission line (TL), which, according to information provided during the site visit, will be included in a separate documentation not yet provided.

### Flora

According to the MIA, flora surveys were carried out to define biodiversity baseline conditions of the Project site. However, no details are provided on the survey's periods and location of the samplings points. Plant species identified have been mostly classified and compared with national red lists and regulations.

According to information currently included in the MIA, only one of the identified flora species falls under the regulations of NOM-059-SEMARNAT-2010: The Guayacán (*Guaiacum coulteri*), classified as "threatened endemic" and as "vulnerable" under the IUCN red list. The remaining plant species identified are either not included in the IUCN red list or are classified as of "Least Concern". However, during the site visit, it was observed that the project area was quite rich in vegetation and appeared to be populated by a greater number of flora species, including the Golden Barrel (*Echinocactus grusonii*), classified as "Endangered" in the IUCN list.

### Fauna

According to the MIA, fauna surveys were focused on four groups of terrestrial vertebrates (reptiles, amphibians, birds and mammals). However, no details have been provided on the survey period, frequency and location of samplings points. Only fauna species directly observed during ecological surveys have been reported in the MIA: specifically, one species of mammals, the antelope jackrabbit (*Lepus alleni*), and two species of birds, the raven (*Corvus brachyrhynchos*) and the great kiskadee, (*Pitangus sulphuratus*). No species of reptiles or amphibians have been reported.

The baseline information included in the MIA is not enough to allow the identification of potential protected and endangered species living in the Project area. Fauna surveys appear to be limited in time and do not cover the entire fauna seasonal cycle to register species movements. Therefore, it is unlikely that all fauna species present in the region have been identified.

During the site visit, different species of wild animals not mentioned in the MIA were noticed (among others, white rabbit, coyote, fox, squirrel, vulture, pigeon). Also, it was noted that avifauna appeared to be very rich in the project area. Testimonies given by the XElio's environmental consultant, the landowner and his foreman (who inhabits the property) confirmed the presence of a greater variety of mammals, reptiles and avifauna other than those identified in the MIA.

### Legally Protected Areas

The Project is not located within any Legally Protected Areas or Internationally Recognized Area. The nearest ones are the "Áreas Naturales Protegidas (ANP) - Área de Protección de Flora y Fauna Sierra de Alamos-Río Cuchujaqui" located more than 38 km to the northwest of the Project site and the "Áreas Terrestres Prioritarias Regiones Terrestres Prioritarias (RTP) - No. 31 Sierra Alamos-El Cuchujaqui" located more than 36 km to the southeast.

The Project is located within the “*Unidad Ambiental Biofísica (UAB) No. 106 Llanuras Costeras y Deltas de Sonora*” (identified by Mexico’s “*Programa de Ordenamiento Ecológico General del Territorio, POEGT, 2012*”), where agriculture and preservation of flora, fauna and tourism are the main priority for attention. According to the MIA, the purpose of the POEGT is not to avoid development and the Project is aligned with POEGT’s sustainable development goals.

According to the ETJ, the Company has submitted a request for land use change from agricultural to industrial. The MIA approval states that mitigation for potential impacts associated with land use change are addressed in the ETJ. This requires verification.

### Habitat Classification

A proper habitat classification in line with PS6 requirements has not been undertaken. According to the MIA and direct observations during the site visit, the Project is in an almost flat and vegetated area, mainly covered by trees, grasslands, shrubs and bushes crossed by seasonal creeks that appears to comprise mainly natural habitat. Modified habitats can be recognized near scattered farms in the area surrounding the project’s direct footprint.

### Biodiversity Impact Assessment

According to the MIA, the project footprint will cover about 670 Ha and the transmission line about 8 Ha. The main impacts to biodiversity will be related to site preparation activities. Impacts connected to the transmission line might continue in the operational phase. However, these impacts have not been assessed in the MIA. The actual biodiversity impact assessment has been mainly focused on a qualitative analysis of potential impacts on vegetation. There is no estimate of the area that needs to be (i.e. natural habitats) cleared by project activities and of the list of flora species that will be impacted.

### Biodiversity Management and Monitoring

Elements of a mitigation hierarchy, in line with IFC requirements, (i.e. avoidance, minimization, restoration and compensation), have not been presented in the MIA. Notwithstanding, some mitigation measures aimed at to avoiding and minimizing impacts on vegetation have been included, but none of them is related to fauna species.

The Project is compliant with Mexican regulations which require that all plant species listed in NOM-059-SEMARNAT-2010 are identified and relocated prior to land clearing in a buffer zone (*Área crecimiento y amortiguamiento*). This is in line with PS6 requirement for natural habitats, seeking to achieve “no net loss” of biodiversity.

A *buffer or compensation zone* of about 216 Ha (equal to 33% of the project site) located near the project site has been identified in the MIA. However, during the site visit it was understood that the extension of this area has not yet been fixed (during the site visit an overall area of 600 ha was mentioned), and that the proposed area is not part of XElio’s property as there isn’t any written agreement between the Company and the landowner.

A monitoring program including a few actions to monitor revegetated areas is included in the MIA. Revegetation requires long-term monitoring key indicator species to demonstrate the achievement of no net loss of biodiversity.

#### Invasive Alien Species

According to the information provided, the Project foresees no introduction of alien species as it will strictly adhere to Mexican regulations in terms of plants that will be replanted. Approaches to topsoil removal described suggest that, if implemented as described, it will be properly managed.

#### Management of Ecosystem Services

The Project area is currently classified as an agricultural/forest area in terms of land use, but it is understood that the Company has asked the corresponding authorities for a change of the current land classification to “industrial”. Impacts of ecosystem services, though not explicitly mentioned, have been evaluated in the current MIA.

Scattered farms in the area surrounding the project site were observed during the site visit. Ongoing farming activities appear to be mainly based on intensive breeding of cows, pigs and horses near the future project site.

### **4.7 Indigenous People**

The documentation provided by the Company indicates that no indigenous groups have been identified or reported at the Project’s area of direct influence. However, according to the Catalog of Indigenous settlements of the Commission of Development of the Indigenous People for Navojoa province, more than 50 indigenous communities dispersed in the region are registered in the Project’s area of indirect influence.

### **4.8 Cultural Heritage**

Due to the presence of an area of archaeological interest (*La Fortuna*) which is located within the site, the INAH has provisionally rejected the authorization for the Project to proceed until a new archaeological assessment has been undertaken.

## **5 Local Access of Project Documentation**

The Sustainability Policy and information about the Project’s Environmental, Social and Corporate Governance – ESG can be accessed via the website: <http://www.x-elio.com/en/sustainability>. At the time of the evaluation, the Client was not making information available to the public and the population affected by the project.

## **6. Environmental and Social Action Plan (ESAP)**

**NAVOJOA SOLAR PV, Mexico  
Environmental and Social Action Plan (ESAP)**

Item No.	Action Item	Product / Deliverable	Anticipated Completion Date
<b>PS 1: Assessment and Management of Environmental and Social Risks and Impacts</b>			
1.1	Redefine the Project's area of influence and update the risk and impact assessment accordingly.	<ol style="list-style-type: none"> <li>Updated Environmental and Social Area of Influence (Aoi) both direct and indirect, consequently updated environmental and social (E&amp;S) baselines.</li> <li>Revised E&amp;S risk and impact assessment, based on revised Aoi and baselines, including resettlement.</li> </ol>	60 days Prior to start construction phase
1.2	Develop an Environmental and Social Management System (ESMS) that incorporates the requirements contained in the MIA, EVIS and Environmental Permit and aligned with the Performance Standard 01 (PS1), for all areas of the project including project site, transmission line, access roads and buffer zone.	ESMS (handbook and procedures) including policies, management plans and programs developed. Construction and Operational phases.	30 days Prior to start construction phase and thereafter in the Environmental and Social Compliance Report (ESCR)
1.3	Develop a Stakeholder Engagement Plan (SEP) that includes: i) identification and mapping of all potentially affected direct, indirect and vulnerable stakeholders; ii) assessment of indigenous groups in the Navojoa region by consultation with corresponding authorities for Indigenous people such as the Comisión de Desarrollo de Pueblos Indígenas" (CDI)"; and iii) Public Consultation	SEP	30 days Prior to start construction phase.
1.4	Develop and implement an external (community) Grievance Mechanism and disclose to stakeholders and affected communities.	Community (External) Grievance Mechanism Construction and Operational phases.	30 days Prior to start construction phase and thereafter in the Environmental and Social Compliance Report (ESCR)
1.5	Develop and implement a local hiring plan based on the identified risks and the demand estimated by the company.	Local Hiring Plan. Construction phase.	30 days Prior to start construction phase and thereafter in the Environmental and Social Compliance Report (ESCR)
1.6	Develop and implement a local purchasing plan based on the identified risks and the estimated demand and categories required by the company.	Local Purchasing Plan. Construction phase.	30 days Prior to start construction phase and thereafter in the Environmental and Social Compliance Report (ESCR)
1.7	Develop an E&S closure plan which includes an approach to demobilization of local workers.	Closure Plan. Construction phase.	60 days Prior to construction completion (operational phase)

Item No.	Action Item	Product / Deliverable	Anticipated Completion Date
1.8	Establish and implement an ESHS organizational structure with: i) specific personnel with clear lines of responsibility and authority to implement the ESMP; and ii) Assign an ESHS professional to manage or coordinate the ESHS area.	1. ESHS Organizational structure for the project Construction and Operational phases. 2. ESHS Manager or Coordinator contract or assignment	30 days Prior to start construction phase.
1.9	Ensure that E&S personnel possess the knowledge, skills, experience, and resources to implement the specific measures and actions required, to comply with national laws and applicable Performance Standards (IFC PS).	E&S personnel Training Matrix. Construction and Operational phases.	Prior to first Disbursement and thereafter in the Environmental and Social Compliance Report (ESCR)
1.10	Prepare a specific Emergency and Contingency Plan.	Emergency Response and Contingency Plan for the Project (construction and operation phases).	30 days Prior to start Construction and 60 days prior to construction completion (operational phase)
1.11	Establish a system for measuring and monitoring implementation of the ESMS and associated management plans consisting of (i) the key risks and impacts of the project on employees, communities and the natural environment; (ii) compliance with laws and regulations; and (iii) progress in implementation of the management programs. The Company should establish, track and measure key indicators.	Environmental and Social Monitoring Program. Construction and Operational phases.	Prior to First Disbursement and thereafter in the ESCR
<b>PS 2: Labor and Working Conditions</b>			
2.1	Prepare site specific OHS programs, including specific procedures detailing activities for each of the significant risks identified, including for contractors and sub-contractors.	Occupational Health and Safety (OHS) Management Plan. Construction and Operational phases.	Prior to First Disbursement (Construction) and 30 days prior to construction completion (operational phase)
2.2	Prepare and adopt OHS requirements for Contractors and subcontractors for the construction phase.	OHS requirements for Contractors and subcontractors for the construction phase.	30 days Prior to start construction phase.
2.3	Prepare and adopt internal grievance mechanism for the Project that include contractors and subcontractors.	Internal Grievance mechanism	Prior to first Disbursement and thereafter in the Environmental and Social Compliance Report (ESCR)
2.4	As part of this OHS program, prepare and adopt training a worker training program in risk prevention in accordance with their category and functions.	OHS Training programs for construction and operational phases.	Prior to First Disbursement (Construction) and 60 days prior to construction completion (operational phase)
2.5	Include contract provisions to ensure that contractors meet the OHS requirements of the Company and minimize risk and liability to the Project.	Contract provisions.	Prior to First Disbursement (Construction) and 60 days prior to construction completion (operational phase)

Item No.	Action Item	Product / Deliverable	Anticipated Completion Date
2.6	Identify the potential EHS/OHS risks relating to suppliers, and potential impacts associated with the supply chain, and prioritize suppliers by levels of risk in the Project.	Evaluation procedure for Contractors and suppliers.	Prior to First Disbursement and thereafter in the ESCR
<b>PS 3: Resource Efficiency and Pollution Prevention</b>			
3.1	Develop a Project specific resource use efficiency strategy by establishing objectives and goals for conserving raw materials, water, and energy consumption, and waste generation.	Resource use efficiency Program including: i) Baseline consumption data and ii) Key Performance Indicators (KPI). Construction and Operational phases.	Prior to First Disbursement and thereafter in the ESCR
3.2	Update the Environmental and Social Management Plan (ESMP) for the Project using the corporate environmental strategies, MIA and World Bank EHS Guidelines as reference.	ESMP updated including: i) Hazardous materials management plan; ii) Waste and hazardous waste management plans; and iii) Solar Panel Disposal Plan	Prior to First Disbursement (Construction) and 60 days prior to construction completion (operational phase)
3.3	Create a site specific Environmental and Social Monitoring Program using as a reference the MIA's monitoring actions, ESMP and World Bank EHS Guidelines. The frequency with which each aspect is monitored should be appropriate to the nature, scale, and variability of potential impacts.	Environmental and Social Monitoring Program. Construction and Operational phases.	Prior to First Disbursement (Construction) and 60 days prior to construction completion (operational phase)
<b>PS 4: Community Health, Safety, and Security</b>			
4.1	Conduct a comprehensive identification and assessment of all possible risks and impacts on community health and safety during the Project life-cycle associated with all project activities and establish preventive and control measures within a community health and safety plan including Hazardous Materials Management and potential exposure to disease.	Community Health and Safety Plan with stakeholders. Construction phases.	30 days Prior to start of construction.
4.2	Produce and adopt a transport management and safety plan.	Traffic safety and management Plan.	30 days Prior to start of construction.
4.3	Develop a comprehensive Emergency Response Plan that takes into account the types of incidents most likely to occur locally and in relation to the project (fire/flooding, project related traffic accidents, impacts on water quality, disease etc), and the ability of the local emergency services to respond.	Emergency response Plan with disclosure to stakeholders. Construction	30 days Prior to construction and thereafter in the Environmental and Social Compliance Report (ESCR)
4.4	Prepare an Integrated Security Management Plan, including risk and impact identification, taking into account the political, economic, legal, military, and social issues relevant to the Project.	Integrated Security Management Plan. Construction and Operational phases.	Prior to First Disbursement (Construction) and 60 days prior to construction completion (operational phase)
<b>PS 5: Land Acquisition and Involuntary Resettlement</b>			
5.2	Adjust project designs to avoid or minimize physical and/or economic displacement, paying particular attention to impacts on the poor and vulnerable.	Adjusted project designs	60 days Prior to start construction phase
5.1	Provide an land acquisition plan that includes: i) Current legal land status; ii) Description of the process of negotiation and compensation for land use, and iii) Analysis of assets and impacted livelihoods, by area	Land acquisition plan	60 days Prior to start construction phase

Item No.	Action Item	Product / Deliverable	Anticipated Completion Date
5.3	Develop a compensation framework in response to potential impacts such as involuntary restrictions on land use and access to natural resources for all Project areas.	Compensation framework	30 days Prior to start construction phase
5.4	Develop and implement: i) A compensation plan based on a specific assessment of the potentially affected people eligible to be compensated; and ii) A resettlement action plan (RAP), focused on cases of physical and economic displacement identified, including a census of affected people, socio economic characterization, asset survey, specific social baseline, compensation procedure, livelihoods restoration process and monitoring.	1. Compensation Plan (if applicable) 2. RAP (if applicable)	30 days Prior to start construction phase and thereafter in the Environmental and Social Compliance Report (ESCR)
<b>PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources</b>			
6.1	Update a biodiversity (flora and fauna) baseline to include: i) Areas intersected by the transmission line; ii) access roads and any other associated facility in line with PS1 definition of the Project Area of Influence (AoI).	Updated biodiversity baseline	60 days Prior to start construction phase
6.2	Produce a critical habitat identification map.	Critical habitat map (if applicable).	30 days Prior to start construction phase
6.3	Update a biodiversity impact assessment, including: i) Definition of extent of the vegetated natural area to be cleared (offset area) and lists of protected (flora) species to be re-planted; ii) Definition of the buffer area needed to compensate for impacts on vegetation and natural habitats based on the new baseline and impact assessment results and ii) a fauna rescue plan	1. Biodiversity impact assessment 2. Buffer area and Reforestation and plan 3. Fauna Rescue plan	30 days Prior to start construction phase and thereafter in the Environmental and Social Compliance Report (ESCR)
6.4	Present a purchase agreement for the buffer area	Buffer area purchase agreement	Prior to first disbursement
6.5	Develop a standalone Biodiversity Management Plan (BMP) to including: i) mitigation measures and ii) monitoring activities.	BMP	Prior to first disbursement and thereafter in the Environmental and Social Compliance Report (ESCR)
<b>PS 8: Cultural Heritage</b>			
8.1	Present Project design alternatives to avoid impact on the archaeological interest site (La Fortuna)	Design of alternatives	60 days Prior to start of construction
8.2	Develop a Cultural Heritage Management Plan and a site-specific Chance Finds Procedure.	1. Cultural Heritage Management Plan 2. Chance Finds Procedure and associated worker training.	Prior to first Disbursement and thereafter in the Environmental and Social Compliance Report (ESCR)