

## Environmental and Social Data Sheet

### Overview

Project Name:	NIGELEC EXPANSION DE L'ACCES À L'ELECTRICITE
Project Number:	2018-0342
Country:	Niger
Project Description:	Multi-component investment programme aimed at increasing and improving access to electricity in Niger by expanding, reinforcing and rehabilitating the transmission and distribution networks throughout the Country.
EIA required:	yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	yes

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

### Environmental and Social Assessment

The Project comprises multiple schemes that will be co-financed by the WB and the EIB on a parallel basis. Although coordination will be ensured among co-financiers, EIB and WB will retain the responsibility to monitor the environmental and social impacts of their respective investments under the Project.

The Project comprises two main components:

Component 1 involves the upgrading and reinforcement of the transmission system in the West Zone that includes the capital Niamey and the regions Dosso and Tillabery. This component comprises the following reinforcements of the transmission system of Niamey:

- Installation of the second 132 kV circuit of the existing 9 km long line between Gorou Banda and Rive Droite and replacement of the existing 66 kV, 8.8 km long line between Rive Droite and Goudel with a double circuit, 132 kV line with tubular pylons that will enable to use of the existing rights-of-way.
- Upgrade to 132 kV of the existing 66 kV, Goudel-Niamey II-Niamey Nord, including associated substation works. To this purpose, the existing lattice towers will be replaced with tubular pylons that will enable to use the existing rights-of-way. This scheme includes the construction of a new 132/20 kV substation at Rive Droite.
- Construction of a new 12 km long overhead line designed for 132 kV between Goudel and Bangoula, construction of a new 132/20 kV substation at Bangoula and installation of a 132/20 kV, 50 MVA transformer in Goudel. The line Goudel-Bangoula will replace the first section of an existing 66 kV line connecting Goudel to Tillabery.
- Construction of a new 132 kV, 12 km long underground cable between Niamey II and Niamey Centre Ville and construction of a new 132/20 kV GIS substation in Niamey Centre Ville.

<sup>1</sup> Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB draft Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO<sub>2</sub>e/year absolute (gross) or 20,000 tonnes CO<sub>2</sub>e/year relative (net) – both increases and savings.

Luxembourg, 13/06/2019

Component 1 also includes the construction of a new 132 kV, 85 km long overhead line Dosso-Balleyara and of a new 132/33 kV substation at Balleyara.

Component 2 involves the extension and reinforcement of the MV and LV distribution networks in Niamey and seven regional cities (Agadez, Diffa, Dosso, Maradi, Tahoua, Tillabery, Zinder) and the electrification of circa 95 rural localities, including the connection of 100,000 households. This component also comprises the construction of a distribution control center in Niamey.

### **Environmental Assessment**

If located in the EU, the transmission facilities under Component 1 would fall under Annex II of the EIA Directive, thus implying a review by the competent authorities with due regard to the necessity for an Environmental Impact Assessment. The distribution facilities under Component 2 instead would fall under neither Annex I nor Annex II of the EIA Directive but could be subject to environmental analyses, as appropriate, in the process for the authorization to build and operate.

Two ESIA's have been prepared for addressing and mitigating the environmental impacts of the two transmission projects under Component 1 (new overhead line Dosso-Balleyara and the reinforcement of the transmission system of Niamey). The procedure is underway to obtain the environmental and social certificate of these projects by the competent authority "Bureau d'Évaluation Environnementale et des Études d'Impact" (BEEEI). The projects have the potential for some adverse environmental impacts among which the most significant are the destruction of vegetation cover and the perturbation/contamination of occasional water streams generated by rainfall (known as koris) during construction and the electrocution and collision of birds during operation. The measures that will be implemented in order to mitigate the destruction of the vegetation cover include the inventory of trees that could be affected by the works, the payment of the felling tax, the restriction of the construction site activities, e.g. vehicle movements and storage of materials, within the right of way of the lines and compensatory plantations. It is expected that the line Dosso-Balleyara will cross circa 80 koris. The impacts will be mitigated by implementing good construction practices (e.g. establishment and periodical cleaning of a drainage system around the construction site) and, when possible, by carrying out the works during the dry season. Finally, visual warning system consisting of white or red spirals will be installed, as appropriate, on the ground wires of the lines to prevent collision of birds. It must be noted that there is no evidence that critically endangered, endangered or vulnerable birds species are present in the projects area.

An Environmental and Social Management Framework (ESMF) has been prepared for the extensions of the MV-LV network under Component 2, given that the exact locations and routes thereof were unknown at the planning stage. The ESMF provides the framework for the environmental classification of the different sub-projects and the assessment/mitigation of the resulting impacts. The competent authority BEEEI will validate the environmental classification of the sub-projects and will provide the environmental and social certificate when ESIA's are deemed necessary.

### **EIB Carbon Footprint Exercise**

The source of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) emissions for the Project is the ohmic losses of the network resulting from the increase in demand enabled by the Project. At Project completion the corresponding both absolute and relative emissions are estimated at 55.8 kt CO<sub>2</sub>e per year.

### **Social Assessment**

The Project is expected to affect positively the beneficiary communities by enabling access to and improving quality of the electricity service. This will improve the living conditions for the

Luxembourg, 13/06/2019

beneficiaries in various ways such as increased income-generating activities, less indoor air pollution, lower risk of fires, reduced violence against women and greater security from street lighting, and better educational performance by children who can read and study for longer periods of time. The project has however also the potential for some adverse social impacts described here below.

#### Involuntary resettlement

Project activities will result in loss of assets, relocation or obstruction of small business.

A Resettlement Action Plan (RAP) has been prepared for the reinforcements of the transmission system of Niamey. Based on a census that took place from 3 to 16 January 2018, this project will involve the resettlement of 207 PAP (170 for the schemes financed by the WB and 37 for the schemes financed by the EIB). The census covered all households and all individuals who will have to resettle permanently or temporarily and/or lose some of their land, whether owned or rented. Under the RAP, the right to compensation is extended to informal occupants and the compensation scheme includes special accompanying measures for vulnerable people (disabled, female heads of household, widows, etc.) and indemnities for temporary loss of income for small businesses. All compensations shall be paid before the start of construction works, namely before the affected persons lose possession of their property and have to move.

For the line Dosso-Balleyara a RAP will be prepared once the detailed design is completed to allow the precise identification of land affected by the footprint of pylons. A Resettlement Policy Framework (RPF) has instead been prepared for the extensions of the MV-LV network under Component 2. The document presents the general principles that guide all resettlement operations under Component 2. If a particular sub-projects component requires resettlement operations, the promoter together with the city concerned will develop a Resettlement Action Plan (RAP).

#### Occupational and Community Health and Safety

The project could lead to increased prevalence of sexually transmitted infections and gender-based violence due to foreign workers at construction sites. To prevent and address the potential social risks related to the labour influx, codes of conduct on child protection and Gender-based Violence (GBV) will be integrated in the bidding documents and in the contracts of all employees, contractors, and consultants contributing to the implementation of the Project.

In rural areas in particular, the promoter will conduct public awareness campaigns on the dangers of electrocution around electrical installations.

Considering the data available from technical literature, at the boundary of the 25-meter wide right-of-way the EMF generated by the 132 kV transmission lines of the project are expected to be far below the limits of exposure set out in the 1998 ICNIRP Guidelines.

#### Labour standards

Conditions related to labour rights, working conditions, including security arrangements, and workers' accommodation in line with EIB's standards will be integrated in bidding documents and in the contracts for the implementation of the projects.

### **Public Consultation and Stakeholder Engagement**

The Environmental and Social Impact Assessment (ESIA), Environmental and Social Framework (ESMF), Resettlement Action Plan (RAP) and Resettlement Policy Framework (RPF) for the project have undergone stakeholder consultations involving community representatives, the affected local populations and NGOs. The Project meets the favour of the affected population on the condition that all compensations to PAPs will be paid before the start of construction works, as indicated in the RAP and in the RPF, and with the expectation that promotional electrification campaigns will be carried out in the neighbourhoods and the

Luxembourg, 13/06/2019

villages affected by the Project. In line with this, 10 rural villages located along the route of the line Dosso-Balleyara will be electrified under Component 2.

## **Other Environmental and Social Aspects**

### Gender

Cultural norms in Niger restrict women's mobility, their participation in the public sphere, and their access to public information, which accentuate their inequality and disadvantage in relation to men. Together with very low literacy rates, these restrictions may keep poor women, female household heads (who constitute 16 percent of all household heads in Niger) and female entrepreneurs from learning about the possibility of getting an electricity connection or successfully applying for and obtaining a connection. The Project will adopt gender-targeted actions such as a) designing information campaigns targeted to reach female household heads and SME entrepreneurs with limited access to information and to stimulate their demand for a connection and b) ensuring that female and male clients are treated equally in the connection application process. Trainings and TA will be funded under the project in order to strengthen the Promoter's capacity to recognize and address gender gaps, to deal with female as well as male customers, and to monitor progress and results of gender activities.

## **Conclusions and Recommendations**

Based on the information available, and with appropriate conditionalities (see below) and monitoring, the Project is expected to be acceptable in environmental and social terms for Bank financing.

The following disbursement conditions will apply:

### All sub-projects

- Conditions related to labour rights, working conditions, including security arrangements, and workers' accommodation in line with EIB's standards will have to be integrated in the bidding documents and in the contracts for the implementation of the sub-projects financed by the Bank.

### Reinforcements of the transmission system of Niamey

- Delivery to the Bank of the environmental and social certificate issued by the competent authority BEEEI;

### Line Dosso-Balleyara

- Preparation of the RAP for the project satisfactory to the Bank.
- Delivery to the Bank of the environmental and social certificate issued by the competent authority BEEEI;

### Distribution networks in the cities of Niamey and Dosso, rural electrification in Niamey, Dosso and Tillabery:

- Delivery to the Bank of the environmental and social classification of the various sub-projects validated by the competent authority BEEEI;
- When relevant, preparation of the appropriate environmental and social assessments documents and/or RAP satisfactory to the Bank;
- Delivery to the Bank of the environmental and social certificate issued by the competent authority BEEEI for the sub-projects requiring an ESIA and/or a RAP.