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Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 02-Nov-2017 | Report No: PIDISDSC21926

Public Disclosure Authorized

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Benin	P162599		Benin Digital Solutions for Sustainable Development (P162599)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
AFRICA	Dec 11, 2017	Feb 12, 2018	Transport & ICT
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Republic of Benin	Ministère de l'Economie Numérique et de la Poste	

Proposed Development Objective(s)

To improve access to affordable broadband in rural communities and leverage e-services to improve supply-chain efficiency and access to markets.

Financing (in USD Million)

Financing Source	Amount
FRANCE: French Agency for Development	26.60
International Development Association (IDA)	30.00
Total Project Cost	**56.60**

Environmental Assessment Category	Concept Review Decision
B-Partial Assessment	Track II-The review did authorize the preparation to continue

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Other Decision (as needed)

B. Introduction and Context

Country Context

1. **Benin is a low-income economy which has made significant progress economically and politically over the last 25 years –** With a population of 10.9m, the Gross National Income per capita (Atlas method) was US$ 8,40 in 2015, which is around half the Sub-Saharan Africa (SSA) regional average (US$ 1,637). 52% of its population lives in urban areas, and the population and the economy are mostly concentrated on the southern parts of the country, near to the sea and the biggest cities of Cotonou – the economic capital – and Porto-Novo – the political capital. Benin is considered a low human development country and is 166th out of 188 countries considering its Human Development Index. Economic growth, though slightly improving since 2011, has remained too low to achieve meaningful poverty reduction and Benin has maintained its ranking as one of the least developed countries in the world. The significant population growth rate during the past years and the low and non-inclusive pattern of growth have hindered the country's efforts to curb persistent poverty. Benin is unlikely to have met most of the Millenium Development Goals (MDGs) by 2015, including targets on universal primary education, gender equality, child mortality, maternal health and global partnership for development.

2. **The economy of Benin remains dependent on subsistence agriculture, cotton production, and regional trade –** The country's recent enhanced growth performance has been supported by the Port of Cotonou, a vital regional trade hub. Benin also benefits from strong cotton and non-cotton agricultural production. However, agricultural growth has been mostly driven by the expansion of cultivated land rather than by increased productivity. The low productivity is mainly explained by: (i) credit constraints; and (ii) high degree of informality which often results in low wages, limited job security and a high degree of economic uncertainty.

3. **The widening urban/rural gap hinders the achievement of shared prosperity and poverty elimination –** In 2015, the poverty rate was estimated at 40% – up from 36% in 2011, with important disparities between urban areas (36%) and rural areas (44%). Like many developing countries, Benin faces both challenges of reduction of poverty and inequalities, among others between rural and urban communities. Rural communities are more vulnerable to climate and environmental disasters. As illustration, in 2011 in the four departments which were the main victims of 2010 floods (Couffo, Collines, Mono and Zou), there was an increase of the poverty rates between 2009 and 2011 to alarming levels, at least 5% above the national average of 36%. Moreover, rural population suffer from inadequate infrastructures: only 15% of the rural population has access to electricity compared to 68% of the urban population; 72% of the rural population has access to potable water compared to 85% for urban population.

4. **Development progress in the country has been frustrated by governance issues –** Benin has made significant progress in consolidating its political transformation to a multiparty democracy since the 1990's. Political alternation has occurred without incident and the effective separation of powers has enabled both parliament and the judiciary to act as a check on executive powers. However, recent corruption scandals have affected the relationship between the country and the international community. In 2015, the Netherlands announced that it would suspend its bilateral aid to Benin, after a previous audit showed that US$4.4m in funds for Benin's Water and Sanitation Support Program had disappeared. A forensic audit jointly commissioned by Benin and the Netherlands concluded that at least US$13.5 million in public funds have been misappropriated in recent years. To tackle the issue, the European Commission announced in December 2016 that it will provide a package of financial support worth US$ 200 million, with a first financing agreement consisting of a Good Governance and Development Contract (GGDC) for US$ 125 million aimed at direct budgetary support over the next five years. The project also intends to improve financial governance, fight corruption and strengthen legal protections for business investments. This funding will provide an opportunity for the Government to deliver on its promise to institute good governance initiatives and strengthen the judiciary.

5. **The government has launched new investment initiatives to boost growth –** The government has started discussions on a new IMF program and a deal is expected by end 2017; the authorities will likely focus on strengthening public financial management and domestic revenue mobilization, for example through comprehensive tax administration and customs management reforms. Furthermore, the authorities will focus on large public investment projects aimed at strengthening the country's infrastructure. However, execution of these projects may be hindered both by administrative constraints and by difficulties in securing enough financing to match their ambitious program. The government will rely heavily on foreign donors and private investors to support these investment plans. Yet bureaucratic inefficiencies and infrastructure gaps will remain a deterrent for many investors. The difficulty in attracting private investors, coupled with limited fiscal space for public capital spending, will slow down progress on infrastructure improvements. The government also plans to increase the efficiency of public investment and state-owned enterprises, improve production capacity in the agriculture sector, develop the tourism sector and ensure access to water and electricity. However, financial constraints, a fragmented legislature and weak underlying administration capacities mean that progress on reforms and controversial restructurings will continue to be sluggish.

Sectoral and Institutional Context

B.1 Rural economy and rural agriculture sectoral and institutional context

6. **The economy of Benin is mainly based on agriculture, and regional trade supported by the Port of Cotonou, a vital regional trade hub.** Agriculture , which is the most important sector in term of contribution to national GDP (36% of GDP) provides 70% of the country's employment, and 75 to 90% of official exports . Most of the farms are very small to medium size family properties. Their number was estimated to about 550,000 in 2011, and their average area at 1.7ha.
7. **Agricultural growth is typically around 3% annually, often offset by the relatively high population growth (3 percent).** Cotton is the primary export commodity with 44% of official exports in 2014 , followed by the fruits (except nuts) which represent 19% of national export, or an equivalent of 43,705.8 million FCFA. Cotton production and transformation have faced many challenges which undermine its profitability during the last years. They represented 3.5% of national GDP between 2006 and 2011. Other agricultural related activities represented 32% of the national GDP in 2011 of which 47.5% was due to food crop agriculture, 18.2% to food craft and 12.5% to animal husbandry and hunting. According to IFAD , “artisanal fishing provides direct employment for 50,000 fishers and 20,000 wholesale fish merchants, mainly women, most of them operating in continental fishing. The subsector’s contribution to GDP is estimated at 3%. Stagnating fish production is attributable to degraded ecosystems, exacerbated by the widespread use of ill-advised techniques.”
8. **Rural economy, and especially rural agriculture, suffers from five gaps crippling economic productivity and related to: (i) Enabling environment; (ii) Access to land; (iii) Access to finance; (iv) Skills and technology; (v) Physical capital –** Poor performance in agriculture undermines shared prosperity and poverty elimination, with five major gaps hindering the development of the rural agriculture sector:
    a. **Gap #1: Lack of accurate data and enabling environment gap –** The agriculture sector suffers from the absence of a policy and certification norms and process. The Benin financial system is in general disinclined to take risks by making loan to entrepreneurs. This hampers the investments and development of private sector in general, and of agriculture in particular. The sector is also impacted by a high degree of informality which often results in low wages, limited job security and a high degree of economic uncertainty. Stakeholders of the sector also

report a difficult access to relevant and accurate information. This manifests in: (i) A gap in the access to knowledge, as most producers ignore how to master water, adapt to climate change effects, and produce good quality inputs. The high level of illiteracy and the decrease of the number of agricultural counsellors impact the ability of the farmer to learn and apply the best methods to increase production efficiently, safely and in sustainable way. (ii) A gap in the access to information on goods, as stakeholders report an insufficient and unreliable information flow on the availability of seeds, tools, crops, and other inputs and harvest, which leads to massive loss of time, and money.

b. **Gap #2 – Access to land gap –** There is a lot of tenure problems and land insecurity because of the coexistence of two land law regimes: the traditional (more used) and the modern. This leads to many problems including the non-respect of the environment, in particular the natural water beds for land acquisition, an increasing partition of the lands preventing the development of big agriculture exploitations, and the hoarding of big superficies not used. As a result, only a low proportion of less than 20% (2007) of agricultural area available are really cultivated. A new land regime, the Plan foncier rural (PFR) was introduced in 2007 to solve this problem. Besides, there is the diminution of the fertility of the lands because of the use of inadequate farming techniques.
c. **Gap #3 – Access to finance –** Access to sources of finance are limited because there are important barriers to access credits for the farmers. The lend requirements set by the finance institutions are so high that they cannot been met by most of the farmers. In addition, the insecurity of land tenure increases these barriers, as the lands can hardly been used as guarantees. Moreover, interest rates dictated by the finance institution for crop year credits are exorbitant (24% for CLCAM for example). Specific insurance and retreat policies have recently been introduced to reduce farmers' vulnerability to environmental shocks, but they are reluctant to adopt them.
d. **Gap #4 – Skills and technology gap –** There is also the problem of availability of good quality and adequate agriculture inputs and fertilizers for cultures other than cotton. Because of difficult access to finance, investment in production machinery is problematic for producers. In addition, the lightweight taxation texts on importation of agriculture materials are not applied at the border, discouraging the investment in technology.
e. **Gap #5 – Physical capital gap –** Farmers cannot sell their products easily due to a lack of adequate transport infrastructure and market facilities. The bad states of roads and of transport infrastructure in general, especially during the rain period, the lack of appropriate storerooms and markets are other major obstacles to the sale of crops. In addition, due to the size of the country and of its population, the national market is relatively small.

B.2 Digital economy sectoral and institutional context

9. **In Benin, the overall sector strategy and development falls under the responsibility of Ministry of Digital Economy and Communication *(Ministère de l'Economie Numérique et de la Communication* MENC).** As part of the restructuration of the sector, a new body of law on electronic Communications and Post (No. 2014-14) was adopted on 9 July 2014 and three major public players were born or consolidated during the last three years:

   a. The *Authority for Regulation of Electronic Communications and Post* (ARCEP), an autonomous regulatory body, became permanent on 9 October 2014.
   b. The *Beninese Agency of Universal Service of Electronic communications and Post* (ABSU-CEP), in charge of managing the universal service fund of electronic communication and post, fed by the operators, was established on 30 December 2013.
   c. The *Beninese Agency of ICT* (ABETIC), implemented via Decree No. 2013-554 of 30 December 2013, is in charge of all government ICT project.

10. **The Benin telecommunication market has shown a noticeable growth in the last years.** It generated 257.7 billion of CFA (US$440 million), which is 6% of the country GDP in 2014 from 1.4% in 2005. The part of revenue invested also grew from 35% in 2005 to 40.5%, which represents 60.6 billion of CFA (US$ 10 million) in 2014. Based on

international indicators the ICT sector in Benin remains one of the least performing compared to other countries in the world. Several organizations ranking the ICT situation with different criteria (ICT connectivity and affordability, digital literacy, e-Government, e-Commerce) highlight the relatively poor global ranking of Benin, which is also ranked in the second half among Sub-Sahara African (SSA) countries.

Table 1: ICT Ranking of Cote d'Ivoire, Benin and Guinea by international institutions

11. **The ICT sector in Benin produced mixed outcomes –** Mobile voice performs well but prices remain high. While mobile broadband is growing steadily, the fixed broadband remains in its infancy:
    a. **Mobile standard service (voice and SMS) penetration –** There were more than nine million of active SIM in Benin on September 2015 (ARCEP, June 2015) for a population of around 10.3 millions of people (INSAE, 2015), that is a mobile penetration rate of 85%, compared to 77% for Sub-Saharan Africa. This could be explained by a multi SIM ownership phenomenon (about 1.86 SIM per subscriber according to GSMA Intelligence, 2015). The number of unique subscribers is estimated to about 4.9 million, that is a unique subscribers' penetration rate of 44.61% (GSMA, 2015). Moreover, the regulator changed the methodology of counting the subscribers in 2015, by considering only active SIM.
    b. **Fixed broadband penetration –** Contrarily to the mobile market, fixed broadband penetration remains is in its infancy with 46 947 subscribers and 0.45% of penetration rate because of the many barriers to access: First, as in most African countries, the fixed phone penetration is very low at 1.89. In addition, the subscribers are mainly enterprises and public institutions, of which less than third are connected by copper wireline. The rest are connected through wireless technology (CDMA). Therefore, the broadband Internet remains a service used by industry, government, and a few privileged households, far below the regional average of 4.6%.
    c. **Mobile broadband service penetration –** Despite a prominent growth of more than 600% in five years, the mobile internet penetration, which represent 97.88% of total internet (fixed and mobile) market, was only 12.09% at the third quarter of 2015.
    d. **ICT Retail Prices –** ICT are expensive in Benin. The mobile cellular sub-basket was 13.8 $US/month against a sub-Saharan average of 11.7$US/month, while the broadband sub-basket was 50.6 $US/month against 44.9$US/month. Despite the installation of an IXP and the reduction of the cost of international capacity due to the landing of a second submarine cable and the restructuration of historical operators, the price of internet service to the end users remains high and unaffordable for most Beninese

Relationship to CPF

12. **The proposed project is designed to contribute to the World Bank Group's twin goals of ending extreme poverty and boosting shared prosperity –** The project will help the country achieve the twin objectives through promoting agricultural growth which is inclusive of smallholder farmers. The proposed project is consistent with the Bank's CPF (FY13-FY17), and especially with 'Pillar I: Increasing Sustainable Growth, Competitiveness and Employment' which comprises four objectives that the project will directly or indirectly support.
13. **The project will directly contribute to three objectives of the CPF regarding infrastructure, agriculture, and business climate – (i)** The project will contribute to 'Objective #1: Increase access to and quality of infrastructure services'. By extending ICT connectivity in rural areas, the project will directly enhance digital infrastructure and provide workarounds to inadequate logistics services. This will positively impact rural agriculture and economy by enabling easier access to consumer markets at competitive costs. **(ii)** The project will also contribute to 'Objective #2: Improved Agriculture Productivity and Diversification and sustainable management of natural resources'.

Unpredictable weather patterns, unreliable pricing information and crop failure due to diseases are a few of the issues that digital services could tackle in Benin. The project will directly support the objective of improving productivity by promoting digital solutions that will: (a) empower smallholder farmers to access information and markets, leading to increase in productivity and sales, and reduction in post-harvest loss; and (b) enable public institutions to collect and gather agricultural and rural statistics to drive public policy and strategy. **(iii)** Finally, the project will contribute to 'Objective #3: Develop High Potential Value Chains and Improve Business Climate/Public Private Partnerships'. By extending the reach of ICT connectivity and facilitating the digitization of economic transactions, the project will support both: (a) the increase in mobile banking usage; and (b) the ability for smallholders to get a credit with traditional banks thanks to a track record on which their financial performance can be assessed. The project will also facilitate the development of ICT platforms to provide cheap and reliable tools to register land and deliver land certificates. Enhancing the registering process of land is fundamental to improve land security and support informed land transactions for both smallholders and private investors, and are a prerequisite for shared growth.

C. Proposed Development Objective(s)

Note to Task Teams: The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet.

To improve access to affordable broadband in rural communities and leverage e-services to improve supply-chain efficiency and access to markets.

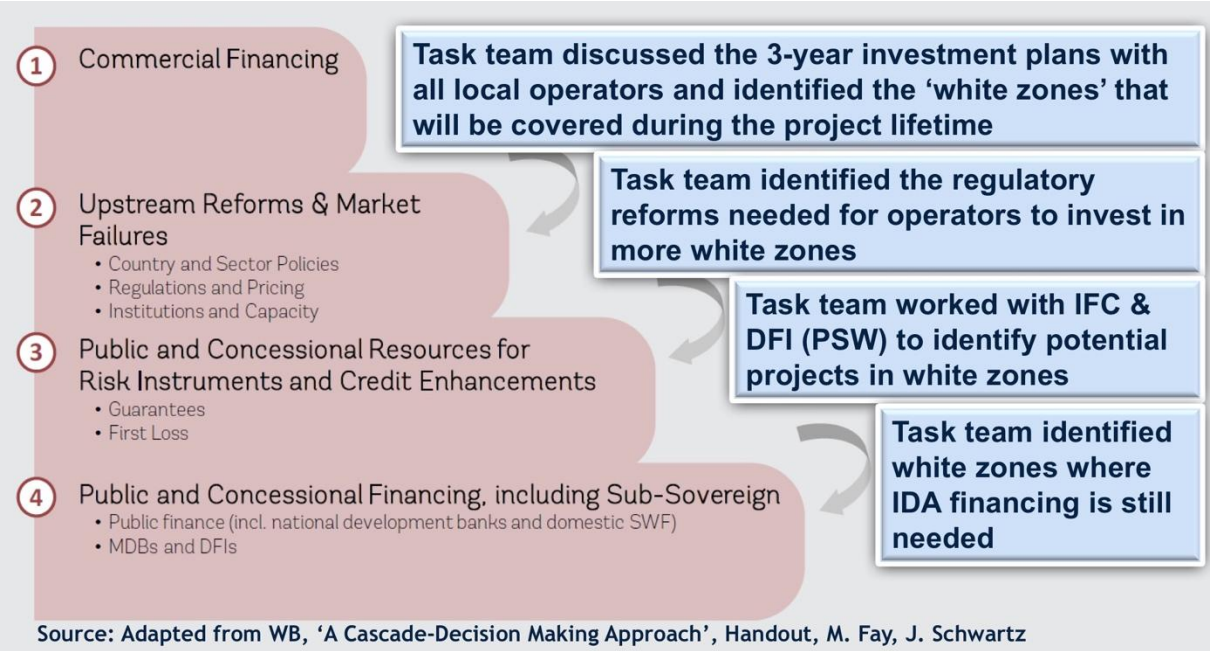
Key Results (From PCN)

D. Concept Description

14. To achieve the Project Development Objectives, the proposed project follows an integrated transformational solutions approach with three components:
    a. **Component #1 ICT Infrastructure –** Extending the coverage of ICT services in rural areas, and thereby improving the number of individuals, public administrations, and businesses that will be able to access both mobile services (voice and SMS) and the internet to improve productivity;
    b. **Component #2 Digital services for rural development –** Stimulating the development of digital services for rural development (with an emphasis on e-Agriculture), improving public service delivery in rural areas, and encouraging development of local content, applications, and services, through the setting up of electronic platforms and the creation of business incubators;
    c. **Component #3 Project implementation –** Project management, coordination, monitoring, and evaluation.
15. **Component 1 ICT Infrastructure –** Component 1 will contribute to achieving the PDO by increasing coverage of ICT services in rural areas. The task team has initiated a Cascade Approach (Figure 1) and has established a set of criteria (cf. below §**Error! Reference source not found.**) for the identification of target areas (where the infrastructure needs to be deployed) and project design (how can the project support the deployment).

- For target areas, workshops with public stakeholders and private operators led to the identification of geographic "white areas" in which the supply of ICT connectivity is nonexistent *and* may not be reached under pure market terms because the inherent profitability of investment is too low ("market failure").
- For project design, Component 1 will first focus on improving the legal and regulatory framework to address the market failure and bring about positive incentives for additional infrastructure roll-out. Yet, this alone will not be sufficient to solve the lack of ICT connectivity in rural areas and reach an envisaged level of supply. Therefore, Component 1 will also provide financial support to overcome the lack of ICT connectivity if there is no alternative. Financial support will first come IFC involvement, and second from Public-Private Partnership (PPP) model combining private investments and public funds. Depending on the targeted region and community, the PPP model will be adjusted.

Figure 1: Cascade-Decision Making Approach used by the team to structure Component 1



Source: Adapted from WB, 'A Cascade-Decision Making Approach', Handout, M. Fay, J. Schwartz

a. **Sub-Component 1.1 –** Help improve the institutional and regulatory environment to address market failure wherever possible. This subcomponent will fund legal review of the current environment and identify bottlenecks that hamper private investment (stage 2 of the Cascade Approach)

b. **Sub-Component 1.2 –** In areas where public funding is not immediately needed, IFC may envisage to partner with potential investors, using the new Private Sector Window (PSW) IDA Facility to go beyond its standard market/risks frameworks (stage 3 of the Cascade Approach). Although IFC involvement in the proposed project is not guaranteed, a joint World Bank/IFC team holds regular meetings with the client to determine the best approach. In areas where public subsidy is needed (stage 4 of the Cascade Approach), the project will implement a Public-Private Partnership (PPP) model combining private investments and public funds to subsidy a 'wholesale open access' broadband infrastructure. Public funds will be channeled – if relevant and possible – through the existing mechanisms established by the Beninese Agency of Universal Service of Electronic communications and Post (ABSU-CEP). When designing the PPP, the guiding principle is that public intervention should limit as much as possible the risk of crowding out or replacing

private investments, of altering commercial investment incentives, and ultimately of distorting competition (cf. §**Error! Reference source not found.** for more details).

16. **Component #2 Digital services for rural development –** Component #2 will contribute to achieving the PDO with two sub-components:

    a. **Sub-component 2.1** – Help improve the performance of the rural development public institutions in Benin in gathering relevant, detailed, and recent data to monitor the rural economy and assist in shaping public policy;

    b. **Sub-component 2.2** –Provide digital solutions to smallholders for selected crops that will increase crop yields, increase volumes of sales, reduce post-harvest loss, and improve market linkages. To that effect, a comprehensive program of activities will be implemented under this component that will be geared at: (i) improving the outreach and quality of crop extension and advisory services by strengthening the skills of public extension workers, promoting ICT in agricultural extension services, and supporting farmer-to-farmer extension; (ii) developing farmers' skills to scale-up the dissemination of Good Agricultural Practices (GAPs); and (iii) fostering the emergence of a digital innovation ecosystem aimed at providing local content, applications, and services for rural development through the creation and leveraging of e-Government platforms.

17. **Component #3 Project implementation –** This Component will support the setting up of a dedicated Project Implementation Unit (PIU) and will also cover training, office equipment, operating costs, audits and communications as well as Monitoring & Evaluation (M&E), environmental and social studies, their implementation and/or the monitoring of their implementation.

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SAFEGUARDS

A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Infrastructure financed by this project will be mainly targeting Northern regions of the country and exclusively rural areas:Vallée du Niger ; Alibori Sud -Borgou Nord-2KP ; Atacora Ouest ; Borgou Sud, Donga – Collines ; Zou-Couffo ; Plateau ; Ouémé-Atlantique, Mono

B. Borrower's Institutional Capacity for Safeguard Policies

The Beninese Environmental Agency which is involved in all projects around the country has capacities to assist the PIU in implementing safeguard policies requirements. In addition, a full assessment of both ministries implementing units will be carried out to ensure they have the appropriate capacity strengthening for fulfilling environmental and social requirements.

C. Environmental and Social Safeguards Specialists on the Team

Abdoul Wahabi Seini, Social Safeguards Specialist
Fatoumata Diallo, Social Safeguards Specialist

Abdoulaye Gadiere, Environmental Safeguards Specialist

D. Policies that might apply

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The component 1 aims at extending the coverage of ICT services in rural areas Among expected activities, there are the roll-out of infrastructure, the setting up of electronic platforms and business incubators. Some of these activities may affect environment. However, as the exact locations of those activities are unknown to date, an Environmental and Social Management Framework (ESMF) will be developed, reviewed, consulted upon and disclosed both within Benin and at the World Bank's Website prior to the Decision meeting.
Natural Habitats OP/BP 4.04	No	The project activities will not be implemented in areas hosting natural habitats.
Forests OP/BP 4.36	No	The project will not support activities related to forest exploitation or management or might have potential adverse impacts on forested areas.
Pest Management OP 4.09	No	The project does not involve pest management
Physical Cultural Resources OP/BP 4.11	Yes	Some activities related to civil works will unquestionably involve excavations with possibilities to discover Physical cultural resources. However, the triggering of this policy does not entail the preparation of a specific safeguard instrument. Only a specific chapter will be included in the ESMF with the aim of providing guidance for properly managing way in case physical cultural resources would be discovered.
Indigenous Peoples OP/BP 4.10	No	The Project location does not cover Indigenous Peoples as defined by the World bank.
Involuntary Resettlement OP/BP 4.12	Yes	The implementation of the poles, towers, or antenna and access rural roads investment expected in the project may lead to land acquisition. Therefore, a Resettlement Policy Framework (RPF) will be prepared for the activities triggered by the OP 4.12 as a due diligence given that the specific sites or impacts of envisioned physical investments are not known. The Resettlement Policy Framework (RPF) consistent with OP 4.12 will be prepared by the Borrower, reviewed and cleared by the team and disclosed by Appraisal.
Safety of Dams OP/BP 4.37	No	The project will not finance dams, not rely on dams

Projects on International Waterways OP/BP 7.50	No	The project is not expected to affect international waterways
Projects in Disputed Areas OP/BP 7.60	No	The project will not be located in a disputed area.

E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Sep 08, 2017

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

The following safeguard instruments are expected to be prepared during the preparation phase: i) an Environmental and Social Management Framework (ESMF) and, ii) a Resettlement Policy Framework (RPF). All these safeguard documents will be reviewed consulted upon and disclosed by the Government of the Republic of Benin, and at the World Bank's Website prior to the Decision Meeting.

CONTACT POINT

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APPROVAL

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