



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

Concept Stage | Date Prepared/Updated: 15-Oct-2018 | Report No: PIDISDSC24923



BASIC INFORMATION

A. Basic Project Data

| | | | |
|--|--|--------------------------------------|--|
| Country Niger | Project ID P167543 | Parent Project ID (if any) | Project Name Niger: Smart Villages for rural growth and digital inclusion (P167543) |
| Region AFRICA | Estimated Appraisal Date Feb 04, 2019 | Estimated Board Date Apr 01, 2019 | Practice Area (Lead) Digital Development |
| Financing Instrument Investment Project Financing | Borrower(s) Ministère des Finances | Implementing Agency ANSI | |

Proposed Development Objective(s)

The project aims at improving digital inclusion in rural areas, in order to bring transformative services based on digital technologies for selected social and economic sectors.

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

| | |
|---------------------------|-------|
| Total Project Cost | 35.00 |
| Total Financing | 35.00 |
| of which IBRD/IDA | 35.00 |
| Financing Gap | 0.00 |

DETAILS

World Bank Group Financing

| | |
|---|-------|
| International Development Association (IDA) | 35.00 |
| IDA Grant | 35.00 |

Environmental Assessment Category

Concept Review Decision



B - Partial Assessment

Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. Niger is a large, landlocked country in the arid Sahel region of West Africa. The majority of the country's territory is sparsely populated or uninhabitable desert with a low population density (12.4 inhabitants / km²) and a very low rate of urbanization (more than 81 percent of the population in Niger lives in rural areas). Niger's three principal challenges that inhibit the country's economic growth and constrain poverty reduction, according to the Systematic Country Diagnosis (SCD), are (i) a low rural productivity, caused in part by irrigation problems, lack of new technologies, lack of access to finance; (ii) insufficient human capital due, in particular, to inadequate skills and training and poor provision of public services, particularly in health; and (iii) weak governance in key sectors, such as agriculture and telecoms, caused by insecurity, lack of public service delivery and limited economic opportunities. To help the country overcome its challenges and enhance its economic GDP growth, the government of Niger has therefore developed a strategic vision, "NIGER 2.0", which defines the key pillars (work streams) for sustainable development based on the anticipated dividends of the digital economy. Niger expects to take full advantage of the digital revolution, which has the potential to transform all sectors of socio-economic life. Niger's ambition is to use ICT to modernize its economy, strengthen its growth, reinforce security, improve its governance and support efforts in key sectors: agriculture, access to financial services, health, education and youth entrepreneurship.
2. In its search for digital transformation, the Government of Niger, through the Ministry of Planning, requested the support of the World Bank Group in January 2018 for the financing of a project to implement the "Smart Villages" work stream of the National Strategy for Information and Communication Technologies 2017-2021.¹ The total cost of the project was estimated at eighty million US dollars (US \$80,000,000), with a pre-project preparation budget of some five million US dollars (US \$5,000,000). Subject to ongoing discussions between the World Bank and the Government of Niger around the Country Partnership Framework/Strategy, the amount that could be allocated for this project would be around US \$35 million under the IDA National envelope, with possible additional financing under the refugee sub-window. The funding gap could be covered from Niger's Universal Access Fund (*Fonds d'Accès Universel* FAU) and investment from the private sector.

Sectoral and Institutional Context

3. The development of ICTs is lagging in Niger and the country is one of the worst performers among all Sub-Saharan Africa Low-Income countries: fixed-line broadband is marginal, the total number of mobile SIM cards represent only 43 percent of the population, and the total number of broadband-enabled mobile SIM cards (i.e. 3G and 4G)

¹ Letter No93/MP/DGPD/DP/DCP, dating 23rd of January 2018



represent only 3 percent of the population. Several factors help explain the dismal performance of the ICT sector: a high share of the rural population (81 percent of the total population compared to 61 percent for SSA), a low access to electricity (only 5 percent of the rural population have access to electricity compared to 25 percent for SSA), a low coverage of the mobile networks (the 3G network covers only 32 percent of the Nigerien population compared to 59 percent for Africa, and 85 percent for the World), high mobile prices (a basket of mobile services represents 33 percent of Gross National Income per capita compared to 14 percent for Africa) and low international connectivity.

4. The limited mobile coverage is also one of the main factors limiting the uptake of mobile finance. The World Bank Global Financial Index estimated that 9 percent of the population aged at least 15 years own a mobile money account in 2017 compared to 24 percent in Mali. In addition to the low connectivity, the fact that the services are not well known due to inadequate financial education, low rate of digitalization of government agencies' payment systems and insufficient partnerships between financial institutions and mobile operators were main obstacles to mobile finance development. However, the large body of evidence of East African countries shows that the development of digital financial services starting with mobile payments, and including savings, insurance and credit, offers strong opportunities for economic growth.
5. With regards to the digital inclusion of women, there are strong socio-economic gender inequalities in Niger, and the socio-economic gender inequality also permeates in the ICT sector: in 2017, 62 percent of male own a mobile phone against 43 percent of female, the third most important relative gap for all SSA Low Income countries (after Ethiopia and Chad). The gender gap in device ownership is aggravated when it comes to the use of digital services: only 5 percent of women in Niger have a mobile money account against 12 percent of men. The digital inclusion of women can catalyze development by empowering them to pursue new professions, access critical government and private services, and become more informed citizens. However, regional and global research indicate a persistent gender gap in access to, and adoption and use of Information and Communication Technology (ICT) tools which could prevent them from reaping digital dividends - in turn hindering their economic as well as political empowerment.
6. Niger would need therefore a major quantitative leap forward in order to catch up the accumulated lag in the ICT and finance sectors and thus seize those opportunities for economic and social development offered by ICT, in particular for women, young people and refugees. The government hopes that its "NIGER 2.0" strategy will provide that boost, especially through the "Smart Villages" program, which will focus on the digital development of rural areas and contribute to achieving the sustainable development goals. In addition, the Smart Villages program intends to enhance social inclusion, to develop e-government services such as e-Agriculture, e-Health and e-Education, to reduce the gap in the use of ICTs between men and women, and finally to support financial inclusion through mobile money. This proposed project aims to support the Smart Villages program and promote the use of ICTs to compensate for the current shortcomings in terms of services and infrastructure and to address the specific challenges Niger faces to reach its development objectives.

Relationship to CPF

7. The proposed project fully embodies the binding constraints identified in the Niger SCD, published in June 2017. The SCD highlights that ICT sector growth remains hampered by policy and regulatory bottlenecks, the complex tax system and a biased judicial system, resulting in high service prices and low quality of services. The SCD suggests priority reforms to make the sector more open and competitive, to strengthen the business environment and to attract private investments. The reforms proposed in the SCD are fully embedded in the design of the proposed



project, specifically, the project would:

- **Develop measures that reach out directly to citizens and seek to empower them.** This entails moving away from a public sector-led provision of services to a private sector-led approach that focuses on the empowerment of citizens and service provision according to competitive advantage. The SCD points out that technological advances in ICT and biometric identification facilitate a citizen-centered approach that would include improved access to information (as well as literacy), a better alignment of the incentives of service providers with results (performance-based financing), promoting private sector service provision where feasible and access to financial services, and greater emphasis on external/civilian oversight on public institutions and services, notably at the local level. Beginning with individuals is thus the optimal means to change Niger’s development trajectory and can be achieved by promoting small-scale interventions that target and engage poor households and refugees directly.
 - **Address the rural productivity constraint in a sustainable manner** by (i) improving market access and local transformation with the introduction of ICT in key areas such as agriculture and healthcare; (ii) investing in skills and competencies where ICT could be the channel through which vocational training is provided (with a particular focus on training for women and refugees); and (iii) facilitating citizen-centered service delivery by ensuring a competitive ICT sector with incentives for improved network coverage in rural areas (including schools, clinics, and so on). An “Iterative Beneficiary Monitoring” (IBM) model will be used to collect and act upon citizen feedback in near-real time.
 - **Build a long-term strategy for building capacity**, in particular to address a skills shortage in central government. A fundamental reform of the public administration is needed, but out of the scope of this program, but it should nevertheless be possible to design some selective and opportunistic interventions with the help of ICT.
8. The design of the proposed project is fully consistent with the UN Sustainable Development Goals, notably #9 “Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation”. As noted in the CPF, *“The Bank will work to identify and develop ways of using ICT to achieve the goals of a citizen-centred approach. It will do this through fostering the expansion of digital networks in rural areas by the private sector and developing the use of key digital applications and services by the population. [...] the Bank will support the development of digital applications and services, including through leveraging on the local youth entrepreneurship community, [...]. Significant attention will be paid to digital inclusion, so as to ensure effective and sustainable use of key digital applications and services by rural population, in particular women and youth.”* The proposed project aims at promoting a resilient ICT infrastructure in rural areas (by diversifying supply networks and working with private sector providers), promoting inclusive entrepreneurship (by extending the reach of ICT services to low-income and/or remote populations) and fostering innovation and financial inclusion (by promoting digital finance, promoting the digital entrepreneurship and attracting private investments and unleashing competition). These actions will ultimately contribute to improving citizens’ welfare in the poorest regions.

C. Proposed Development Objective(s)

The project aims at improving digital inclusion in rural areas, in order to bring transformative services based on digital technologies for selected social and economic sectors.

Key Results (From PCN)

9. The proposed **PDO-level results indicators** for the project would include:



- Mobile telephony and mobile broadband (3G and above) penetration rates (SIM cards per 100 inhabitants), including the percentage of female users;
 - Mobile telephony and mobile broadband (3G and above) network coverage (% of population covered);
 - Percentage of internet users per 100 people, including the percentage of female users;
 - Number of villages newly-connected with mobile broadband services, as a result of the project;
 - Number of adults with mobile money accounts (of which, women);
 - Number/volume of digital payment transactions, of which those made in rural areas.
10. The **proposed intermediate results indicators** for the project would include:
- Retail price of 0.5 GB per month of pre-paid mobile broadband services (3G and above), in US\$ and as a percentage of monthly Gross National Income (GNI) per capita;
 - Number of people trained for digital skills or knowledge under the project, of which percentage of women;
 - Private sector investment leveraged through this project, in US\$ (maximizing finance for development);
 - Number of digital entrepreneurs and number of MSMEs offering digital solutions to rural populations.

D. Concept Description

11. The Smart Villages Program aims to assist Niger to harness its digital potential - ensuring that all citizens have access to high quality, low-cost internet connectivity, that public services are easily accessible online, and that the digital economy is driving growth, innovation and job creation. This vision will require a long-term commitment to making the investments and policy reforms needed to increase connectivity, spur private sector ICT investment, financial product development and innovation, and to develop a new generation of digital leaders and champions who can use technology creatively to improve efficiency and impact of public services.

12. The achievement of the Project Development Objectives will be achieved through the following four components:
- Component 1: Enabling Environment -- seeking to establish the optimal legal and regulatory environment for the development of Niger's digital economy, especially in rural areas;
 - Component 2: Rural Connectivity – Extending the number of villages in Niger that have access to digital connectivity (covering telephony, internet, mobile payments etc), with a particular focus on zones hosting refugees;
 - Component 3: Financial inclusion – Promoting the availability and adoption of digital financial services, such as mobile money, and promoting digital entrepreneurship;
 - Component 4: Project Management and Capacity Building for counterparts.

13. These components will be implemented based on the following principles:
- Digital inclusion and the principle of universal access.
 - Economic sustainability through job creation, especially for young people and women;
 - Synergies and sharing of development efforts, in particular: financial inclusion, agriculture, education (primary, secondary, professional and technical, superior), health, culture, rural electrification, biometrics, e-Government;
 - Maximizing Finance for Development (MFD) and the use of private sector led investment when possible, and public-private partnerships, to maximize the leverage IDA investment to mobilize private investment resources.
14. In so far as any construction work with potential social and environmental implications is likely to take place under this program, it would most likely be under component 2. The objective of this component is to develop connectivity in rural areas, in particular the approximately 6,100 villages, with a total population of 1.9 million, that



lack any form of telecommunications coverage. While there are other reasons why ICTs may not be widely adopted in rural Niger, such as lack of electrification -- unaffordability of services or lack of compelling local content and applications -- nevertheless it is the lack of coverage which is a *binding constraint*. While providing coverage won't solve the other problems, it will at least open up possibilities for community services, government services and entrepreneurship to develop.

15. By connecting some 700 of these remaining villages to telecommunication networks, Niger will move closer to universal digital coverage, thereby bridging one of the key factors that underpins the urban rural divide and drives migration to the cities and abroad. The project will seek to promote the most cost-effective connectivity options in different regions (e.g. fiber optic, cellular communications, microwave and satellite coverage), with the private sector taking the lead. Providing reliable connectivity access to these villages, on which the development of ICT services and applications, including mobile money, will be based upon should serve as a springboard to increase the overall mobile penetration in a country which has one of the lowest levels in the world. Boosting rural connectivity should also have a positive spillover on the country's wider GDP growth.
16. In addition to basic connectivity and power, the project will also seek to provide basic ICT equipment to facilitate service delivery. This may include, for instance, a computer lab, video-projector and Wi-Fi server for schools, with a server to store curriculum content. For government institutions, a more practical solution may be to provide a suite of smartphones / tablets, stored in a lockable suitcase which also serves as a charger and WiFi router. These may be used by government officials to collect public data, as a feedback channel for information and to communicate with other public entities. In designing these solutions, every effort will be made to ensure that relevant content and applications are embedded in the equipment provided, and they can operate with low bandwidth usage design and an efficient off-line mode (relying on cache servers).
17. The most common solution to be used for extending rural access will be the construction of additional cell towers (masts) in areas that currently have limited or no cellular coverage. The construction work would be undertaken by the private sector, and the project would provide capital subsidies awarded through a "reverse subsidy" auction where the winning bidder requests the lowest level of subsidy. No construction work would be undertaken directly by the project, though a small level of subsidy (typically 30% of construction costs) would be provided to the private firms erecting the masts. The construction would eventually take place, even without the program, but the subsidy program should help to bring forward the date of construction by easing the capital burden. The location of the masts would typically be on a high site (eg a mountain) close to a village, but in areas of flat terrain may be constructed closer to the village center. The site would typically occupy a space of around 30 square metres (e.g., 5x6m) and would rise to up to 30m above the ground. Only minimal excavation would be required, and it is unlikely that any chance finds would take place that might endanger physical cultural heritage.
18. Some small scale relocation of residents may be required, in exceptional cases, but this is extremely unlikely as the rural areas have a generally low population density. More likely is that some limited removal of vegetation may be required. Some additional access roads may be required, but this is unlikely. In areas where no roads exist, delivery of material by helicopter is more likely. The cellular masts and base stations would be powered by solar panel arrays, and batteries to allow for overnight operation, and for continuous power during rainstorms or dust storms. The solar-panel arrays would be modestly over-dimensioned to provide surplus power, off-grid, for community usage. It is possible that, for some villages, backup power by diesel generator may be required, for instance in areas subject to prolonged dust-storms. The viability of wind power, and large battery arrays, will be considered as an alternative.
19. The construction work for the cell masts, solar panel arrays and batteries is likely to take up to a week in each location, but may exceptionally take longer in areas with only limited access. There is thus a risk of gender-based violence, or sexual exploitation, during the brief period where construction work takes place. This risk is heightened where the construction sites are close to settlements. These risks will be mitigated by ensuring that the construction teams are well-briefed as to the risks, and through field monitoring on an unannounced basis. Immediate action to



suspend subsidy payments, and debar construction firms, will be taken where violations are found to have taken place. Citizen feedback mechanisms, for instance using SMS or instant messaging to report violations, will be implemented in areas where construction takes place. For the project as a whole, an Interactive Beneficiary Mechanism (IBM) is planned.

20. It is planned to work with a project implementation unit (PIU) within ANSI (National Agency for the Information Society). The PIU will recruit a full-time safeguards experts, supplemented by additional expert consultants as required. The government is planning to request a project preparation advance (PPA) which will, inter alia, cover the costs of environmental and social safeguards studies. The PCN review was carried out on 28 September 2018 and therefore will be conducted under the old environmental and safeguards framework.

SAFEGUARDS

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

The exact locations of the activities where project activities will take place are not yet known. However, some 707 villages of between 500 and 1'100 population where there is currently no cellular coverage will be the main locus of intervention. The specific villages will be identified only during the design phase.

B. Borrower's Institutional Capacity for Safeguard Policies

Niger's legislative framework includes a decree on Environmental Assessments that ensures the integration of environmental considerations at the project level. Institutional responsibility lies with the Bureau Environmental Assessments and Impact Studies (BEEEI). The major environmental assessment regulatory in Niger is referred to the institutionalization of Environmental Impact Studies (January 1997), Law n ° 98-56 of 29 December 1998 on the Framework Law on the management of the environment; the authorization of the Professionals Association for Environmental Impact Studies in Niger for carrying out its activities (April 1999), the Administrative procedure for impact assessment including the list of activities subject to impact assessment and the content of the environmental impact assessment . The legal framework, and more precisely the Law on the Environment, allocates an entire chapter to Public Participation and the related articles provide the means of such participation. In line with this Law, public and private institutions are obliged, as part of their actions, to raise public awareness on the environment challenges. To this end, they ensure better information for citizens with a view to their participation in the environmental management.

The Project Implementation Unit is proposed to be created within ANSI (Agence Nationale pour la Société d'Information). It is a new and special entity in charge of the management of the Universal Access Funds and the development of the Smart Village concept . ANSI has been staffed by presidential Decree and equipped, and is now fully operational. But ANSI's institutional capacity remains unproven to date and its ability to deal with and apply and comply both with World Bank and the country environmental and social policies, procedures and regulations, is not yet known.

C. Environmental and Social Safeguards Specialists on the Team

Demba Balde, Social Specialist
Emmanuel Ngollo, Environmental Specialist
Bougadare Kone, Environmental Specialist

D. Policies that might apply



| Safeguard Policies | Triggered? | Explanation (Optional) |
|--|------------|--|
| Environmental Assessment OP/BP 4.01 | Yes | <p>The major proposed project construction activity is the construction of radio masts in rural areas. This is expected to generate potential social and environmental risks and impacts. They will be limited in scale, most of the impacts will be site-specific. In most cases, mitigation measures can be designed fairly easily. As the exact location of the activities is not yet known, beyond the first few villages, an ESMF will be prepared, reviewed and disclosed in the country and the World Bank websites prior to appraisal. This is intended to guide the way that potential negative environmental and social impacts of future projects will be identified and mitigated during the project implementation. The ESMF will also reflect all measures on Gender-based violence (e.g., code of conduct, Grievance Redress Mechanism, etc.). During the development of the ESMF physical cultural resources will be taken into consideration and baselines defined. Although construction work will be very limited (typically radio masts cover an area of no more than 30 square meters) the ESMF will include clear procedures that will be required for identification, protection of cultural property from theft, and treatment of discovered artifacts, and will be included in standard bidding documents. The ESMF will also provide procedures for handling with “chance finds” during implementation project activities.</p> |
| Performance Standards for Private Sector Activities OP/BP 4.03 | No | <p>Private sector activities during the project will be self-financed by the private sector, with IDA funds providing a capital subsidy. Operational activities (eg provision of mobile services) will be entirely financed by the private sector</p> |
| Natural Habitats OP/BP 4.04 | No | <p>This policy is not triggered as is not anticipated that any subproject with the potential to cause significant conversion or degradation of natural habitats or critical natural habitats will be financed. Implementation may require some limited removal of vegetation.</p> |
| Forests OP/BP 4.36 | No | <p>This policy is not triggered as the sub projects financed under the project are not anticipated to have adverse impacts on the health and quality of forests or rights and welfare of people and their level of dependence with the forests. Indeed, rural Niger is characterized by desert rather than forest areas.</p> |



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| Pest Management OP 4.09 | No | This policy is not triggered as the project is not expected to increase the use of chemical pesticides which could have negative environmental and health impact. |
| Physical Cultural Resources OP/BP 4.11 | Yes | The project will not involve significant physical work, excavations and demolitions. However, the Physical Cultural Resources policy OP/BP 4.11 is triggered because the nature of the proposed physical activities and the project areas, may involve the possibility of finding evidence of physical cultural resources during civil works. Nevertheless, as any construction work to be carried out is almost exclusively above ground (cellular masts), it is not considered highly likely that any physical cultural resources (chance finds) would be harmed. Due to the potential impacts on Physical Cultural Resources associated with civil works, the ESMF will formulate standard measures to be included in the companies' contracts, in case any chance finds occurs. |
| Indigenous Peoples OP/BP 4.10 | No | There are no known indigenous peoples living in the areas where activities are planned. |
| Involuntary Resettlement OP/BP 4.12 | Yes | OP 4. 12 is triggered as this project involves the building of physical infrastructure including the construction of radio masts. These activities may result in loss of assets, relocation or obstruction of small business. As the exact footprints of these activities is not yet known precisely, a Resettlement Policy Framework (RPF) will be prepared, consulted upon and disclosed in-country and on the World Bank website. Construction of radio masts may require some minimal resettlement in areas of flat terrain where the cellular mast is in proximity to a village, but this is very unlikely as population density is so low. More likely is a requirement for temporary rehousing for periods of up to a week if construction work creates excessive dust or noise. |
| Safety of Dams OP/BP 4.37 | No | The project will not support construction or rehabilitation of dams. |
| Projects on International Waterways OP/BP 7.50 | No | This project will not take place on any international waterways, and will not support activities that will impact international waterways. |
| Projects in Disputed Areas OP/BP 7.60 | No | This project will not take place in any disputed areas as defined under OP 7.60, and will not support any activities that will impact disputed areas. |



E. Safeguard Preparation Plan

Tentative target date for preparing the Appraisal Stage PID/ISDS

Nov 12, 2018

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 safeguard preparation plan will require an ESMF and an RFP.

The government is planning to request a project preparation advance that will allow the safeguards related studies to be started, before the end of 2018.

CONTACT POINT

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APPROVAL

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Approved By

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