



Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

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**BASIC INFORMATION****A. Basic Project Data**

Country	Region	Project ID	Parent Project ID (if any)
Chad	WESTERN AND CENTRAL AFRICA	P180000	
Project Name	Chad Digital Transformation Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Digital Development	Investment Project Financing	11/6/2023	12/19/2023
Borrower(s)	Implementing Agency(ies)		

Proposed Development Objective

To expand access to affordable and climate-resilient broadband connectivity and improve government capacity to deliver public services digitally.

Financing (in USD Million)	Amount
Total Project Cost	120.00

B. Is the project being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The proposed project is designed to address key bottlenecks to unlock digital transformation in Chad through four integrated and mutually reinforcing components, with a fifth component dedicated to contingent response to future eligible emergencies. Project activities will seek to (i) strengthen the institutional, strategic, legal, regulatory, and policy frameworks for affordable broadband access and a trusted digital economy; (ii) expand broadband access, particularly in rural areas; (iii) support the development of e-government foundations, modernization of the civil registration system and digitization of payments; and (iv) provide institutional coordination and project management support. The proposed project is conceived in alignment with the Paris Agreement and would incorporate appropriate climate adaptation measures and mitigation solutions. All activities the project will apply the Maximizing Finance for



Development (MFD) principles, ensuring that public interventions lay the foundations for the private sector to flourish.

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

The project is designed to be at national scale. It will be implemented (i) in rural areas, where private sector interest is insufficient to provide connectivity without additional intervention or incentives, (ii) in urban areas, to connect ministries, departments and agencies (MDAs) not yet connected, and (iii) to equip the regulator with the technical tools necessary to control the quality of the service offered. The digital infrastructure built under this project will be subject to quality standards and climate-change resilience evaluation, including compliance with the requirements for disaster response and for climate change adaptation and mitigation. Whilst investments are envisaged throughout the country, targeted areas of intervention will be defined during project preparation based on analysis of white zones, synergies with other infrastructure projects, and government priorities. Some of the areas are remote, hard to access and insecure; this together with high levels of poverty may have an impact on project implementation and supervision. Social context is one of vulnerability and fragility on multiple levels; poverty, lack of voice, lack of trust, illiteracy, vulnerability to climate shocks. Illiteracy is a significant barrier for digital adoption / design of locally relevant digital service delivery and will be taken into account in project design.

Chad is the country most vulnerable in the world to the risks of climate change, ranging from a dry tropical climate in the south to arid conditions in the Sahara desert in the north. Climate change is leading to desertification; the degradation of forests, soil, and natural habitats; a loss of biodiversity; reductions in the level of water tables; and the silting up of oases. Moreover, it is modifying agricultural seasons, disturbing the biological cycles of crops, reducing cereal crop production, and extending the time and space necessary for transhumance, which in turn contributes the degradation of protected areas and wetlands, and to bush fires. The impact of climate-related disasters, such as droughts or floods, is magnified by the fact Chad does not have the resources to combat them.

Chad's development challenges are exacerbated by adverse natural events. As a landlocked Sahelian country, Chad is exposed to various types of hazards, including droughts, floods, wildfires, storms, and extreme heat. The country's vulnerability to these natural events is magnified by poverty, poor governance, and poor access to basic services. This high level of risk occurs in a country where access to basic services is limited and well below the Sub-Saharan Africa average, with only 12 percent of the total population having access to electricity, and 8 percent with access to sanitation services. Furthermore, conflict, violence, and disasters trigger significant internal displacements in Chad, with 367,000 people displaced at the end of 2021 due to conflict and violence, and a further 24,000 people displaced due to disasters (IDMC, 2022).

D. 2. Borrower's Institutional Capacity

The Ministry of Telecommunications and digital economy (MTDE) mandated to lead ICT sector development and flagship digital initiatives, will lead overall project implementation and act as the main implementing agency. It oversees a number of structural projects, which are currently underway in support of the country's digital transformation. The main ongoing projects include : (i) the implementation of an Internet Exchange Point (IXP) at the Agency for the Development of Information and Communication Technologies (ADETIC); (ii) The Electronic Communications Infrastructure Modernization Project (PMICE), financed by EXIMBANK (\$180 million), which aims to build 1,200 kilometers of optical fiber, a Data Center and its backup, as well as 200 mobile telephone sites for the



modernization of Sotel; and (iii) The Trans-Saharan Corridor Project, financed by the African Development Bank and European Union (\$80 million), which includes the construction of 550 kilometers of optical fiber between Massaget (Chad) and N'Guiguimi (Niger).

However, MTDE has no experience with WBG projects in Chad. A new Project Implementation Unit (PIU) would be established within such a Ministry. A detailed assessment will be conducted during project preparation under Project Preparation Advance to assess capacity gaps and propose remedial action, including the recruitment and training of key specialists. Various elements of the project will require support from implementing partners and close collaboration with other MDAs including ANSICE, ADETIC, ARCEP, ANATS, and ENASTIC.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Substantial

Environmental Risk Rating

Substantial

The environmental risk is rating substantial at this stage. Indeed, large-scale infrastructure investments made, including the deployment of fiber and new cell-sites, are likely to have environmental impacts that will need to be proactively managed such as: e-waste/waste management and disposal; health and safety risks to the community and workers during installation and maintenance relate to health and safety disruptions to access to properties and businesses; soil erosion; road safety and traffic interruptions and biodiversity because of the deployment of fiber optic cables in rural areas. Distribution of hardware and digital devices also pose environmental risks related to safe final disposal of hazardous waste. Risks related to e-waste generation and energy consumption will also require strong mitigation measures that will be done through TA for implementation of e-waste provisions and by specifying energy efficiency requirements in procurements undertaken.

Social Risk Rating

Substantial

The social risk rating is substantial at this stage. Deployment of digital infrastructure could prompt temporary or permanent economic or physical displacement. However, the magnitude of infrastructure construction and/or rehabilitation and subsequent resettlement is to be confirmed during project preparation. While the project seeks to actively address digital inclusion and expand access to broadband, digital tools and public services, there is a risk of social exclusion of vulnerable or marginalized populations in digital access, such as the elderly, that will need to be actively addressed as part of targeting, especially in relation to access to networks and the various digital skills and device access schemes envisioned. High levels of illiteracy and most people living in rural, often remote areas, add another layer of risk for exclusion from access.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

ESS 1 is relevant. Environment and social risks and impacts are anticipated through the implementation of both Component 2: Climate-resilient broadband infrastructure and Component 3: Digital Public Infrastructure (DPI) and



Services. Investments and TA activities that are anticipated to result in direct and indirect environmental and social risks and impacts include the installation, operation and maintenance of broadband connectivity infrastructure (fiber cable, satellite towers and dishes, small equipment sheds and boxes), and also to the technical advisory on (i) broadband access and (ii) development of policies, laws and regulations relevant to the development of a safe and vibrant digital economy, and (iii) capacity building of senior government officials tasked with the design, implementation and evaluation of digital transformation projects and programs. The possibility of Associated Facilities will be further assessed during project preparation and implementation.

Key environmental issues related to the installation, operation and maintenance of broadband connectivity infrastructure are expected to be: e-waste/waste management and disposal; health and safety risks to the community and workers during installation and maintenance relate to health and safety disruptions to access to properties and businesses; soil erosion; and road safety and traffic interruptions. Noise may likely be generated from the use of construction machinery and vehicle movement depending on the scale and scope of project activities and this may cause disturbance to nearby businesses and homes.

Based on the scope of the Project's activities, which includes policy development, technical assistance, capacity building, and infrastructure interventions for which exact locations and extent of the civil works are not yet known (and will be determined with the feasibility studies), the Borrower will prepare and disclose prior to appraisal an Environmental and Social Management (ESMF) in line with the World Bank's Environmental and Social Standards and the World Bank Group Environment, Health and Safety (EHS) Guidelines. In addition, a Resettlement Policy Framework (RPF), a Stakeholder Engagement Plan (SEP) and an Environmental and Social Commitment Plan (ESCP) will be prepared and disclosed prior to appraisal. The ESCP will cover all measures and actions needed to ensure compliance with the ESF requirements, the World Bank's directive on addressing risks and impacts to disadvantaged and vulnerable groups and the Project's environmental and social instruments as well as implementation details, monitoring and reporting activities.

The ESMF will include: (a) the assessment of the security risks (SRA) of the project (which will then in turn inform a security management plan for the activities to be developed by the client), (b) the environmental and social context in targeted areas of intervention; (c) checklists of potential environmental and social risks and impacts and their sources; (d) the policy context, and the institutional and legal frameworks; (e) the environmental and social impact assessment system in the country, including the review and approval mechanism; (f) an evaluation of the environmental and social institutional capacities; (g) procedures for participatory screening of proposed sites and activities, and environmental and social considerations; (h) procedures for assessing potential environmental and social impacts of the planned project activities, including the direct, indirect and cumulative impact and SEA/SH risks; (i) institutional arrangements for managing the impacts identified, according to the mitigation hierarchy; (j) environmental and social management planning processes for addressing negative externalities in the course of project implementation; (k) a system for monitoring the implementation of mitigation measures; (l) the results of stakeholder consultation and responses by the Borrower (with summary of discussions in annexes); (m) the capacity building measures recommended for environmental and social planning and the monitoring of project activities; and, (n) an estimate of the budget needed to implement the framework.



When project sites are identified, site-specific Environmental and Social Impact Assessments (ESIAs) will be prepared. In addition, the ESMF will incorporate relevant parts of WHO guidelines establishing good international industry practice for COVID-19 response.

The project includes a strong focus on social inclusion to ensure that no-one is left behind, by actively seeking to close any gendered, geographical or age-based digital divides. The project's Labor Management Procedure (LMP) as required in ESS2 and SEP as required in ESS10 will address inclusion of marginalized or vulnerable groups, through communications and outreach to related groups to ensure they are fully aware of project opportunities and do not face social, cultural, linguistic or other barriers to participation in project training, financing and digital access schemes, as well as related opportunities. Digital divides will take into consideration of cultural and literacy factors (including the risks set out in ESS4 with respect to cyber safety).

Areas where "Use of Borrower Framework" is being considered:

not applicable

ESS10 Stakeholder Engagement and Information Disclosure

ESS 10 is relevant. Potential stakeholders include institutional actors such as relevant MDAs, public and private service providers, as well as those who would be affected by the project such as local communities, women, and youth including vulnerable or marginalized groups.

The Borrower will prepare a Stakeholder Engagement Plan (SEP), which will identify and assess the level of project impact on stakeholders and their interest and support for the project; lay out an approach to build and maintain a constructive relationship, especially with project affected parties; promote and provide means for effective and inclusive engagement with the vulnerable groups throughout the project life cycle; ensure that appropriate project information on environmental and social risks and impacts is disclosed to stakeholders in a timely, understandable, accessible, and appropriate manner and format. During project implementation, the SEP will be reviewed and updated as necessary, and any major revisions effected to the SEP publicly disclosed to stakeholders. The needs of any vulnerable groups will need to be considered to adjust for their meaningful participation. The SEP will be prepared and disclosed prior to Appraisal.

The SEP will incorporate a comprehensive project wide Grievance Mechanism (GM) which will enable a broad range of stakeholders to channel concerns, questions, and complaints to the implementation agency. The GM will include channels/procedures for SEA/SH complaints including multiple and accessible entry points, referral to GBV service providers and management of complaints in a confidential and survivor centered manner.

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project workers will include direct, contracted workers, and primary supply workers (who will mainly supply the equipment, goods and materials to the project). The Borrower will prepare an LMP to address key issues, such as working conditions and the management of worker relationships, occupational health and safety of the work force,



non-discrimination, establish the minimum work age applicable to the project, and measures to prevent forced labor, sexual abuse, and exploitation and sexual harassment. The LMP will include an effective GM for the workers, based on national laws and regulations and the provisions of ESS2.

ESS3 Resource Efficiency and Pollution Prevention and Management

ESS3 is considered relevant to the project at this stage. This ESS is relevant for the project given risks related to pollution prevention and management, including the safe disposal of batteries and e-waste.

The ESMF will include sections on resource efficiency and Pollution Prevention and Management and assessment of risks and impacts, and proposed mitigation measures related to relevant requirements of ESS3 will be included within scope of the ESMF, ESIA and ESMPs as relevant.

In addition, the ESMF will include an e-waste management plan (EWMP) to serve as a guidance for the appropriate management and disposal of E-waste. Related technical assistance could be included in the project.

Water and energy efficiency measures such as efficient water fixtures, efficient lighting, cooling and heating systems, and other water and energy-related efficiency equipment are a factor in this Project, and will be incorporated in the design. The ESMF will include specific measures related to water and energy use efficiency during the construction phase of all civil works as well as, during the operational phase and the retrofitted buildings.

During preparation, relevant domestic regulations and their enforcement will be reviewed against the requirements of ESS3 and the World Bank's applicable Environmental, Health and Safety Guidelines, and the initial Due Diligence (DD) will be conducted to review the logistical arrangements to transport batteries and e-waste and viability of batteries and e-waste disposal sites to support the assessment and mitigation measures proposed in the ESMF/ESCP.

ESS4 Community Health and Safety

The project does not anticipate use of security personnel but given the insecure conditions in some part of the country, the Borrower will prepare a Security Risk Assessment (SRA) as part of the ESMF. Based on this assessment, a subsequent Security Management Plan (SMP) may be required during project implementation.

Ensuring data security/data protection of individuals is an element that will be incorporated through project design. Component 3 includes several activities to strengthen the government's cybersecurity and data protection capabilities, including through capacity-building. Cyber safety is a risk especially for people without previous access to the internet. This will also be managed through project design, including through sensitization activities.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

ESS 5 is relevant. There will be infrastructure construction and/or rehabilitation, including the deployment of last mile connectivity sites with their docking stations, solar panels, etc., and the construction of the missing fiber optic links that may require land acquisition or restrict access to natural resources and result in economic displacement and resettlement, even though the magnitude of land acquisition or location of civil works is not known yet. However, the impacts in terms of resettlement are expected to be limited given the nature of the planned activities



and the limited amount of land required for activities/infrastructure. Likely impacts under ESS 5 could include temporary or permanent economic or physical resettlement, loss of assets and/or access to resources/livelihood impacts arising from land acquisition. Therefore, the Borrower will prepare, consult, and disclose prior to appraisal a Resettlement Framework (RF) that will guide the preparation of site-specific Resettlement Action Plans (RAPs) if necessary, during project implementation.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS 6 is relevant. Deployment of fiber optic cables is expected to take place on rural areas with some impacts and risks on biodiversity because the project supports civil works and 'last-mile connectivity' in rural areas. Footprint of any new cell towers would be minimal to avoid adverse impacts and risks on natural resources. The ESMF will include specific measures and screening processes of all above mentioned activities to be considered that all infrastructure works do not take place near environmentally sensitive areas particularly in natural or critical habitats. These measures will aim to avoid, minimize, or mitigate potential impacts that may have any significant negative impact on biodiversity and on the sustainable management of living natural resources and will be included in site specific instruments as needed.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

There are no known Indigenous Peoples/Sub-Saharan Historically Underserved Traditional Local Communities in the project area.

ESS8 Cultural Heritage

The environmental and social assessment (ESMF or ESIA) will confirm the existence of cultural heritage in identified project areas, first through screening using the information in the SAWS4 Country profile for cultural heritage in Chad. If there is any cultural heritage present that could be affected by the project in a country, the Borrower will design mitigation measures, in consultation with the relevant national authorities and experts, to protect it.

For activities related to component 2, once the areas for construction are identified, the ESIA will include a section on cultural heritage to ensure that there is no pre-existing or known cultural heritage sites that could be affected by the project. In accordance with ESS10, the Borrower will identify stakeholders relevant to the cultural heritage already known to exist or likely to be encountered during the project lifecycle, and carry out meaningful consultations, with national heritage institutions and local communities.

When impact is unavoidable, adequate mitigation measures will be outlined in the environmental and social assessment instruments. The ESMF will include "Chance Find" Procedures. In addition, construction contracts will include a "Chance Find" clause which will require contractors to stop construction if cultural property sites are encountered during construction and contact the Ministry of Culture. Where appropriate, a Cultural Heritage Management Plan will be prepared and consulted upon with stakeholders.

ESS9 Financial Intermediaries



ESS9 is considered not relevant to the project at this stage because no financial intermediaries are involved.

C. Legal Operational Policies that Apply

OP 7.50 Projects on International Waterways No

OP 7.60 Projects in Disputed Areas No

III. WORLD BANK ENVIRONMENTAL AND SOCIAL DUE DILIGENCE

A. Is a common approach being considered? No

Financing Partners

n/a

B. Proposed Measures, Actions and Timing (Borrower's commitments)

Actions to be completed prior to Bank Board Approval:

Actions to be completed prior to project appraisal:

-ESCP

-ESMF, including SRA and e-waste management plan (EWMP)

-RPF

-LMP

-SEP, including GM

Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):

-PIU structure and timeline

-site-specific instruments and timeline



-operationalization of GM

C. Timing

Tentative target date for preparing the Appraisal Stage ESRS

30-Oct-2023

IV. CONTACT POINTS

World Bank

Contact: Audrey Anne Alexandra Ariss Title: Digital Development Specialist

Telephone No: 34179 Email: aariss@worldbank.org

Contact: Tounwende Alain Sawadogo Title: Senior Digital Development Specialist

Telephone No: 5351+2228 / 223-223-20702228 Email: tsawadogo@worldbank.org

Borrower/Client/Recipient

Implementing Agency(ies)

V. FOR MORE INFORMATION CONTACT

The World Bank
1818 H Street, NW
Washington, D.C. 20433
Telephone: (202) 473-1000
Web: <http://www.worldbank.org/projects>

VI. APPROVAL

Task Team Leader(s): Audrey Anne Alexandra Ariss, Tounwende Alain Sawadogo

Practice Manager (ENR/Social) Pia Peeters Recommended on 27-Feb-2023 at 17:29:22 EST

Safeguards Advisor ESSA Nathalie S. Munzberg (SAESSA) Cleared on 28-Mar-2023 at 08:43:58 EDT