AFRICAN DEVELOPMENT FUND

CENTRAL AFRICAN REPUBLIC

CENTRAL AFRICA FIBRE-OPTIC BACKBONE PROJECT (CAB) – CAR COMPONENT

PICU/RDGC/PGCL DEPARTMENTS

December 2017

Translated Document

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Currency Equivalents
September 2017

UA 1 = CFAF 832.51
UA 1 = EUR 1.26

Fiscal Year
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ACRONYMS AND ABBREVIATIONS

ADF	African Development Fund
AfDB	African Development Bank
AfIF	European Union Africa Investment Facility
ANTIC	National Information and Communication Technologies Agency
AON	National Competitive Bidding
ARCEP	Electronic Communications and Postal Regulatory Authority
CAB	Central Africa Backbone
CABLC	CAB Project Liaison Committee
CAR	Central African Republic
CCN	Community Digital Centre
CEMAC	Central African Economic and Monetary Community
CFAF	Franc of the African Financial Community
CFD	Digital Training Centre
DGE	Directorate-General of Environment
DPU	Declaration of Public Utility
ECCAS	Economic Community of Central African States
ESMP	Environmental and Social Management Plan
EU	European Union
FO	Fibre-Optic
GDP	Gross Domestic Product
GICA	Interprofessional Group of the Central African Republic
ICB	International Competitive Bidding
ICT	Information and Communication Technologies
INS	National Institute of Statistics
IRR	Internal Rate of Return
ITU	International Telecommunications Union
KEXIM	Korea Eximbank
MEPC	Minister of Economy, Planning and Cooperation
MINUSCA	United Nations Multidimensional Integrated Stabilization Mission in the Central African Republic
MNO	Mobile Network Operator
MPT	Ministry of Posts and Telecommunications
NEPAD	New Partnership for Africa's Development
NPV	Net Present Value
PACE	State Consolidation Support Programme
PAP	Project Affected People
PCN	Project Concept Note
PCU	Project Coordination Unit
PIDA	Programme for Infrastructure Development in Africa
PMA	Project Management Assistance
PPP	Public-Private Partnership
RCPCA	National Recovery and Peacebuilding Plan

RE	Regional Envelope
RISP	Regional Integration Strategy Paper
SC	Steering Committee
SPN	National Heritage Company
TECHCO	Technical Committee
TFP	Technical and Financial Partners
TSB	Trans-Saharan Fibre-Optic Backbone
TSF	Transition Support Facility
WB	World Bank
WWF	World Wildlife Fund

PROJECT INFORMATION SHEET

Client Information

Borrower : **CENTRAL AFRICAN REPUBLIC (CAR)**

Project Name : **CENTRAL AFRICA FIBRE-OPTIC BACKBONE (CAB) – CAR COMPONENT**

Location : **OMBELLA-M'POKO, NANA-MAMBERE, MAMBERE-KADEÏ AND SANGHA-MBAERE PREFECTURES**

Executing Agency : **MINISTRY OF POSTS AND TELECOMMUNICATIONS (MPT)**
CAB-CAR PROJECT IMPLMENTATION UNIT (PCU /CAB-CAR)

1. Financing Plan

Source	Amount in million CFAF	Amount in million Euros	Amount in million UA	Instrument
ADF (TSF+RE)	10.923	16.653	13,216	Project Grant
EU (AfIF)	10.907	16.627	13,196	Project Grant (co-financing)
TOTAL	**21.83**	**33.28**	**26,412**	

2. ADF's Key Financing Information

Grant Currency:	Unit of Account (UA)
FIRR, FNVP (baseline scenario) :	26.49%; EUR 157.572 million (@2%)
EIRR, ENPV (baseline scenario) :	29.15 %, EUR 57.659 million (@10%)

3. Duration – Main Milestones (expected)

Activities	(month, year)
Concept Note Approval	September 2017
Project Approval	December 2017
Effectiveness	January 2018
Completion	December 2021
Last Disbursement	December 2022

EXECUTIVE SUMMARY

1. Project Overview: Based on the objectives assigned to the Information and Communication Technologies (ICT) sector described in the 2017-2021 National Recovery and Peacebuilding Plan (RCPCA), the Government of the Central African Republic (CAR) sought the Bank's assistance to finance the national component of the Central Africa Fibre-Optic Backbone (CSB) Project consisting in: (i) the laying of 1,050 km of fibre-optic cable on the interconnection roads with Cameroon and Congo as well as (ii) the establishment of a local urban loop comprising a national data centre (Datacentre) and a Digital Training Centre in Bangui. The project also provides for the establishment of an e-government platform as well as institutional support comprising, in particular : (i) feasibility studies for further phases of the project (ii) technical assistance to the Electronic Communications and Postal Regulatory Authority (ARCEP) ; (iii) support to educational establishments (Bangui University and Vocational High School) ; (iv) support for the establishment and operationalisation of a National ICT Agency (ANTIC) and (v) capacity building for environmental protection organisations (DGE and WWF). The project executing agency is the Ministry of Posts and Telecommunications (MPT). The total estimated project cost is 26.412 million Units of Account (UA). The Bank's contribution to the project's financing is through the ADF window for an amount of UA 13.216 million. The European Union is co-financing the project through the Africa Investment Facility for an amount of UA 13.196 million. The project implementation period will be four (4) years

2. Needs Assessment: In addition to its regional focus, the project proposes to complete the missing links in the national fibre-optic network in CAR. The project will make it possible to cover the national fibre-optic network in this region as well as on the borders of CAR with Cameroon and Congo. Indeed, the connections with neighbouring countries (in particular Cameroon) will provide them with an alternative destination for international traffic transiting by undersea cables accessible in Cameroon. Thus, international connectivity costs should be reduced due to these new international outlets. The project will also be able to capitalize on the extension of the national fibre-optic backbone to modernize the government services of the Central African Republic. This indirect benefit is taken into account in the 2017-2021 Country Strategy Paper (CSP) for CAR presented to the Board on 29 November 2017 and which includes this operation as well as the 2011-2015 Regional Integration Strategy Paper for Central Africa (extended to the end of 2017).

3. Bank's Value Added: The Bank's value added concerns its field experience capitalized on through exchanges with the countries concerned since the project's identification in 2007. Indeed, the Bank has allocated significant resources, in coordination with the World Bank to finance the Regional CAB Project while continuing exchanges with the countries concerned since that date. The Bank's intervention will also enable CAR to construct major infrastructure, in particular, interconnections between the country and its neighbours while complying with international norms and standards.

4. Knowledge Management: The project will contribute to knowledge building in the area of national fibre-optic infrastructure. Indeed, preparation of the first Broadband Infrastructure Development Master Plan for use, among others, by ARCEP, will authorize the use of appropriate regulatory tools for the broadband infrastructure sector in CAR. Such tools will offset the lack of trench control for laying of the optic fibre and thus prevent the occurrence of risk of damage that could harm the integrity of the road network.

PROJECT RESULTS-BASED LOGICAL FRAMEWORK

Project Country and Name: Central African Republic (RCA) – Central Africa Fibre-Optic Backbone (CAB)
Project Goal: Contribute to economic diversification by fostering the emergence of a digital economy in CAR

	Results Chain	Performance Indicators			Means of Verification	Risks/Mitigation Measures
		Indicator (including CSI)	Baseline Situation	Target		
Impact	Economy of Central African Republic diversified and integrated into digital communication networks and social contract renewed	✓ Percentage contribution of ICTs to the country's GDP ✓ ICT contribution to central government resources	✓ 3.1 % (2016) ✓ 10.2% (2015)	✓ 9 % (2021) ✓ 15 (2021)	✓ MPT, ARCEP Reports and Statistics, etc. ✓ Project impact monitoring-evaluation reports ✓ ITU, ECCAS, CEMAC reports	
Outcomes	**Outcome 1** : Access facilitated for populations, government services and businesses to high-quality, reliable and low-cost telecommunications/ICT services	✓ Internet services penetration rate ✓ Ratio of mobile telephony expenditure as % of annual GNI per capita ✓ Cost (USD/month) of one Mbps to Europe ✓ Number of people benefiting from on-line administrative services (information and transactional)	✓ 2,2 % (2016) ✓ 50% (2016) ✓ 600 (2017) ✓ 0 (2016)	✓ 20% (2021) ✓ 18 (2021) -> Sub-Saharan Africa average ✓ 200 (2021) ✓ 30,000 (2021)	✓ MPT, ARCEP reports and statistics, etc. ✓ Reports of different indirect beneficiaries (Ministries responsible for social affairs, women, universities, etc.) ✓ Project impact monitoring-evaluation reports by PCU/CAB-CAR ✓ ITU, ECCAS, CEMAC and World Bank (Doing Business) reports.	**Risks**: (i) Security instability linked to activism of rebel groups (Seleka and Anti-Balaka); (ii) Non-compliance with standards for laying fibre-optic cable; (iii) No impact on prices; and **(iv)** early degradation of fibre-optic cable caused by lack of maintenance. **Mitigation Measures**: (i) Measures taken by the Government of the Central African Republic in collaboration with the International Community (MINUSCA) to pacify the whole territory knowing that the routes chosen are the ones with the least security risk; (ii) Government undertaking to apply the International Telecommunication Guidelines (ITU) ; (iii) Technical Assistance to ARCEP to establish a cost-based model; and (iv) Establish a PPP to ensure the sustainability of the newly created infrastructure.
	Outcome 2: Social, economic and financial inclusion of the populations (of the interior in particular) strengthened	✓ Number of users of Digital Community Centres (CCN) ✓ Number of people benefiting from solar panel connectors	✓ 0 (2016) ✓ 0 (2016)	✓ 200,000 (2021) ✓ 20,000 (2021)		
	Outcome 3: Opportunities for training and access to ICT in education improved	✓ Number of students offered fibre-optic training ✓ Number of people with access to training programmes (ICT, entrepreneurship, etc.)	✓ 0 (2016) ✓ 0 (2017)	✓ 500 (2021) ✓ 20,000 (2021) including 8,000 women		
Outputs	**Output 1*: Fibre-optic infrastructure*** ✓ Fibre-optic links constructed ✓ Technical sites built	✓ Length of fibre-optic line ✓ Number of technical sites along the project links	✓ 0 km (2016) ✓ 0 (2016)	✓ 1050 km (2021) ✓ 8 (2021)	✓ PCU/CAB-CAR Activity Reports ✓ Control Mission Reports ✓ Project Supervision Reports ✓ Project Completion Reports	**Risks:** (i) weak procurement capacity; (ii) increased cost of works; (iii) Non-compliance with technical and functional specifications in the specifications for the related feasibility studies. **Mitigation Measures**: (i) Strict monitoring of the Bank's procurement procedures; (ii)

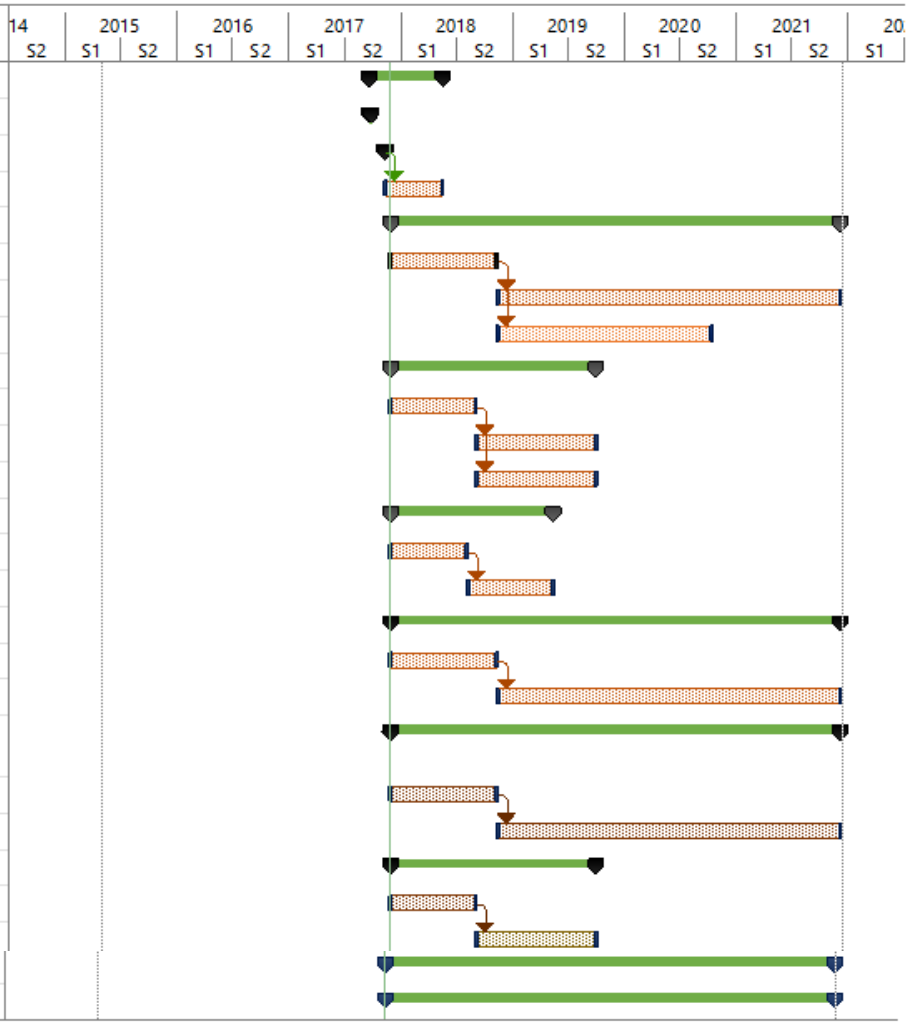
	Output 2: ***ICT applications and services*** ✓ EGov infrastructure and platform for e-services (government services intranet, interoperability framework and tools, open data 'Open data, government Internet gateway, on-line administrative services, central government information systems, etc.), installed	✓ Number of on-line administrative services developed and on-stream	✓ 0 (2016)	✓ 50 (2021)		Factoring in of physical contingencies into project; (iii) Capacity building of PMU/CAB-CAR through project management assistance (PMA) for structuring activities, such as fibre-optic works, establishment of the Datacentre and e-government platform.
	Output 3*: Institutional support and capacity building*	✓ Development and protection of fibre-optic infrastructure networks	✓ 2017 : No strategic framework for the development of the national fibre-optic backbone ✓ 2017 : No foundations for the large-scale deployment of ICT applications and services	✓ 2020 : Strategic decision-making assistance documents finalized (Master plans accompanied by a study on break-even points)	✓ PCU/CAB activity reports ✓ Control mission reports ✓ Project supervision reports ✓ UN Women reports ✓ Project Completion Reports.	
		✓ Preparation of feasibility studies to prepare the follow-up to the project: (i) Broadband Infrastructure Development Master Plan; (ii) implementation of innovative multipartite solutions (ORM, SSE, etc.) for rural electrification purposes and energy efficiency; (iii) integrated electronic system for the identification of persons (SIGIEP); (iv) Development of mobile financial services; and (v) preparation of an e-government strategy		✓ 2020 : Feasibility studies for the introduction of e-government in the service of public and private sectors		
		✓ Number of equipped community centres	✓ 0 (2017)	✓ 20 (2021)		
		✓ Number of ICT trainers trained	✓ 0 (2016)	✓ 20 in total (by 2021) including 12 female students		
	Output 4: Project Management ✓ *Support to PCU*/CAB-CAR; ✓ Monitoring-evaluation of the technical outputs and environmental and social impacts; ✓ Project accounting and financial audit; and ✓ Project technical audit.	✓ Audit reports ✓ Reports on monitoring –evaluation of different project aspects ✓ Technical audit report	✓ 2017 : No report	✓ 2021 : at least 4 audit reports, at least 3 monitoring-evaluation reports, 1 technical audit report produced etc.	✓ PMU/CAB-CAR ✓ Control Mission Reports ✓ Project Supervision Reports ✓ Project Completion Reports.	
Key	**Components**				**Inputs**	

A. Fibre-optic infrastructure
B. ICT Applications and services
C. Institutional support and capacity building
D. Project management

Components	In UA million
Fibre-optic infrastructure (Component A)	**17.942**
ICT Applications and services (Component B)	**2.778**
Institutional support and capacity building (Component C)	**3.61**
Project management (Component D)	**1.446**
Base costs	**25.776**
Physical contingencies	0.377
Financial contingencies	0.259
Total Project Cost	**26.412**

PROJECT IMPLEMENTATION SCHEDULE

N°	Task Name
1	**1. GENERAL ACTIVITIES**
2	Project Appraisal by Bank
3	Approval by the Bank's Board
4	Grant Signature and Effectiveness
5	**2. ICT INFRASTRUCTURE**
6	Procurement Process up to Notification
7	Implementation of Infrastructure Works financed by AfDB
8	Operationalization of Digital Community Centres (CCN)
9	**3. ICT APPLICATIONS AND SERVICES**
10	Procurement process of different contracts up to notification
11	Deployment of a National Data Centre (Datacentre)
12	Implementation of an E-Gov Platform
13	**4. INSTITUTIONAL SUPPORT AND CAPACITY BUILDING**
14	Procurement process up to notification
15	Conduct of different studies and procurement of goods and works planned
16	**5. CONTROL AND SUPERVISION OF FIBER-OPTIC WORKS**
17	Procurement process up to notification
18	Supervision and control services for FO works
19	**6. MONITORING AND EVALUATION OF IMPACTS AND SENSITIZATION OF POPULATIONS**
20	Procurement process up to notification
21	Implementation of impact monitoring and evaluation and population sensitization services
22	**7. TECHNICAL AUDIT OF ICT SERVICES**
23	Procurement process up to notification
24	Performance of technical audit of ICT applications
25	**8. FINANCIAL AND ACCOUNTING AUDIT**
26	**9. PROJECT IMPLEMENTATION MANAGEMENT AND MONITORING**



REPORT AND RECOMMENDATION OF THE MANAGEMENT TO THE BOARD OF DIRECTORS ON A PROPOSAL TO AWARD AN ADF GRANT OF UA 13.216 MILLION TO THE CENTRAL AFRICAN REPUBLIC TO FINANCE THE CENTRAL AFRICA FIBRE-OPTIC BACKBONE PROJECT (CAB) – CAR COMPONENT

I. PROJECT STRATEGIC THRUSTS AND RATIONALE

1.1 Project Linkages with Country Strategy and Objectives

1.1.1. Despite its landlocked situation, the Central African Republic (CAR) is a potential hub between the central and eastern regions of the Continent due to its land borders with Cameroon, Congo and the Democratic Republic of Congo (DRC), Sudan, South Sudan and Chad. Among the latter countries, the coastal countries have the following international undersea cable landing points: ACE, EASSy, SAT3, WACS and SAS-1. However, despite these many international outlets, CAR remains the last landlocked country on the Continent not to have fibre-optic land links with its immediate neighbours. Moreover, the extremely low internet and mobile telephony rate is compounded by the virtual non-existence of high-speed wired infrastructure. The Information and Communication Technologies (ICT) in CAR are amongst the least developed in sub-Saharan Africa with an obsolete legal and regulatory framework and public sector stakeholders (Ministry, Regulator and legacy operator, etc.) require capacity building in the areas of sector management and regulation. The establishment of fibre-optic interconnections with the neighbouring countries (coastal, in particular) as well as implementation of appropriate support activities (capacity building, review of the legal and regulatory framework, etc.) provides opportunities to be seized in order to address the abovementioned challenges.

1.1.2. This project falls in line with the National Recovery and Peacebuilding Plan (RCPCA) for the 2017-2021 period as well as the Letter of Development Policy of the State Consolidation Support Programme (PACE) of the Central African Republic. It provides for the establishment of new wired broadband infrastructure combined with the development of more efficient e-government that is open to the rest of the world and capable of providing high-quality services

1.1.3. The project also provides for implementation of a series of activities that will contribute to the emergence of a real digital economy through: (i) the establishment of a national data centre, a real crucible for all the planned central government data resources (data and applications); (ii) the establishment of an interoperability framework that will foster information exchanges between the central government information systems (IS) in order to mitigate or eliminate the risks of capture and depletion of domestic revenue (taxes, duties, levies, etc.) in a post-conflict situation; (iii) preparation of a digital code in order to unlock the sector's considerable development potential which, despite the abovementioned difficulties, remains the 3rd largest tax contributor to the General Government Budget after the energy/oil and gas and agro-food sectors.

1.2 Rationale for Bank's Involvement

1.2.1. Part of the Programme for the Development of Infrastructure in Africa (PIDA), the project is aligned with the Bank's following High-5 priorities: (i) 'Integrate Africa' with the crossed fibre-optic interconnections of the three countries concerned (Cameroon, Congo and CAR) ; (ii) 'Feed Africa' through the establishment of market and climate information systems (MCIS) for farmers/stockbreeders, (iii) 'Industrialise Africa' through the promotion of a digital industry and "improvement of the quality of life of the people" through the widespread use of ICT. It is consistent with the two pillars of the 2017-2021 CSP for CAR: i) Support to agricultural development and infrastructure in support of social inclusion; and (ii) Institutional

capacity and governance strengthening. It is also in keeping with Pillar 1 (Development of Regional Infrastructure) of the 2011-2015 Regional Integration Strategy Paper (RISP) for Central Africa (extended to the end of 2017) aimed at linking the countries of the region with fibre-optic telecommunications networks.

1.2.2. The project is also aligned with the Bank's ICT operational strategy through its pillars 2 (national and regional ICT infrastructure) and 3 (ICT Applications). The same applies to the Bank's 2014-2019 Strategy for Addressing Fragility and Building Resilience in Africa for the 2014-2019 period, especially its Focus Area 1 (Strengthen State capacity and support efficient institutions) by helping to enhance the efficiency of public administration services and its proximity to the citizens and 2 (promote resilient companies) due to the impacts of the extension of connectivity on the Central African territory.

1.2.3. The CAR intends to resolutely engage in the development of high-speed wired infrastructure to support the development of mobile technologies as well as the democratization of internet access countrywide. In addition to the country's landlocked situation, such an ambition sometimes faces major constraints: (i) the prohibitive level of prices due to the combined effects of weak international connectivity (barely exceeding 150 Mbps for the entire country) and the insufficiency of national bandwidth; (ii) the burden of overall taxation applied to the ICT sector and (iii) weaknesses of the existing legal and regulatory framework.

1.2.4. The CAB component, subject of this project, is a natural extension of the Cameroonian and Congolese components of the same operation, whose financing was approved in July 2015 and May 2016 respectively. In a more global framework, the project complements the Trans-Saharan Fibre-Optic Backbone (TSB), also co-financed by the Bank and EU through a similar mechanism, and which proposes to interconnect Algeria, Niger, Nigeria and Chad.

1.2.5. CAR is also faced with complex situations of fragility, the main drivers of which are: chronic instability in the East of the country, spatial exclusion of chiefly rural areas located in the country's interior, gender inequalities, low access to basic services, intercommunity divides, climate change impacts and food insecurity, extreme poverty, the high rate of unemployment, especially youth unemployment. As a key component of development, broadband connectivity and ICT development should have impacts that are likely to contribute to the reduction of fragility and to building the country's resilience. These impacts include: access by the population to the project impact sensitization programmes, increased economic and employment opportunities especially for young people, digital access for communities and its impact on social cohesion as well as on the performance of the public administration; increased business opportunities for stockbreeders and farmers; access to virtual learning opportunities especially for rural communities and women in the production, processing, conservation and marketing of agricultural, livestock and artisanal products likely to increase incomes, reduce poverty and promote empowerment; financial inclusion opportunities. Chapter B.9 of the technical annexes provides further details on the analysis of drivers of fragility and their incorporation in the project's design.

1.3 Donor Coordination

1.3.1. The consultation framework has functioned well with meetings held in Bangui and outside CAR. Despite the absence of a formal framework, the missions and activities of TFPs in CAR have, for the most part, been relatively well coordinated: (i) the preparation of budget support packages in coordination with the World Bank and IMF teams; the Bank participated in their reviews either in Bangui, Douala or Paris; (ii) coordination between development

partners mainly organised by MINUSCA which allowed the organisation of the Presidential and legislative elections; (iii) the existence of a mechanism to combat gender-based violence established with TFP support and operated by UNFPA; (iv) preparation of the 2017-2021 RCPCA which benefited from TFP support and provided an opportunity for dynamic cooperation between the Bank, World Bank, United Nations System, EU and IMF.

1.3.2. Dialogue in the ICT sector builds on permanent exchanges between the World Bank and the Bank in consultation with the MPT. As a complement to this operation, the World Bank has financed the CAB-APL3 project, in particular a review of the legal and regulatory framework and confirmed its wish to continue its support through a new operation to be prepared by the end of 2017. The World Bank also undertook to collaborate closely with the Bank to implement this new operation which will be managed by the PCU/CAB-CAR.

1.3.3. Since the launching of the CAB project in 2007, the Bank has sound experience in the ICT sector through its exchanges with all the countries of the sub-region. Thus, following the Bank's approval of the Cameroon component in July 2015 and the Congo component in May 2016, this operation will enable CAR to establish major interconnection infrastructure with the neighbouring countries, with international norms and standards in order to avoid possible risks of substandard work that could seriously affect the project's sure economic spin-off, not forgetting the attendant advantageous costs.

1.3.4. During project appraisal, the Bank team had exchanges with these main TFPs (mainly the WB and EU). These discussions helped to harmonize the various points of view concerning in particular the project components and possible joint financing with the World Bank of the Project Coordination Unit (PCU)/CAB-CAR. All these partners recognized the importance and relevance of this project which is fully consistent with their priority focus areas in the CAR.

II. PROJECT DESCRIPTION

2.1. Project Objectives and Components

2.1.1 This project's overall objective is to help diversify the economy of the Central African Republic. More specifically, it will lead to an increase in tax revenue and a reduction in the cost of economic and social transactions, digital opening access for rural areas coupled with regional integration through the establishment of fibre-optic infrastructure that will facilitate access to the neighbouring countries (Cameroon and Congo) and renewal of the social contract through the creation of job opportunities for young people in particular.

2.1.2 Establishment of this fibre-optic infrastructure will help reduce the cost of access to higher-quality ICT services. It will also help to generate additional resources for CAR through the economic activities created on the territory of the Central African Republic and will contribute to strengthening social cohesion by improving digital connectivity between different communities as between government services and users.

A. ICT INFRASTRUCTURE (MUA 17.942)

2.1.3 In terms of ICT infrastructure, the project will consist in the laying of 1,000 km of fibre-optic cable along the following two roads: (i) Bangui-Berberati-Gamboula (to Kentzou on the border with Cameroon); and (ii) Bangui-Berberati-Nola-Bayanga (towards Bomassa, on the border with Congo). There are also plans to establish a local urban loop of 50km in Bangui to connect the national Datacentre to distant administrative sites while strengthening the collection

network in the capital. This component also includes the establishment of twenty Digital Community Centres (CCN) along the project roads. The CCNs are intended to be community focal points especially for young people and women to build community momentum and restore social cohesion. They will have a multi-service ICT access system, in particular: (i) Internet for access to general information and employment opportunities; (ii) a virtual library to build women's knowledge in the areas of law, income-generating activity practices (agricultural product conservation and processing methods and techniques) and mother and child health (hygiene and nutrition, etc.); and (iii) the availability of information on supply and demand for agricultural products as well as on prices in order to facilitate market access and improve business opportunities; etc.

B. ICT APPLICATIONS AND SERVICES (MUA 2.778)

2.1.4 In addition, and through its component on ICT applications and services, the project includes the establishment of a national data centre (Datacentre) which will serve as an infrastructural base for the development of e-government. The establishment of an e-government platform will help to fill the application layer for the purposes of establishing on-line administrative services for the benefit of CAR users. This will help to improve relations between the public authorities and citizens and enhance the quality of public services as well as the efficiency of the central and local authorities. This platform will serve as a crucible for all the central government information systems (public finance management, customs, taxes, etc.) so that all the applications used can function in a robust, reliable and secure environment in order to limit (or eliminate) losses of resources due, among others, to their inoperability.

C. INSTITUTIONAL SUPPORT AND CAPACITY BUILDING (MUA 3.61)

2.1.5 In terms of institutional support and capacity building, it makes provision for the establishment and operationalisation of the Digital Training Centre (CFD) at the University of Bangui which will, on the one hand, contribute to the development of the skills of young Central Africans to create job opportunities brought about by the promotion of ICT services and, other hand, make the University of Bangui into an appropriate framework for the promotion of ICT business incubators and start-ups with potential for creating jobs and economic opportunities. There are also plans to set up an e-learning system to be used as a tool to implement the partnership programme envisaged with the other universities and twinning in the area of education and scientific research. The CFD will also be used as a reference centre for developing appropriate curricula in the area of ICT for the benefit of the University of Bangui but also for other institutions operating in CAR.

2.1.6 This operation also includes the establishment of an incubator to help young Central African entrepreneurs create and promote their start-ups that take advantage of the CFD ecosystem. An important capacity building is planned for the benefit of the different national stakeholders. Thus, several studies will be carried out to complete the institutional, legal and regulatory arsenal (broadband infrastructure master plan, mobile financial services, etc.) with a view to correcting the aforementioned shortcomings that hinder the emergence of a digital economy. It should be noted that these studies will be used to prepare the next phases of this operation (e-government strategy, digital identity, etc.).

2.1.7 With regard to the legal and regulatory framework of the ICT sector, the project will provide considerable support mainly to: (i) the MPT to establish a public-private partnership (PPP) to manage the national fibre-optic backbone; and (ii) the Electronic Communications and Postal Authority (ARCEP) to regulate the wholesale market through the integration of a

framework governing the carrier-of-carriers for the purpose of future development by the national and even, in time, regional broadband infrastructure. This back-up also includes support for the integral application of the open access principle on each fibre-optic link financed by the Bank in order to provide minimum conditions for competition on access prices that will be highly advantageous to end users in CAR. In this regard, note should be taken of the preparation of economic model determining the costs of access to national and international connectivity to remove the barriers at entry to the fibre-optic segment.

2.1.8 In order to ensure the sustainability, on the one hand, of the project outputs (Datacentre, e-government platform, etc.) and, on the other hand, as part of the forthcoming implementation of the National Strategic Plan (NSP) 'Digital Central Africa 2020', there are plans to support the MPT in transforming the PCU/CAB into a National ICT Agency (ANTIC) which will be the executive branch of the Ministry concerning the Central African Republic Government's digital policy. The CAR will fully leverage both the Agency's technical expertise but also the pooling of central government resources with a view to streamlining public spending.

D. PROJECT MANAGEMENT (MUA 1.446)

2.1.9 The project includes a component to support the operation of the PCU/CAB-CAR by covering staff salaries and related expenses.

2.1.10 In order to achieve the above–mentioned objectives, the project is structured on the basis of the four components summarized in the following table:

Table 2.1: Project components

No.	Component Name	Description
A	**ICT INFRASTRUCTURE** (UA 17.325 million)	A.1 – Implementation works on fibre-optic infrastructure; A.2 – Control and supervision of fibre-optic works and compensation for the population; A.3 – Support to the securing of fibre-optic works A.4 - Operationalisation of the Digital Community Centre (CCN).
B	**ICT APPLICATIONS AND SERVICES** (UA 2.778 million)	B.1 – Roll out of a National Datacentre (Datacentre)) ; B.2 – Establishment of an e-government platform.
C	**INSTITUTIONAL SUPPORT AND CAPACITY BUILDING** (UA 3.61 million)	C.1 - Studies; C.2 – Technical assistance to the Electronic Communications and Postal Regulatory Authority (ARCEP) ; C.3 – Support to educational establishments (Bangui and University and Vocational High School) ; C.4 – Support to the establishment and operationalisation of a National ICT Agency (ANTIC) ; C.5 – Technical support to the Ministry of Posts and Telecommunications; C.6 – Capacity building for environmental protection agencies organisations (DGE and WWF).
D	**PROJECT MANAGEMENT** (UA 1.446 million)	D.1 – PCU/CAB-CAR staff; D.2 – Miscellaneous charges; D.3 – Technical, procurement, accounting and financial audits.

2.2. Technical Solutions Retained and Other Alternatives Explored

2.2.1 This project concerns the installation and commissioning of 1,050 km of fibre-optic cable also including active equipment as well as energy and air-conditioning systems. This line concerns one main route (Bangui – Boali – Bossembélé–Yaloké–Bawi–Baoro-Carnot–Berbérati.) with the following two feeders: (i) Berbérati-Gamboula (border with Cameroon) and; (ii) Berbérati–Nola-Bayanga-Bomassa (border with Congo). This is supplemented by the Bangui urban loop. The construction of these routes will enable CAR to begin the operations and development of its national fibre-optic backbone and provide it with its first international outlets with Cameroon and Congo.

2.2.2 Satellite or digital radio links are currently presented as the two main alternative technical options for the deployment of fibre-optic. Indeed, the use of satellite links is impeded by the combined effect of high access prices currently charged, the quality of service delivery which does not meet fibre-optic standards and capacity weaknesses inherent in the technologies used. Despite the development of new satellite offers such as O3b, using low orbit satellites, the level of access costs remains fairly high. Indeed, the satellite remains a technology used as for redundancy purposes allowing operators to offset the unavailability (mainly due to technical damage) of fibre-optics, but with operating costs two to ten times higher than the latter. Consequently, the satellite may not be a sustainable alternative to fibre-optics.

2.2.3 Digital radio links for their part extend the scope of high-speed internet, especially in poorly served areas. However, while useful for point-to-point traffic (to connect base station with collection networks), they cannot handle the large flow of data expected to pass through a fibre-optic backbone. It is, therefore, necessary in CAR to migrate mobile operators to 3G even 4G in the near future which will require a significant increase in the internet access level and the required bandwidth in the country. Consequently, fibre-optics appear to be the best option which overcomes/eases the constraints presented by the alternative solutions.

2.2.4 It is also worth noting that manual laying (as opposed to mechanical) was retained for this project on the basis of the engineering designs prepared. Indeed, this option (despite its slightly higher cost than mechanical laying) has positive impacts in terms of higher incomes for the population concerned as well as indirect support under the project's sensitization component for them.

Table 2.2 : Alternative solutions explored and reasons for rejection

Alternative solution	Brief description	Reason for rejection
Mechanized laying of fibre-optic cable	Use of an excavator to dig trenches along the two routes retained under this project.	Quality risk relating to the lack of familiarity with the different reliefs concerned which does not facilitate the use of this technique. Moreover, manual laying will generate incomes for the work force recruited from the localities crossed prioritizing local residents for the project.
Supply of 'dark' fibre (without active equipment)	This only entails in this particular case the supply of optical fibre without transmission equipment.	Inappropriate solution for telecom operators are less likely to invest in infrastructure (especially in CAR) and are therefore more interested in hiring capacity.

2.3. Project Type

2.3.1 The ADF grant will fully finance the four project components of the project. Co-financing by the European Union through the AfIF will complement the proposed financing plan given the financial situation of the Central African Republic which does not allow the country to release resources for the national counterpart fund. As a result, a grant was considered to be an appropriate instrument for the Bank's involvement in the project.[1]

2.4. Estimated Project Costs and Financing Arrangements

2.4.1 The total cost net of taxes and customs duties amounts to UA 26.412 million (i.e. EUR 33.28 million). The provision for physical contingencies is 3% of the base cost on the ADF funding. The provision for price escalation equals 2% of the base cost plus physical contingencies, on the ADF funding as well. This cost was calculated on the basis of feasibility

[1] It should be noted that the World Bank's involvement in the CAR ICT sector is done on the basis of this type of operation (investment project).

studies conducted, exchanges with other partners and similar recent or ongoing contracts in the region.

2.4.2 All the project costs will be covered by the Bank and European Union in order to end the CAR's existing digital isolation and meet the conditions for digital emergence, a key driver of the CAR's economic recovery. Indeed, in spite of the unfavourable environment, the ICT sector is the 3rd largest contributor to the national budget and could possibly become the first contributor in the near term as a result of the expected outcomes of this operation on the entire digital ecosystem (legal and regulatory framework, e-government, training, entrepreneurship, etc.) of the country

The summary of the estimated costs by project component is presented in the following table:

Table 2.3 : Summary of estimated costs by component of the entire project

Components	EUR Million			UA Million		
	F.E.	L.C.	Total	F.E.	L.C.	Total
A. ICT INFRASTRUCTURE	18.086	4.521	22.607	14.354	3.588	17.942
B. ICT APPLICATIONS & SERVICES	2.800	0.700	3.500	2.222	0.556	2.778
C. INSTITUTIONAL SUPPORT AND CAPACITY BUILDING	3.639	0.910	4.549	2.888	0.722	3.610
D. PROJECT MANAGEMENT	1.457	0.364	1.822	1.157	0.289	1.446
BASE COST	25.982	6.496	32.478	20.621	5.155	25.776
Physical contingencies	0.380	0.095	0.475	0.302	0.075	0.377
Financial contingencies	0.262	0.065	0.327	0.207	0.052	0.259
TOTAL	**26.624**	**6.656**	**33.280**	**21.130**	**5.282**	**26.412**

The Summary of Estimated Costs by Project Category is presented in the following Table:

Table 2.4 : Summary of costs by project expenditure category

Expenditure categories	EUR million			UA million		
	F.E.	L.C.	Total	F.E.	L.C.	Total
A. GOODS	2.161	0.540	2.701	1.715	0.429	2.144
B. WORKS	17.718	4.430	22.148	14.062	3.516	17.578
C. SERVICES	4.933	1.233	6.167	3.915	0.979	4.894
D. OPERATION	0.576	0.144	0.720	0.457	0.114	0.571
E. OTHER	0.594	0.149	0.743	0.472	0.118	0.590
BASE COST	25.982	6.496	32.478	20.621	5.155	25.776
Physical contingencies	0.380	0.095	0.475	0.302	0.075	0.377
Financial contingencies	0.262	0.065	0.327	0.207	0.052	0.259
TOTAL	**26.624**	**6.656**	**33.280**	**21.130**	**5.282**	**26.412**

2.4.3 The project will be jointly financed by the Bank and the European Union (UE) in accordance with the indicative financing plan below. The Bank will intervene with an ADF grant representing 50.04% of the project's total cost, of UA 13.216 million from the country's resources: (i) from the Performance Based Allocation (PBA) to the tune of MUA 5.716; (ii) and the Transition Support Facility (TSF) for an amount of MUA 3.0 and (iii) completed by the Regional envelope for an amount of MUA 4.5 under ADF-14. The EU, for its part, will intervene with a grant of MUA 13.196 from the Africa Investment Facility (AfIF) which was approved in September 2016 and which represents 49.96% of the project's total cost. To that

end, and in accordance with the Bank's policy on eligible expenditure from the Bank's ADF window, the underlying reasons for the failure to use national counterpart funds for this operation are explained in detail in Appendix II.

Table 2.5 :Summary of project costs by source of financing

Sources of financing	EUR million			UA million			Percentage
	F.E.	L.C	Total	F.E.	L.C.	Total	
ADF Grant	13.322	3.331	16.653	10.573	2.643	13.216	50.04%
EU Grant (AfIF)	13.302	3.325	16.627	10.557	2.639	13.196	49.96%
TOTAL	**26.624**	**6.656**	**33.280**	**21.130**	**5.282**	**26.412**	**100%**

Table 2.6 : Summary of project components by source of financing (UA million)

Components	ADF Grant	EU Grant (AfIF)	Total
Component A : FO Infrastructure	7.631	10.679	18.310
Component B : ICT Applications and Services	2.918	0.000	2.918
Component C : Institutional Support and Capacity Building	1.654	2.036	3.690
Component D : Project Management	1.013	0.482	1.495
TOTAL	**13.216**	**13.196**	**26.412**

2.4.4 The expenditure schedule (in UA million) by source of financing is presented in the following Table:

Table 2.7 : Expenditure schedule by source of financing (UA million)

Components	30%	40%	20%	10%	100%
	2018	2019	2020	2021	Total
Component A : FO infrastructure	5.383	7.177	3.588	1.794	17.942
Component B : ICT applications and services	0.833	1.111	0.556	0.278	2.778
Component C : Institutional Support and Capacity Building	1.083	1.444	0.722	0.361	3.610
Component D : Project management	0.434	0.578	0.289	0.145	1.446
BASE COST	7.733	10.310	5.155	2.578	25.776
Physical contingencies	0.113	0.151	0.075	0.038	0.377
Financial contingencies	0.078	0.104	0.052	0.025	0.259
TOTAL	**7.924**	**10.565**	**5.282**	**2.641**	**26.412**

2.5. Project Area and Beneficiaries

2.5.1 Project Area: This project has a national scope but a regional impact. The 1,050 linear km of fibre-optic cables will be deployed over a main route (Bangui – Boali – Bossembélé– Yaloké–Bawi–Baoro-Carnot–Berbérati.) with the following two feeders: (i) Berbérati-Gamboula (Border with Cameroon); and (ii) Berbérati – Nola-Bayanga-Bomassa (Border with Congo). Both these routes are located in the prefectures of Ombella-M'poko, Nana-Mambere, Mambere-Kadeï, Sangha-Mbaere. In addition to the local residents along these roads, the project will impact all the inhabitants of CAR and, in turn, the populations of the sub-region through a reduction in the costs of ICT services expected as a result of the integration of the telecommunication systems of the countries of Central Africa. In addition, operationalisation of the 20 CCN will strengthen the socio-economic inclusion of rural dwellers countrywide,

especially hinterland inhabitants, due to the provision of a range of public services and meeting and sharing areas to forge closer social ties.

2.5.2 Direct Project Beneficiaries: The project's direct beneficiaries are all the country's inhabitants and beyond, even in the entire sub-region. Indeed, once the links are established to connect the neighbouring countries to the CAR fibre-optic backbone, the population of the eastern regions that are the most affected by the socio-political crisis, will ultimately also be beneficiaries through the project's knock-on effect. As regards ICT applications and beneficiaries, the potential beneficiaries are the entire CAR population through the use of the e-government platform (Internet gateway, on-line administrative services, etc.). It is also expected that at least 20,000 beneficiaries (including 8,000 women) will be introduced to the use of ICT tools per year. Finally, 20 students (including 12 girls) completing their Masters in ICT–related disciplines (telecommunications, electronics, IT and optics) at the University of Bangui could be awarded a Doctorate scholarship as part of ICT training of trainers. This programme will help to improve the quality of training at the University of Bangui by building the ICT capacity of faculty members. The country's telecom operators will also benefit from the project's achievements through facilitating the expansion of their services in all the localities served by fibre-optics as well as terrestrial fibre-optic outlets to neighbouring countries (Cameroon and Congo).

2.6. Participatory Process for Project Identification, Design and Implementation Including Active Private Sector Participation

2.6.1 A participatory process was adopted both during the preliminary designs and during the environmental and social assessment during the preparation and appraisal stages. These consultations helped to improve the project's design both during the preparation of the components and implementation arrangements.

2.6.2 During the identification, preparation and appraisal phases, all the stakeholders were consulted by the public administration (MEPC, MPT, etc.) and at private sector level (Telecel, Orange Azur and Moov).The exchanges contributed, for example, to the definition of the contents of technical assistance to ARCEP planned under the 'Institutional Support and Capacity Building' component in order to provide minimum conditions for competition in the sector through non-discriminatory access to all fixed and mobile operators with the required authorizations in CAR. Moreover, support for the establishment of a public-private partnership (PPP) to manage the national fibre-optic backbone will ensure effective application of the principle of open access to all stakeholders in the abovementioned sector.

2.6.3 As part of the environmental and social assessment, public consultations were also organised along the project roads and validated in September 2012. These consultations were updated in August 2017. The community meetings were held in each village concerned by the fibre-optic route mostly in the presence of village chiefs and notables. People expressed their concerns and main expectations as well as their support for the project in a development perspective. The minutes of these meetings have been prepared and may be consulted at the PCU/CAB-CAR.

2.6.4 In general, MPT will prepare and implement a communication plan targeting information, sensitization and social mobilization of the local communities, and public and private operators in the sector during project implementation. This plan will also communicate

the joint contributions of the European Union and the Bank to realize this key operation for CAR and the sub-region.

2.7. Bank Group Experience and Lessons Learned Reflected in Project Design

2.7.1 The Bank's active portfolio as at 31 August 2017 comprised 10 public sector operations representing a total envelope of UA 70.60 million (MUA), compared to 11 projects for a net amount of MUA 111.85 in October 2016. This is due to the closure of two (2) projects: the Transport Facilitation Programme on the Douala-Bangui Corridor for an amount of MUA 32 and the Community Development and Vulnerable Groups Support Project for an amount of MUA 8. The portfolio financed from ADF-13 resources (ABF and TSF), AREI, and GEF, confirms the dominance of national projects (51 %) in terms of volume compared to 49% for regional projects. The national portfolio comprises four public investment operations and three institutional support operations.

2.7.2 The main constraints and problems encountered in the implementation of infrastructure projects are: (i) weak procurement implementation capacities; (ii) increased cost of works; and (iii) non-compliance with operational and functional specifications defined in the specifications for the related feasibility studies.

2.7.3 In light of the foregoing, the Bank will draw on the following measures already taken or planned during the project's implementation: (i) strict monitoring of the Bank's procurement procedures; (ii) incorporation of physical contingencies in the project; (iii) building the capacity of the PCU/CAB-CAR by providing project management assistance (PMA) to structuring activities such as fibre-optic works, establishment of the Datacentre and the e-government platform.

2.7.4 Finally, this operation will draw on the lessons learned from implementation of the other components of the same project being implemented in Cameroon and in Congo.

2.8. Key Performance Indicators

2.8.1 The core sector indicators (CSI) on which the project will focus are: (i) penetration of internet services; (ii) the proportion of mobile telephone expenditure as a % of annual GNI per capita; (iii) the price (USD/month) of one Mbps to Europe; (iv) the number of beneficiaries of on-line administrative services (information and transactional) ; (v) the number of users of Digital Community Centres (CCN) ; (vi) the number of people benefiting from solar panel connectors; (vii) the number of students benefiting from offers of training in fibre-optics ; and (viii) the number of people with access to training programmes (ICT, entrepreneurship, etc.)

2.8.2 The responsibility for collecting and analysing data will be assigned to the new National ICT Agency (ANTIC) which could be supported by the National Institute of Statistics (INS) of CAR. In this case, the INS, which is familiar with this type of exercise, could: (i) establish the baseline situation for these indicators at project start-up; (ii) carry out an impact assessment on project completion; and (iii) continue the assessment after the commissioning of the planned links.

2.8.3 In order to achieve these indicators within the stipulated time frames, in addition to those related to outcome, implementation performance indicators were established relative to the Bank's institutional performance indicators. These concern mainly: (i) the effectiveness period; (ii) the time taken to fulfil the conditions precedent to first disbursement of the funds;

(iii) procurement timeframes; and (iv) disbursement rate trend on the basis of the expenditure schedule. All these indicators will be monitored during supervision missions and in the project's routine management.

III. PROJECT FEASIBILITY

3.1. Economic and Financial Analysis

3.1.1. An economic and financial rate of return study was conducted on the following components:

i. Establishment of fibre-optic infrastructure;

ii. Roll out of a National Data Centre (Datacentre) ; and

iii. Establishment of an e-government platform.

The macroeconomic assumptions concern an inflation rate of 3% and stability of the CFAF/Euro exchange rate. The financial discount rate is 2% and the economic discount rate retained is 10%.

On the basis of these assumptions, the main results are indicated below:

Table 3.1 : Economic and financial assessment

FIRR; FNPV:	26.49% ; 157.572 million Euros @ 2%
EIRR; ENPV:	29.15% ; EUR 57.659 million @10%

3.1.2. The project's economic life span is 15 years. On the basis of the assumptions made, the FIRR is 26.49% and the EIRR 29.15%. The economic and financial analysis shows both the project's economic and financial feasibility

3.1.3. A project sensitivity test was also carried out on the basis of the following three parameters: (i) a 10% increase in investment costs; (ii) a 10% drop in revenue; and (iii) a combination of the two previous criteria. The results of this analysis presented in the following Table (details of which are repeated in Technical Annex B.7) show slight variations which in no way affect the project's financial and economic feasibility.

Table 3.2 : Sensitivity test

Assumptions	FNPV (million Euros)	ENPV (million Euros)	FIRR (%)	EIRR (%)
S0 : Baseline scenario	157.572	57.659	26.49	29.15
S1 : 10% increase in investment costs	152.83	54.46	24.57	27.09
S2 : 10% drop in revenue	137.07	48.36	24.38	26.71
S3 : Scenarios 1 and 2	132.32	45.11	22.53	24.74

3.2. Environmental and Social Impact

3.2.1. ***Environmental Aspect***: The project was classified in Category 2, in compliance with the requirements of the Bank's Integrated Safeguards System, the Environmental and Social Impact Assessments (ESIA) along with a Social and Environmental Management Plan (ESMP) were validated in September 2014 by the Ministry responsible for the Environment. They were updated in August 2017 with the additional inclusion of the Datacentre and Digital Training Centre (CFD) of the University of Bangui. The ESMP summary has been published on the Bank's website since 8 November 2017. Fibre-optic cable will only be deployed on the rights-of-way of the roads concerned.

3.2.2. In view of the roads retained for deployment and equipment installation sites, the project environmental scope is regional. The activities and installation of fibre-optic cable and the chambers shall be strictly installed along the rights-of-way of the roads used. The Datacentre and CFD will be established on specific sites identified and already free of expropriation with the required administrative authorizations.

3.2.3. The expected impacts generated by the civil works on the aforementioned roads are (i) risk of inconvenience of access by local residents through a lack of signage, open trenches that cannot be crossed, (ii) compensation for the repair of some affected dwellings, (iii) obstruction of access by miscellaneous waste deposits; (iii) risks of road accidents of which the victims will be workers wrongly positioned on the roads. On the two roads, the deployment of fibre-optic cable by cable jetting will generate some periodic sound nuisance of very short duration (compressor for compressed air). The expected impact on the natural and physical environments, concerns poor waste management (small segments of ducts and fibre, empty abandoned ductwork, slurries of discarded cement mortar and packaging etc.).

3.2.4. These impacts identified are accompanied by generally adequate measures for the project's environmental integration. The monitoring of these mitigation measures recommended under the Environmental and Social Management Plan (ESMP), will be under the responsibility of the PMU/CAB assisted by a project management assistance (PMA) mission.

3.2.5. The 'ICT Applications & Services' component does not generate any negative environmental impacts. It contributes to a reduction in movements and, as a result, sound nuisance, road accidents and reduces greenhouse gas emissions. There are also many positive impacts due, inter alia, to: (i) the creation of direct jobs related to the operation of equipment, and (ii) improvement of the living environment of the populations of the adjoining areas and of the entire country through stronger connectivity and access to all kinds of information.

3.2.6. ***Climate Change:*** ICTs are not eligible for climate change categorization. However, it must be stressed that the project will help to reduce the carbon footprint in the electric power sector in CAR by the provision of solar panels generating 146,000 kWh/year for the 20 CCN planned. It will contribute to the avoidance of 108 tCO2/year. ICT are also responsible for a sharp reduction in greenhouse gases. Implementation of ICT applications and services (energy, environment, water and sanitation, etc.) will facilitate the adoption of innovative solutions like the smart grid/metering in order to mitigate climate change-related risks while allowing the most vulnerable to adapt to the new climatic conditions.

3.2.7. ***Social Impacts:*** the project area covers the entire Central African territory. Its positive externalities will benefit the entire population of CAR and the sub-region. The project's main

positive impacts are: (i) improvement of the living conditions of the rural communities by building the capacity of women's centres and CCN in the project area; (ii) opening up of the project area; (iii) creation of job opportunities and improvement of incomes; (vi) more efficient operation of community infrastructure. Contractors will be encouraged to recruit local labour to dig trenches, lay ducting, fibre-optic cable etc. Improved access to ICT will also contribute to the reduction of exclusions between different communities within the population and strengthen social cohesion.

3.2.8. ***Involuntary Resettlement:*** No resettlement is envisaged under this project.

3.2.9. ***Gender and Specific Activities for Women:*** In CAR, women represent 53.7% of the work force and 74% of them are employed in the primary sector. They are penalized by a higher illiteracy rate than for men. Indeed, about 80% of 15 to 49 year-old women have no access to education. The primary school enrolment rate was 81.3% for girls in 2012. In legal terms, the country has adopted: i) Law 06.005 of 20 June 2006 on reproductive health which 'guarantees equality before the law and in dignity of all individuals concerning reproductive health without any gender-based discrimination', ii) the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) ratified in 1991, iii) the Convention on the Rights of the Child, ratified in 1992, and iv) African Charter on Human and Peoples Rights and its additional Protocol. Gender-based violence (GBV) has increased in the context of crisis and insecurity. The project provides for the establishment of CCN which will serve as an appropriate framework for building knowledge on women's rights and access to justice, the availability of information and training on income-generating activities for women's empowerment and socio-economic reintegration. Doctorate scholarships will be mainly awarded to a majority of young female Masters students at the University of Bangui in order to build its capacity so that it can operationalise the Digital Training Centre, in particular.

IV. IMPLEMENTATION

4.1. Implementation Arrangements

4.1.1. This project's executing agency is the Ministry of Posts and Telecommunications (MPT) through the Coordination Unit for the CAR CAB project (PCU/CAB-CAR) established since 2009 on World Bank financing. This unit was fully staffed until the project's completion (in March 2016).

4.1.2. Since the project's closure, the only active members are the Coordinator and Procurement Specialist (PS), the current acting Coordinator. This limited unit therefore meets the conditions to support the project's implementation. The remainder of the team will be recruited on the basis of open competition in order to complete the following missing staff: (i) technical expert, (ii) environmental officer; (iii) Administrative and Finance Officer (AFO); (iv) Accountant; (v) Administrative Assistant; (vi) Accounting Assistant; (vii) Support Staff (drivers, maintenance workers, etc.).

4.1.3. The PCU/CAB will ensure the technical monitoring of project implementation; (i) ensure that the State honours its commitments; (ii) provide monitoring and evaluation; and (iii) prepare estimated budgets and ensure they are available within the stipulated timeframe; (iv) prepare the project's six-monthly and yearly status reports (v) carry out the project's financial management (verification of invoices, submission to the Bank of direct payment requests) ; (vi) ensure the timely submission of project accounting and financial audit reports; and (vii) prepare the Borrower's completion report for submission to the Bank.

4.2. Procurement Arrangements

4.2.1. All procurements of goods, works and services financed by the Bank's resources (including those of the European Union), will be made in accordance with the Procurement Policy for Bank Group-Funded Operations ('AfDB Procurement Policy'), October 2015 version and by Procurement Methods and Procedures described by the Operations Procurement Manual of the Bank Group. Details of the procurement arrangements (system, cost, schedule, method and type) agreed upon between the Donee and the Bank, are described in Technical Annex B.5.

4.2.2. Organisation of procurement arrangements: The PCU/CAB procurement expert will implement the procurement processes planned under the project as defined in Technical Annex B5.

4.2.3. Country Procurement Assessment Report (CPAR): In order to take into account the project specificities, the Bank has assessed the risks at national, sector and project levels and the capacities of the executing agencies. The results of these assessments concluded that there was a high procurement-related risk and determined, subject to the application of the mitigation measures proposed in paragraph 5.9 of Annex B.5, that project procurements will be made in accordance with the Bank's system.

4.3. *Financial Management and Disbursement Arrangements*.

4.3.1. The Bank's financial management strategy for development projects is to maximize the use of the national public finance management systems of regional member countries (RMC) In the case of CAR, the fiduciary risk assessment of the national system carried out by the Bank in September 2016 revealed a high fiduciary risk. Under these conditions, the Bank prefers a parallel system for the financial management of its projects. It was, therefore, agreed that the management system established at the MPT's PCU/CAB initially established to implement the CAB project financed by the World Bank would be maintained[2]. The PCU/CAB has a procedures manual for CAB management and accounting software. As a result, the mission assessed the existing capacities of the aforementioned unit in order to ensure that its financial management system was adequate and would allow for the transparent, effective and efficient management of the project's resources as well as the safeguard of its assets and production of reliable financial information.

4.3.2. The assessment showed that the fiduciary risk is substantial because of the shortcomings of the existing system in the current situation of the PCU/CAB in relation to the management requirements for the new project. Improvement measures have been recommended to mitigate this risk. Indeed, the contracts of the fiduciary staff have expired since 2016 with the closure of the CAB project. Most of them are currently working elsewhere. The accounting software is obsolete and could not perform efficiently for the management of this project. The administrative, accounting and financial procedures manual requires updating to adapt to the new context. The main improvement measures recommended by the missions are i) the recall of the old fiduciary team comprising an accountant, an AFO and an internal auditor, failing which it will be necessary to recruit others on the basis of a competitive process; ii) the procurement of new software, iii) updating of the procedures manual and iv) opening of a bank account.

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[2] The PCU/CAB structure was comprised of a Coordinator and a technical team including an Administration and Finance Officer and an accountant who made up the financial staff with an internal auditor.

4.3.3. ***Audit Arrangements***: the annual audits of the CAB project financed from the Grant resources will be conducted by an independent firm of external auditors to be recruited on a competitive basis and in accordance with the Bank's standard Terms of Reference (ToR). The PCU will be responsible for recruiting the external auditor and should seek the prior opinion of the Bank and the audit costs will be borne by the project. There are plans for an annual audit to be conducted throughout the project's duration and the first project audit will cover an 18-month period from the Grant's effectiveness or first disbursement date. The external auditor's Terms of Reference (ToR) will be adapted and harmonized with those of the European Union to take into account the project specificities and validated with a view to recruiting an independent firm with experience of Bank-financed projects. The audits will be carried out in compliance with ISA/ISSAI international standards. The financial statements audited by the independent firm will be submitted (see table for frequency) to the Bank no later than six months after the closure of the accounting period concerned.

4.3.4. ***Disbursement Arrangements***: The disbursement of ADF and EU grant resources will be made in accordance with the Bank's Disbursement handbook once the Grant Agreement is signed and the condition precedent to first disbursement fulfilled. In general, three methods have been retained for the disbursement of funds at the Bank: (i) the direct payment method, (ii) the revolving fund or special account method, and (iii) the reimbursement method.

4.4. Monitoring

4.4.1. Implementation of the different components will be monitored by the CAB-CAR Project Coordination Unit (PCU/CAB-CAR). The joint EU/Bank supervision missions and inter-donor coordination meetings will also provide opportunities to monitor the performances of this project in terms of physical and financial outputs.

4.4.2. In order to bolster the existing system it was agreed with the Central African Republic Authorities to use a Steering Committee (SC) which will be under the oversight of the MPT and will assist the PCU/CAB in determining the broad lines of the CAB project. This will be the same for the necessary guidelines and recommendations to improve the strategy and the project implementation methods as well as the validation of documents and project deliverables. The composition of this Committee will have to be reviewed in order to reflect the participation of all the project stakeholders. The two project donors (EU and Bank) will also be represented as observers. A Technical Committee (TECHCO) will also be established to assist the PCU/CAB in preparing the technical guidelines for the different project activities. In addition, a CAB Project Liaison Committee (CABLC) will be established to serve as a framework for supranational exchanges of the countries concerned in order to coordinate the actions of the different national stakeholders in issues relating to the principle of open access at the regional level and the management of call termination rates, etc.

4.4.3. In order to assess the level of achievement of its development objectives, a socio-economic impact monitoring and evaluation system will be established and implemented by the PCU/CAB. Monitoring of the project's environmental and social impacts will be carried out directly by the PCU/CAB. As regards implementation of the ICT Applications and Services component, there are plans to perform a technical audit of each expected output in order to ensure its compliance with the original specifications on the understanding that the construction of fibre-optic infrastructure will be the subject of specific project management to supervise the scheduled works on behalf of the recipient.

Table 4.1: Project monitoring and supervision

Timeframe	Stage	Procedure	Feedback Loop
Q1 -2018	Project launching	Field mission	Status Reports
Q2 – 2018	Project review – procurement	Field/supervision mission	Status reports/ Aide-mémoire
Q3&Q4-2018	FO infrastructure works & national data centre	Field/supervision mission	Status reports/ Aide-mémoire
Q1&Q2&Q3&Q4-2019-2020-2021	FO infrastructure works & national data centre	Field/supervision mission	Status reports/ Aide-mémoire
Q3 -2022	Guarantee period and first year of activities	Field mission	Status reports/ Aide-mémoire Completion report

4.5. Governance

4.5.1 Aspects relating to governance, procurements and financial management were analysed during the project appraisal. In general, establishment of the e-government platform planned under the project (with central government IT systems including finance) will mitigate these risks by enhancing the efficiency of public spending in the ICT sector. In addition, the establishment planned under the project of the National ICT Agency (ANTIC), responsible for the management of the e-administration platform will provide permanent institutional anchoring for ICT development in CAR.

4.5.2. In the procurement process for international competitive bidding, the governance-related risk will be mitigated by the fact that the Bank will ensure strict application of its related rules as well as through ex ante reviews. The Bank's supervision missions as well as independent technical and financial audits will ensure conformity between the specifications, services, services and works effectively carried out, disbursements and the Grant Agreement.

4.5.3. One of the main features of the ICT sector in CAR is the application of relatively affordable prices (compared to the other countries of the sub-region) by mobile and fixed telephone operators as a result of the real competition created by the Central African Republic Authorities under the supervision of the Electronic Communications and Postal Regulatory Authority (ARCEP). At the same time, it should be stressed that the real ICT potential continues to be impeded by a lack of national broadband infrastructure and strong fiscal pressure against a backdrop of budgetary tension as a result of the country's post-conflict situation.

4.5.4 To address these challenges, the operation includes the preparation of an economic model on determining the costs of access to national and international connectivity in favour of ARCEP to enable it to scrutinize the price catalogue of the legacy operator and ensure that the principle of open access is being applied guaranteed by the regulation of the sector for all operators with a license. The project also provides technical assistance for the establishment of a public-private partnership (PPP) for the management of the entire national fibre-optic backbone to be created under this project.

4.6 Sustainability

4.6.1 Maintenance of the national fibre-optic backbone in CAR will be managed by a private partner to be recruited through an open call for applications. This private partner will be responsible for the technical operation of the national fibre-optic backbone (including the section to be laid as part of this project) and the marketing of available capacity for interested operators. The SPV will cooperate with the *Société de Patrimoine National* [National Heritage Company] (SPN) which will also be established and is the owner of the infrastructure. It will be responsible for the development of the country's broadband infrastructure in order to cover, in time, the entire national territory. The project also proposes to regulate the carrier's carrier

in order to promote the deployment of regional fibre-optic infrastructure by private operators so as to replicate the success achieved in this area in Southern and Eastern Africa in particular.

4.6.2. Moreover, the planned transformation of the PCU/CAB-CAR into a National ICT Agency (ANTIC) will provide the MPA with a fully operational delegated contracting authority for the project's duration in order to implement all the projects planned under the National Strategic Plan, 'Digital Central Africa, 2020' (NSP DC2020) the comprehensive study on which is also taken into account in this operation. ANTIC will be able to count on the establishment of the National Data Centre (Datacentre) and the e-government platform to be able to generate income to ensure its sustainability and development. The project will support the Agency in making available part of the Universal Access Fund in order to be able to implement the NSP DC2020.

4.7 Risk Management

4.7.1. **The risks which could impede the achievement of the outcomes concern**: (i) security instability related to the activism of rebel groups (Seleka and Anti-Balaka) ; (ii) non-compliance with fibre-optic cable laying standards; (iii) no impact on prices; and (iv) early degradation of fibre-optics due to lack of maintenance.

4.7.2. **Mitigation Measures**: (i) Measures taken by the Government of the Central African Republic in collaboration with the international community (MINUSCA) to pacify the entire territory knowing that the routes chosen are the ones with the least security risk; (ii) an undertaking by the government to apply the guidelines of the International Telecommunications Union (ITU); (iii) technical assistance to ARCEP to establish a costs-based model; and (iv) establishment of a PPP to ensure the sustainability of the infrastructure established.

4.7.3. **The risks that could impede the achievement of outcomes concern:** (i) bottlenecks and lack of transparency in the procurement process; (ii) increase in the cost of works; and (iii) non-compliance with the technical and functional specifications for the different applications planned under the project.

4.7.4 **Mitigation Measures**: (i) strict monitoring of Bank's procurement procedures; (ii) making provision for physical contingencies in the project; and (iii) capacity building for the PCU/CAB-CAR.

4.8 Knowledge Building

4.8.1. The project will provide an opportunity to improve knowledge in the area of national ICT infrastructure. Indeed, in order to assess this project's impacts, a monitoring and evaluation mechanism will be established by the PCU/CAB. The establishment of key impact indicators prior to project commencement and assessment of the impact at the end of the project, will ensure the provision of useful information on the project outcomes and impacts. The lessons learned, experience and knowledge gained from the implementation of this project will be managed at the PCU/CAB level and disseminated through annual reports and on the Bank's Website. They will be very useful for the implementation of the next CAB project.

V. LEGAL INSTRUMENT

5.1. Legal Instrument

The project will be financed through a grant from ADF resources awarded to the Central African Republic (RCA). A Grant Agreement will be signed between the Central African Republic and the Bank.

5.2. Conditions Associated with ADF's Intervention

5.2.1. Conditions Precedent to Effectiveness

The ADF Grant agreement will become effective on the date of its signature by the two parties.

5.2.2. Conditions Precedent to First Grant Disbursement

In addition to effectiveness of the ADF Grant Agreement, the first disbursement of Grant resources shall be conditional on fulfilment by the Donee, to the satisfaction of the Fund, of the following conditions:

(i) Provide the Fund with evidence of update of the accounting and financial administrative procedures manual of the PCU/CAB-CAR to incorporate the Project's specificities; and

(ii) Provide the Fund with evidence of remobilization or recruitment or appointment of an administrative and financial officer and an accountant within PCU/CAB-CAR.

5.2.3. Other Conditions

The Borrower shall, to the Bank's satisfaction, and prior to the request to disburse grant resources for the operation of the PCU/CAB-CAR, provide evidence of the opening of a special account in an acceptable bank for the payment of the project resources.

The Donee undertakes, to the satisfaction of the Fund, to provide:

(i) Prior to the request for disbursement of Grant resources to the Special Account, evidence of the opening of a special account on behalf of the Project with a bank acceptable to the Fund for the payment of Grant resources;

(ii) If applicable, submit to the Fund, at the latest prior to the commencement of works, in an area concerned: (a) proof of compensation to project affected persons (PAPs) in accordance with the Fund's rules and procedures, especially its Integrated Safeguards System, the Environmental and Social Management Plan and the relevant national regulations; or (b) in the event of impossibility of such compensation of certain PAPs, proof of deposit, in an escrow account satisfactory to the Fund, of financial resources meant to finance the compensation of such persons in accordance with the abovementioned rules and procedures of the Fund.

5.2.4. Undertakings

The Borrower shall, to the Bank's satisfaction, undertake to:

(i) Establish a public-private partnership (PPP) to manage the national fibre-optic backbone and meticulously implement the principle of open access providing non-discriminatory access to the wholesale market for all operators with the appropirate authorizations;

(ii) Implement the Project and the Environmental and Social Management Plan and have them implemented by its conctracting parties in compliance with : (a) the Fund's rules and procedures; (b) national law; and (c) the recommendations, requirements and procedures contained in the ESMP;

(iii) Where applicable, not start work on an area without the project affected persons in that area having been fully compensated or, if such compensation is impossible, deposit in an escrow account satisfactory to the Fund, financial resources for that purpose in accordance with the rules and procedures of the Fund;

(iv) Provide the Fund with six-monthly reports on ESMP implmentation including, if necessary, weaknesses and corrective actions initiated or to be initiated any document reasonably necessary to monitor the Project's implementation;

(v) Procure a multi-project and multi-account accounting software no later than three (3) months after the first disbursement; and

(vi) Recruit an External Auditor no later than six (6) months after the Project launch.

VI. RECOMMENDATION

Management recommends that the Board of Directors approves the proposal of an ADF grant of UA 13.216 million to the Central African Republic (CAR) for the Central Africa Fibre-Optic Backbone Project (CAB) – CAR Component under the conditions stipulated in this report.

ANNEX I: DESCRIPTION OF INSTITUTIONAL SUPPORT AND CAPACITY BUILDING

This institutional support operation will focus on strengthening sector governance through support to sector structural reforms, in particular reinforcement of the legal and regulatory framework through the Ministry of Posts and Telecommunications (MPT) and the Electronic Communications and Postal Regulatory Authority (ARCEP), support for the establishment and operationalisation of a National ICT Agency (ANTIC) as well as capacity building for environmental protection organisations (Directorate-General of the Environment and WWF). It will also provide targeted support to higher and vocational education, women's empowerment as well as the development of indigenous populations. This will be supplemented by several studies preparing, among others, the next CAB project which is mostly devoted to the development of the applicative layer in order to consolidate the foundations of the digital economy in CAR and provide support to women's empowerment. This support will be focused on the following five components:

i- Studies

As a continuation of the efforts by the Authorities of the Central African Republic to provide the country with the prerequisites for its digital development, the project makes provision for a Broadband Infrastructure Development Master Plan in order to ultimately interconnect all the country's localities by capitalizing on the welter of existing technologies (mobile, wired and satellite). It is also supplemented by the finalization of a National Strategic National (NSP) - Digital Central Africa 2020 whose objective is to establish a comprehensive roadmap for the emergence of a connected administration (local fibre-optic loop in Bangui, Datacentre, e-government platform, etc.) are already planned as part of this operation.

ii- Technical Assistance to MPT and ARCEP

Among its objectives, the project proposes to facilitate access by the populations, government services and businesses to high-quality, reliable and affordable telecommunications services. To that end, the Regulator (ARCEP) must strictly apply the concept of open access through compliance with the following five principles: (i) wholesale access: any operator marketing or wishing to market telecommunication services in CAR is entitled to effectively acquire this; (ii) transparent access: it is necessary to ensure global, non-discriminatory access to information relating to fibre-optic infrastructure as well as the terms and conditions of access to all interested parties; (iii) non-discriminatory access: any operator marketing or wishing to market telecommunication services in CAR will have access to the different offers proposed; (iv) access on fair and reasonable terms: conditions of access should be cost-oriented and be stable over time ; (v) effective access: it is necessary to ensure that there are no barriers to entry of any kind to prevent access to fibre-optic infrastructure. To that end, the project intends to provide long-term support for the establishment of a public-private partnership (PPP) for the management of the national fibre-optic backbone as well as a comprehensive study on the wholesale market, access to national and international connectivity and a model of retail tariffs. It will also include training on the regulation of the digital economy for ARCEP personnel concerned (technical, legal, etc.).

iii- Support to Higher Education Establishments (University and Vocational High School of Bangui)

The problem of access to high-quality ICT training in CAR remains critical to ensuring the sustainability of the outcomes of this operation. For that reason, it includes the construction and equipping of a Digital Training Centre (CFD) and an incubator at the Higher Institute of Technology at the University of Bangui. Moreover, and in order to promote technical training on trades related to the maintenance of fibre-optic equipment, in particular, there are plans to repair and equip a laboratory at the Bangui vocational high school.

Furthermore, and in order to improve the quality of education, the project includes support to the deployment of a wireless network on the two sites of the university campus of the University of Bangui to provide internet access for all students.

The project also includes the training of trainers in ICT in order to improve the quality of technical training and in particular in fibre-optics. Concretely, this will be done through the award of doctorate scholarships to male and female Masters students in ICT-related disciplines (telecommunications, electronics, IT and optics) on the basis of a national competition. The main objectives targeted are as follows: (i) strengthening the autonomy of the main higher education establishments in ICTs in CAR; (ii) improving the quality of ICT education given the rapid technological developments in that sector; and (iii) proposing high-quality vocational training in that sector given its considerable job-creating potential especially for young people.

iv- Support to the Creation and Operationalisation of ANTIC

In order to ensure the sustainability of the project's institutional anchoring, the project includes significant support for the establishment and establishment of ANTIC. This structure will capitalize on the following main assets: (i) the availability of qualified staff recruited from the PCU/CAB who will be integrated into that structure on project completion; (ii) the establishment of facilities that will generate income such as the Datacentre; and (iii) utilization of the telecommunication operators' contribution through the Universal Access Fund.

There are also plans to procure transportation equipment and prepare a training programme for the staff of the future Agency.

v- Capacity Building for Organisations Responsible for Environmental Protection (DGE and WWF)

In order to contribute to environmental conservation, the project includes support in the form of training, IT equipment and surveillance (drones, GPS, cameras, etc.) for organisations responsible for the environment, namely the Directorate-General of the Environment and WWF which have a base in the border region between CAR and Congo through which the fibre-optic cable connecting these two countries transits.

ANNEX II: JUSTIFICATION FOR WAIVER ON THE USE OF NATIONAL COUNTERPART FUNDS IN THE PROJECT'S FINANCING

Following a request by the Government (dated 29 November 2017) relating to the national counterpart, it was mutually agreed that no counterpart funding by the Central African Republic is planned for financing the Fibre-Optic Project. The Government's contribution should be 10% of the project's total for ADF countries required under the paragraph 4.2.2 of the Policy on Expenditure Eligible for Bank Group Financing. Thus, in accordance with the provisions of Section 4.2.2 of the abovementioned policy (Revised version of 19 March 2008) and the SNVP/ECVP Directive of December 2014 relating to the application of the aforementioned policy concerning counterpart funds, this Annex presents an analysis justifying the request for a waiver on the amount of counterpart funding, on the basis of the following criteria required by the Bank's aforementioned Policy and Directive: (i) persisting fragility of CAR; (ii) determination to implement a real development programme; (iii) commitment to reforms with TFP support; (iv) fairly tense budgetary situation; (v) high level of debt; and (vi) Bank support to CAR.

A. Persisting Fragility of CAR

There are many complex, interrelated drivers of CAR's persisting fragility. The violence of its political history and malfunctioning of institutions, the failure of previous DDR programmes and spatial exclusion are impeding social and national cohesion. The main challenges the country must address are:

- ✓ The countrywide restoration of security, peacebuilding and national cohesion. Despite the return to constitutional order in 2016 and the establishment of the main democratic institutions planned under the Constitution, insecurity persists and intercommunity clashes continue to be reported in several localities of the country. The central Government of the Central African Republic now only controls a very small part of its territory, and armed groups are divided into many uncontrolled rebel factions which increases criminal activities.
- ✓ The limited productive capacities of firms and their financial situation as a result of looting and destruction of their production tools. Weak economic diversification with, in particular, specialization in primary products makes CAR particularly vulnerable to external shocks. Private sector development is the cornerstone for expansion and diversification of the economy.
- ✓ Lack of development of economic infrastructure (transport, energy, ICT, water and sanitation) in a context of a vast landlocked territory like CAR, the quantity and quality of infrastructure is a determining factor for the reduction of fragility and poverty.

B. Determination to Implement a Real Development Programme

The Authorities have established a 2017-2021 CAR National Recovery and Peacebuilding Plan (RCPCA) 2017-2021 aimed at laying the foundations for sustainable and inclusive economic and social development by restoring and expanding the State throughout the national territory and massive public investment in order to consolidate peace. The RCPCA's three pillars are to: (i) supporting peace, reconciliation and security; (ii) renewing the social contract between the State and the populations; and (iii) achieving economic recovery and the revival of the productive sectors.

In keeping with the priorities of the national plan, the Authorities have made great efforts to close the country's many social and infrastructure gaps. In this context, an ambitious programme of average annual public investments of about CFAF1500 billion has been implemented. This programme will also support the development of the ICT sector by initiating reforms which will help to expand connectivity, in particular, the mobile telephone penetration rate and mobile network coverage on the national territory.

C. Commitment to Reforms with TFP Support

On the macroeconomic front, with TFP support, the progress made since 2014 is gradually being consolidated with a real GDP growth rate of 5.1% in 2016 compared to 4.8% in 2015. Despite its weak diversification, the economy has benefited from the recovery of extractive industries with a leap of 22.8% following the partial lifting of the suspension of the Kimberley process. While services grew by 7.5 % in 2016, agriculture, for its part, only grew by 1.2% mainly because of the slow return of refugees and displaced persons and the lack of means of production and supervision. In addition to the effects of insecurity, supply remains constrained by weak agricultural sector productivity, the rapid degradation of infrastructure (especially in the energy sector) and limited access to credit. Banking sector growth remains timid and is estimated at 2.5 %, whereas the recovery in trade and transport produced a tertiary sector growth rate estimated at 6.0% in 2016.

CAR's macroeconomic outlook remains healthy despite the deterioration of the security environment. The economic growth projections are based on the principle that the refugees and displaced persons will gradually return to their land to pursue their agricultural or artisanal activities. The complete lifting of the ban on exports of diamonds from territories considered to be conflict areas as well as the commissioning of newly acquired forest concessions could revive the primary sector and mining activities and thus boost real GDP growth to about 5.6 % in 2018. Economic growth would, therefore, trigger an increase in imports and exports with increased traffic in the corridor linking Douala and Bangui which contributes significantly to the number of secure convoys.

D. Relatively Tense Fiscal Situation

The Authorities have continued with TFP support to implement the actions to consolidate reforms in the area of public finance management since the transition period. These efforts have resulted in improved leveraging of domestic public resources and the gradual restoration of a more viable public finance management framework. Domestic fiscal revenue in fact improved throughout the transition period from 4.9% of GDP in 2014 to 7.1 % and 8% respectively in 2015 and 2016. Public spending which had fallen to 12.7% of GDP in 2014, rose to 14.9 % in 2015 reaching 15.2 % of GDP in 2016. The ensuing fiscal deficit was financed by external budget support which represented 4.9 % of GDP in 2016.

However, the volume of budget support operations mainly in the form of grants is well below the 2014 and 2015 levels which respectively represented 10.8 % and 7.2 % of GDP. Despite efforts to mobilize tax revenue and control spending, especially on the payroll following the census of civil servants, the country still needs TFP support to reduce the fiscal deficit.

The third review mission of the programme supported by the IMF's ECF concluded that the economic performances of the Central African Republic remain sound despite the deterioration of the security environment. The management of public investments which mainly aim to support inclusive, job-creating growth, will also have to be strengthened in order to promote social cohesion and political stability. The increase in external budgetary assistance and

technical support to build capacity will be able to help CAR to address its huge challenges and overcome persisting fragility. The Government should accelerate the clearance of commercial and social debt which will contribute to the consolidation of social cohesion and peace. An independent audit, which will be finalized in October, will form an integral part of the process to clear arrears, the largest part of which are social arrears (CFAF 60 to 70 million).

E. High Debt Level

The risk of debt distress remains high in CAR because of a structural trade imbalance, exacerbated by the country's chronic instability. The crisis situation led to the accumulation of new arrears on domestic and external payments, significantly deteriorating the level of public debt with a public debt to GDP ratio, rising from 38.5 % in 2013 to 51.1 % in 2014 and 47.2 % in 2016. The CAR has, therefore, shifted from a moderate to high risk of debt distress. Against this backdrop, the debt sustainability analysis carried out in May 2017 by the IMF recommends that the country pursue prudent fiscal policies with a maximum conditionality for external financing and only contract new debts under exceptional circumstances for critical projects for which grant financing could not be guaranteed. In the case of such projects, it would be necessary to carry out a comprehensive and independent cost-benefit analysis to ensure they are viable and have no fiscal impact.

F. Bank Support to CAR

Because of this high risk of debt distress, the country only receives limited resources from the Bank. The financing of the indicative lending programme for operations under the 2017-2021 CSP will mainly come from ADF window resources. For the 2017-2019 period, the Performance–Based Allocation (PBA) under ADF-14 amounts to MUA 15 to which is added TSF financing of MUA 15, that is, a total of MUA 30. Over the 2020-2021 period, the assumption of renewal of the same allocations was maintained, i.e. a total of MUA 30. The Bank will, moreover, continue its efforts to leverage supplemental resources such as the special/thematic and trust funds in order to increase ADF's limited allocations for CAR. Finally, the regional envelope, with its significant leveraging effect will be used for the financing of integrating projects which is very important given the country's landlocked situation. Co-financing will also be prioritized for large-scale operations in the infrastructure sector.

G. Conclusion

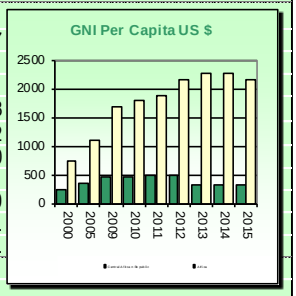
In light of the foregoing, and at the request of the Government, it is recommended that the Government of the Central African Republic should not contribute to the project's financing by way of counterpart funding.

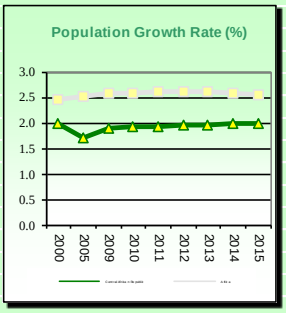
APPENDIX III: COMPARATIVE SOCIO-ECONOMIC INDICATORS

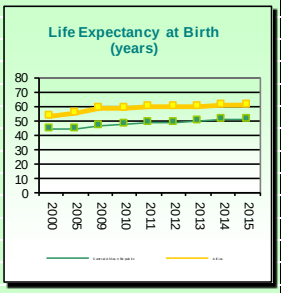
Central African Republic

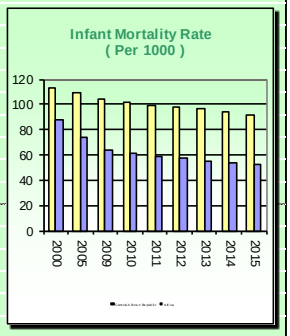
COMPARATIVE SOCIO-ECONOMIC INDICATORS

	Year	Central African Republic	Africa	Develo-ping Countries	Develo-ped Countries
Basic Indicators					
Area ('000 Km²)	2016	623	30,067	97,418	36,907
Total Population (millions)	2016	5.0	1,214.4	6,159.6	1,187.1
Urban Population (% of Total)	2016	39.5	40.1	48.7	81.1
Population Density (per Km²)	2016	8.02	41.3	65.1	33.8
GNI per Capita (US $)	2015	320	2 153	4 509	41 932
Labor Force Participation *- Total (%)	2016	78.1	65.7	63.5	60.0
Labor Force Participation **- Female (%)	2016	71.8	55.7	48.9	52.1
Sex Ratio (per 100 female)	2016	97.2	100.1	106.0	105.0
Human Develop. Index (Rank among 187 countries)	2015	188	...	...	...
Popul. Living Below $ 1.90 a Day (% of Population)	2008	66.3	...	21.1	...
Demographic Indicators					
Population Growth Rate - Total (%)	2016	2.0	2.5	1.3	0.6
Population Growth Rate - Urban (%)	2016	2.7	3.6	2.4	0.8
Population < 15 years (%)	2016	38.8	40.9	27.9	16.8
Population 15-24 years (%)	2016	20.5	19.3	16.9	12.1
Population >= 65 years (%)	2016	3.9	3.5	6.6	17.2
Dependency Ratio (%)	2016	74.5	79.9	54.3	52.0
Female Population 15-49 years (% of total population)	2016	25.1	24.0	25.7	22.8
Life Expectancy at Birth - Total (years)	2016	52.2	61.5	69.9	80.8
Life Expectancy at Birth - Female (years)	2016	54.2	63.0	72.0	83.5
Crude Birth Rate (per 1,000)	2016	33.1	34.4	20.7	10.9
Crude Death Rate (per 1,000)	2016	13.7	9.1	7.6	8.6
Infant Mortality Rate (per 1,000)	2015	91.5	52.2	34.6	4.6
Child Mortality Rate (per 1,000)	2015	130.1	75.5	46.4	5.5
Total Fertility Rate (per woman)	2016	4.1	4.5	2.6	1.7
Maternal Mortality Rate (per 100,000)	2015	882.0	476.0	237.0	10.0
Women Using Contraception (%)	2016	24.3	31.0	62.2	...
Health & Nutrition Indicators					
Physicians (per 100,000 people)	2005-2015	4.7	41.6	125.7	292.2
Nurses and midwives (per 100,000 people)	2005-2015	25.2	120.9	220.0	859.4
Births attended by Trained Health Personnel (%)	2010-2015	53.8	53.2	69.1	...
Access to Safe Water (% of Population)	2015	68.5	71.6	89.4	99.5
Access to Sanitation (% of Population)	2015	21.8	39.4	61.5	99.4
Percent. of Adults (aged 15-49) Living with HIV/AIDS	2015	3.7	3.4	...	...
Incidence of Tuberculosis (per 100,000)	2015	391.0	240.6	166.0	12.0
Child Immunization Against Tuberculosis (%)	2015	74.0	81.8	...	...
Child Immunization Against Measles (%)	2015	49.0	75.7	83.9	93.9
Underweight Children (% of children under 5 years)	2010-2015	23.5	18.1	15.3	0.9
Prevalence of stunding	2010-2014	40.7	33.3	25.0	2.5
Prevalence of undernourishment (% of pop.)	2015-2016	47.7	16.2	12.7	...
Public Expenditure on Health (as % of GDP)	2014	2.1	2.6	3.0	7.7
Education Indicators					
Gross Enrolment Ratio (%)					
Primary School - Total	2010-2016	93.5	101.2	104.9	102.4
Primary School - Female	2010-2016	79.8	98.4	104.4	102.2
Secondary School - Total	2010-2016	17.4	52.6	71.1	106.3
Secondary School - Female	2010-2016	11.8	50.2	70.5	106.1
Primary School Female Teaching Staff (% of Total)	2010-2016	19.9	47.1	59.8	81.0
Adult literacy Rate - Total (%)	2010-2015	36.8	66.8	82.3	...
Adult literacy Rate - Male (%)	2010-2015	50.7	74.3	87.1	...
Adult literacy Rate - Female (%)	2010-2015	24.4	59.4	77.6	...
Percentage of GDP Spent on Education	2010-2015	1.2	5.0	4.0	5.0
Environmental Indicators					
Land Use (Arable Land as % of Total Land Area)	2014	2.9	8.7	11.2	10.3
Agricultural Land (as % of land area)	2014	8.2	41.7	37.9	36.4
Forest (As % of Land Area)	2014	35.6	23.2	31.4	28.8
Per Capita CO2 Emissions (metric tons)	2014	0.1	1.1	3.5	11.0









Sources : AfDB Statistics Department Databases; World Bank: World Development Indicators; UNAIDS; UNSD; WHO, UNICEF, UNDP; Country Reports. *last update : June 2017*

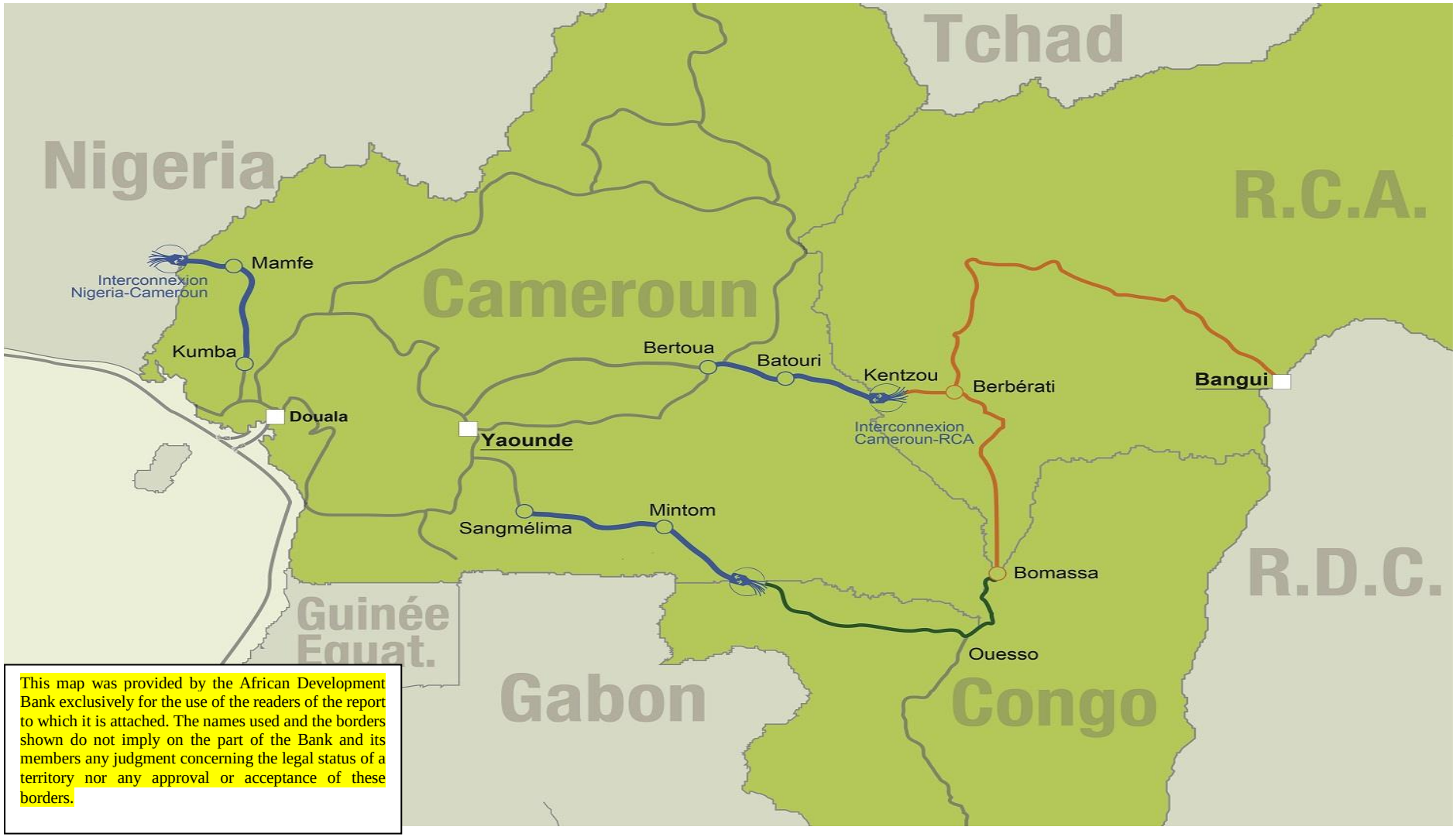
*Note : n.a. : Not Applicable ; ... : Data Not Available. * Labor force participation rate, total (% of total population ages 15+)*

*** Labor force participation rate, female (% of female population ages 15+)*

ANNEX IV: PIPELINE OF PROJECTS (2018-2020) IN CAR- RDGC

Year	Dept.	Project Name	AfDB		ADF-PBA		ADF	RE	NTF	TSF		MIC (Grant)	AGTF	Other Co-financing	Total (MUA)
			Public	Private	Grant	Loan	Annual Resources			Grant	Loan				
2018	PICU	Study on the Baoro - Boussembélé Road and Rural Roads												2.00	2.00
2018	PICU	Multi-modal project: River Navigation Project on the Congo-Sangha Rivers and construction of the Ouesso (Congo), Bangui (CAR) and Ndjamena (Chad) road			6.00			9.00							15.00
2019	AHHD	Skills development Project for Youth Employability				10.00									10.00
2019	PESD	Boali 3 Phase 2 and CAR-DRC Interconnection Project (Moubaye Power Plant)			5.00			10.00							15.00
2020	AHHD	Project to Support Agricultural Transformation based on the Development of Value Chains and Youth Agricultural Entrepreneurship			5.00					5.00					10.00
2020	AHHD	Agricultural Sector Governance Support Project				5.00					3.00				8.00
2020	AHHD	GAFSP Programme Support Project				5.00									5.00
2020	AHHD	PPF – Studies			1.00										1.00

APPENDIX V: MAP OF PROJECT AREA FOR FIBRE-OPTIC INFRASTRUCTURE NETWORK (AFDB AND EU FINANCING)



This map was provided by the African Development Bank exclusively for the use of the readers of the report to which it is attached. The names used and the borders shown do not imply on the part of the Bank and its members any judgment concerning the legal status of a territory nor any approval or acceptance of these borders.