IDA/R2016-0310/1

December 29, 2016

FROM: Vice President and Corporate Secretary

Burkina Faso - eBurkina Project

Project Appraisal Document

Attached is the Project Appraisal Document regarding a proposed credit to Burkina Faso for an eBurkina Project (IDA/R2016-0310), which is being processed on an absence-of-objection basis.

Distribution:
    Executive Directors and Alternates
    President
    Bank Group Senior Management
    Vice Presidents, Bank, IFC and MIGA
    Directors and Department Heads, Bank, IFC and MIGA

Document of

The World Bank

Report No: PAD 1767

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF EUR18.8 MILLION
(US$20 MILLION EQUIVALENT)

TO

BURKINA FASO

FOR THE

EBURKINA PROJECT

27 December, 2016

Transport and ICT Global Practice – ICT Sector Unit

CURRENCY EQUIVALENTS

(Exchange Rate Effective November 30, 2016)

Currency Unit	=	EUR
EUR 0.9391876	=	US$1

FISCAL YEAR
January 1   –   December 31

ABBREVIATIONS AND ACRONYMS

AfDB	African Development Bank
ANPTIC	Agence Nationale de Promotion des Technologies de l'Information et des Communications *(National Agency of ICT Promotion)*
ANSSI	Agence Nationale de Sécurité des Systèmes d'Informations *(National Agency for Security of Information Systems)*
BCEAO	Banque Centrale des États de l'Afrique de l'Ouest *(Central Bank of West African States)*
BODI	Burkina Faso Open Data Initiative
CPIA	Country Policy and Institutional Assessment
DANIDA	Danish International Development Agency
ECOWAS	Economic Community of West African States
FM	Financial Management
GODAN	Global Open Data for Agriculture and Nutrition initiative
GPOBA	Global Partnership on Output-based Aid
GVAP	Guichet Virtuel de l'Administration Publique *(Virtual Office of the Public Administration)*
IBRD	International Bank for Reconstruction and Development
ICT	Information and Communication Technologies
ID	Identification
IDA	International Development Association
IFC	International Finance Corporation
IFR	Interim unaudited Financial Report
IGAD	Interest Group on Agricultural Data
*Info*Dev	Information for Development Program
IXP	Internet Exchange Point
MAAH	Ministère de l'Agriculture et des Aménagements Hydrauliques *(Ministry of Agriculture and Hydraulic Planning)*

MATDSI	Ministère de l'Administration Territoriale, de la Décentralisation et de la Sécurité Intérieure *(Ministry of Territorial Administration, Decentralization and Internal Security)*
MDA	Ministries, Departments and Agencies
MDENP	Ministère du Développement de l'Économie Numérique et des Postes *(Ministry of Development of Digital Economy and Posts)*
MEA	Ministère de l'Eau et de l'Assainissement *(Ministry of Water and Sanitation)*
MINEFID	Ministère de l'Économie, des Finances et du Développement *(Ministry of Economy, Finance and Development)*
MENA	Ministère de l'Éducation Nationale et de l'Alphabétisation *(Ministry of National Education and Literacy)*
MFPTSS	Ministère de la Fonction Publique, du Travail et de la Sécurité Sociale *(Ministry of Public Service, Work and Social Security)*
NAP	National Adaptation Plan
NFV	Network Functions Virtualization
PACT	Programme d'Appui aux Collectivités Territoriales *(Local Government Support Project)*
PAD	Project Appraisal Document
PDO	Project Development Objective
PIE	Project Implementing Entity
PIU	Project Implementation Unit
PMT	Project Management Team
PNDES	Plan National de Développement Économique et Social *(National Plan for Economic and Social Development)*
PPP	Public-Private Partnership
PPSD	Project Procurement Strategy for Development
PSC	Project Steering Committee
RCIP	Regional Communications Infrastructure Program
RESINA	Réseau Informatique National de l'Administration *(Administration National IT Network)*
SOFITEX	Société Burkinabè des Fibres Textiles *(Burkina Faso Textile Company)*
SORT	Systematic Operations Risk-rating Tool
SP-PST	Secrétariat Permanent du Programme Sectoriel des Transports *(Permanent Secretariat of Transport Sector Program)*
TOR	Terms of Reference
UN	United Nations
WAN	Wide Area Network
WARCIP	West Africa Regional Communications Infrastructure Project
WBG	World Bank Group
3G	Third Generation Mobile Phone Service

BURKINA FASO

Burkina Faso eBurkina Project (P155645)

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PAD DATA SHEET

Burkina Faso

Burkina-Faso eGovernment Project (P155645)

PROJECT APPRAISAL DOCUMENT

AFRICA

Report No.: PAD1767

Basic Information		
Project ID P155645	EA Category C - Not Required	Team Leader(s) Samia Melhem,Axel Rifon Perez
Lending Instrument Investment Project Financing	Fragile and/or Capacity Constraints [ ]	
	Financial Intermediaries [ ]	
	Series of Projects [ ]	
Project Implementation Start Date 19-Jan-2017	Project Implementation End Date 30-Jun-2022	
Expected Effectiveness Date 19-May-2017	Expected Closing Date 30-Jun-2022	
Joint IFC No		
Practice Manager/Manager	Senior Global Practice Director	Country Director	Regional Vice President
Boutheina Guermazi	Jose Luis Irigoyen	Pierre Frank Laporte	Makhtar Diop

Borrower: Ministry of Economy Finance and Development
Responsible Agency: Ministry of Digital Economy (ICT) and Posts Development, National Agency of ICT Promotion

Contact:	Michaël Guibougna Lawakiléa Folane	Title:	Director General of National Agency of ICT Promotion (DGCPTI
Telephone No.:	22670204290	Email:	michael.folane@tic.gov.bf

Project Financing Data(in USD Million)			
[ ] Loan [ ] IDA Grant [ ] Guarantee [X] Credit [ ] Grant [ ] Other			
Total Project Cost:	20.00	Total Bank Financing:	20.00
Financing Gap:	0.00		

Financing Source	Amount
International Development Association (IDA)	20.00
Total	20.00

Expected Disbursements (in USD Million)

Fiscal Year	2017	2018	2019	2020	2021	2022	2023			
Annual	3.00	5.00	6.00	4.00	1.50	0.50	0.00			
Cumulative	3.00	8.00	14.00	18.00	19.50	20.00	20.00			

Institutional Data

Practice Area (Lead)

Transport & ICT

Contributing Practice Areas

Other

Proposed Development Objective(s)

The proposed Project Development Objective (PDO) is to improve capacity and use of ICTs by the public administrations and agencies for (i) the provision of information and public e-services and (ii) to foster entrepreneurship inthe digital economy, with a specific focus on agriculture and rural areas.

Components

Component Name	Cost (USD Millions)
(1) Enabling Environment for e-Government, including Policy, Legal and Regulatory Frameworks	3.00
(2) Data Management and Digital Platform for e-Service Delivery	10.00
(3) Foster Local Skills and Entrepreneurship in the Digital Economy	4.50
(4) Project implementation. Effective project implementation, monitoring and evaluation, institutional strengthening, capacity building, and communication.	2.50

Systematic Operations Risk- Rating Tool (SORT)

Risk Category	Rating
1. Political and Governance	High
2. Macroeconomic	Substantial
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial
5. Institutional Capacity for Implementation and Sustainability	Substantial

6. Fiduciary	Substantial
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	Substantial
OVERALL	Substantial

Compliance

Policy

Does the project depart from the CAS in content or in other significant respects?	Yes [ ]	No [X]

Does the project require any waivers of Bank policies?	Yes [ ]	No [X]
Have these been approved by Bank management?	Yes [ ]	No [ ]
Is approval for any policy waiver sought from the Board?	Yes [ ]	No [X]
Does the project meet the Regional criteria for readiness for implementation?	Yes [X]	No [ ]

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01		X
Natural Habitats OP/BP 4.04		X
Forests OP/BP 4.36		X
Pest Management OP 4.09		X
Physical Cultural Resources OP/BP 4.11		X
Indigenous Peoples OP/BP 4.10		X
Involuntary Resettlement OP/BP 4.12		X
Safety of Dams OP/BP 4.37		X
Projects on International Waterways OP/BP 7.50		X
Projects in Disputed Areas OP/BP 7.60		X

Legal Covenants

Name	Recurrent	Due Date	Frequency
Schedule 2, Section I.B.1 Project Implementation Manual (PIM) adoption		19-Aug-2017	

Description of Covenant

The Recipient shall prepare and adopt and ensure that ANPTIC adopts, no later than three (3) months after the Effective Date, in accordance with terms of reference acceptable to the Association, a project implementation manual, containing detailed arrangements and procedures for: (a) institutional coordination and day-to-day execution of the Project; (b) monitoring, evaluation, reporting and communication; (c) eligibility criteria, detailed rules and procedures for identification, registration and selection of selected towns, (f) administration, financial management and accounting; and (g) such other

administrative, technical and organizational arrangements and procedures as shall be required for purposes of implementation of the Project.

Name	Recurrent	Due Date	Frequency
Schedule II, Section 2, Paragraph B.4 - Recruitment of an External Auditor		19-Nov-2017	

Description of Covenant

The Recipient shall no later than (6) six months of Effective Date, recruit and thereafter maintain, an external auditor for the project, with experience and terms of reference acceptable to the Association.

Name	Recurrent	Due Date	Frequency
Schedule 2, Section I.A.1(a) - Project Steering Committee (PSC)	**X**		CONTINUOUS

Description of Covenant

The Recipient shall establish, not later than (3) three months after the Effective Date, and thereafter maintain, throughout the Project implementation period, with composition, mandate and resources satisfactory to the Association, a Steering Committee, to be chaired by the Secretary General of the Ministry in charge of Development of Digital Economy and Posts (MDENP) or her/his representative and comprised of representatives from the ministries in charge of finance, agriculture, territorial administration and interior and public administration (Steering Committee).The Recipient shall cause ANPTIC to maintain, throughout Project implementation, a Project Implementing Entity with TOR, composition and resources, satisfactory to the Association.

Name	Recurrent	Due Date	Frequency
Schedule 2, Section I.A.3 - Framework Agreement signed		19-Jun-2017	

Description of Covenant

The Recipient shall, no later than one (1) month after the Effective Date, enter into a Framework Agreement with ANPTIC, which shall set forth the flow of Project funds from the Recipient to ANPTIC, as well as all provisions relating to the implementation of the Project, procurement, financial management, monitoring, and disbursement; all in accordance with the provisions of this Agreement. To this end, the Framework Agreement shall be in form and substance satisfactory to the Association.

Conditions

Source Of Fund	Name	Type
IDA	Retroactive Financing	Disbursement

Description of Condition

No withdrawal shall be made for payments made prior to the signing date of the Financial Agreement, except for payments up to an aggregate amount not to exceed EUR 700,000 may be made for payments made prior to this date but on or after October 1, 2016, for Eligible Expenditures.

Team Composition				

Bank Staff

Name	Role	Title	Specialization	Unit
Samia Melhem	Team Leader (ADM	Lead ICT Policy Specialist	e-government	GTI09

			Responsible)	
Axel Rifon Perez	Team Leader	ICT Policy Specialist	e-government and ICT	GTI11
Mohamed El Hafedh Hendah	Procurement Specialist (ADM Responsible)	Senior Procurement Specialist	Procurement	GGO07
Lanssina Traore	Procurement Specialist	Senior Procurement Specialist	Procurement	GGO07
Ngor Sene	Financial Management Specialist	Financial Management Specialist	Financial Management	GGO26
Abdoul Wahabi Seini	Safeguards Specialist	Senior Social Development Specialist	Senior Social Safeguard Specialist	GSU01
Charles Pierre Marie Hurpy	Team Member	ICT Policy Specialist	ICT Policy	GTI11
Leandre Yameogo	Safeguards Specialist	Senior Environmental Specialist	Senior Environmental Specialist	GEN07
Marc Jean Yves Lixi	Team Member	Senior Operations Officer	ICT and Bank Operations	GTI11
Pierre Anselme Gilbert Chrzanowski	Team Member	Consultant		GTI11
Suzanne Rayaisse	Team Member	Procurement Assistant	Procurement	AFMBF
Tasneem Rais	Team Member	Program Assistant	Operational Support	GTI11
Tassere Pitroipa	Team Member	IT Analyst, Client Services	ICT	ITSCR
Yolande Bougouma-Zagre	Team Member	Program Assistant	Operational Support	AFMBF

Extended Team

Name	Title	Office Phone	Location

Locations

Country	First Administrative Division	Location	Planned	Actual	Comments
Burkina Faso		Ouagadougou			

I. STRATEGIC CONTEXT

A. Country Context

1.   Burkina Faso has witnessed dramatic regime changes in the last two years. After the popular uprising of October 2014, a transitional government was installed with the support of the Economic Community of West African States (ECOWAS). Presidential and parliamentary elections were held in November 2015, resulting in the election of Mr. Roch Marc Christian Kaboré as the country's new President. The profound political change witnessed by the country is taking place in a context of persistent poverty, weak human development outcomes, and declining citizen trust in government, despite the progress achieved at a macroeconomic level. The terrorist attack in January 2016 gave a devastating blow to the climate of optimism, attributed to the earlier election process and outcome. In this context, the new Government's challenge is to ensure safety for its citizens while focusing on delivering better services and efficiently implementing economic programs.

2.   Looking at development indicators, the poverty rate has been decreasing in the last years but remains high (40.1 percent of the population was below the national poverty line in 2014 against 46.7 percent in 2009). The situation is even more problematic in rural areas with regions where poverty has been increasing (Boucle du Mouhoun, Centre-Ouest, Centre-Nord and Nord). In 2015, the average growth rate of the country was 5.5 percent, while previous annual growth rates in 2013 and 2014 reached 6.5 percent and 4.5 percent respectively.[1] Burkina Faso has received significant aid flows in the last decade, being a relatively good performer in terms of its Country Policy and Institutional Assessment (CPIA) score.[2] Yet a high population growth rate of 2.9 percent, a non-inclusive pattern of growth and the sub-optimal performance of public administration have limited the impact f economic growth and stability on poverty reduction, anti-corruption and service delivery. Overall, Burkina Faso continues to be ranked among the poorest countries in the world.[3]

3.   The new Government recently adopted a National Plan for Economic and Social Development 2016 - 2020 (PNDES) which focuses on three main challenges translated into the following strategic directions: (i) institutional reforms and modernization of the administration; (ii) development of the human capital; and (iii) stimulation of high potential sectors to foster economic development and jobs creation.[4] ICT is part of the PNDES and seen by the new administration as a key enabler and high potential sector for the country's development. ICT was also part of the five key points of the President's program.[5] Commitments in ICT include connecting all public agencies, schools and health facilities, setting up a unique digital identification (ID) for each citizen and company, improving education, health and rural development by developing and deploying e-Services, as well as developing a vibrant local digital

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[1] Estimated for 2014, see http://data.worldbank.org/country/Burkina Faso-faso.
[2] Burkina Faso's CPIA score since 2010 has been 3.78, making it one of the best performers in West Africa.
[3] See: http://data.worldbank.org/?locations=XL-BF.
[4] PNDES can be downloaded here http://www.finances.gov.bf/index.php?option=com_content&view=article&id=302:plan-national-de-developpement-economique-et-social-pndes-2016-2021&catid=9&Itemid=371.
[5] Le Programme en 5 points, http://presidence.bf/.

industry, through a series of investment in incubation, innovation and research and development (R&D).

4.   The PNDES mentions the implementation of an e-Government project and open data as part of its priorities. However, the use of ICT by public administrations to provide better services and foster economic development is not new in the countries' agenda, as it was already embedded within the Modernization of Public Administration strategy (2011-2020) and its subsequent Action Plan for 2015-2018 where Axis 4 refers directly to e-Governance. The country also adopted in January 2013 a Government's digital development strategy (Cyberstratégie Sectorielle e-Gov - Burkina Faso), focusing on key sectors such as education, health, and rural development.[6] This background offers a clear rationale for an e-Government project that would bring all components together in order to respond to the three PNDES challenges: administration reforms, human resources, and economic development.

5.   Such an e-Government project would imply that the whole Government unites around a shared vision of marrying ICTs to build the needed shared digital infrastructure, governance, and capacity to implement the strategic vision and its related roadmap. This complex task has been done successfully in the past through several World Bank Group (WBG) lending operations (eRwanda, eGhana, eLanka, eVietnam, eMoldova). Today, as reported in the World Development report 2016 (Digital Dividends), reform-minded Governments leverage ICTs to amplify and deploy information and services to citizens while adjusting institutional settings. The private sector is already leveraging ubiquitous mobile networks to reach and serve their consumers, enabling them to pay through mobiles (M-Pesa for instance) and allowing citizens to provide feedback. This approach can be replicated and adapted by the Government of Burkina Faso.

B.   Sectoral and Institutional Context

6.   Two decades of telecom sector reforms have resulted in notable improvements in Burkina Faso's ICT sector. The country has created a relatively competitive environment for telecommunication services and has been one of the leading countries in the region in terms of adopting ECOWAS ICT policies and adhering to the supplementary acts. The Government of Burkina Faso has also developed a licensing regime that ensures non-discriminatory access to infrastructure, and has ongoing efforts to develop Public-Private Partnership (PPP) frameworks and structures, including to manage the yet to be developed national backbone, partly financed through the West Africa Regional Communications Infrastructure Project (WARCIP 1B - P122402). Since the enactment of the Law on Telecommunications in 1998, Burkina Faso has established a sound institutional and legal framework that would, however, need to be revised and updated to support upcoming ICT and e-Government developments. As for institutions in charge of ICT, the Ministry of Digital Economy and Posts (MDENP) is in charge of ICT Policy, there is an independent regulator (ARCEP) and an ICT Agency (ANPTIC) now in charge of the main ICT projects of the Government.

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[6] The strategy includes sectoral cyber strategies for e-Education; e-Health and e-Commerce. A strategy for social welfare and e-Service for rural areas was also planned.

7. From a market perspective, the ICT sector is characterized by a relatively well performing mobile telephony market but an under-performing internet sector. Overall, there are 9.4 percent of internet users in the country, to be compared with the average of 12.8 percent for the ECOWAS region, most of them through mobile internet and concentrated in the major cities Ouagadougou and Bobo-Dioulasso. The rapid take-up of 3G (and 4G in the future) will most likely dramatically increase the penetration of mobile internet broadband in the coming years, while upcoming fiber optic connections to neighboring countries are expected to increase the international bandwidth (currently of 2860 bit/s/user, against 5163 bit/s/user for ECOWAS). Lastly, high costs of access to internet (US$44/month in average whereas the revenue / person is US$59) remains an important barrier to most of the population.

8. In order to tackle some of the issues faced in the ICT sector, the Government of Burkina Faso is currently implementing the WARCIP 1B Project (BF-WARCIP) funded by the World Bank. The project intends to (i) provide increased international connectivity via a fiber optic network between the border of Ghana and Ouagadougou; (ii) set up an internet exchange point (IXP) and a virtual landing point that will foster more reliable and cheaper bandwidth connectivity in Burkina Faso; and (iii) subsidize the purchase of bulk international capacity. The IXP is now fully operational and works for the fiber optic connection between Ghana and Ouagadougou officially started on October 14, 2016.

9. In parallel to acquiring international connectivity, Burkina Faso started in November 2015 the roll-out of its G-Cloud project, funded by the Government of Denmark (through DANIDA), a cloud networking technology that will create elements of infrastructure to enable the country to develop new e-Services. The company Nokia (formerly Alcatel-Lucent) will supply the country with its Network Functions Virtualization (NFV), Cloudband and IP platforms, which will be integrated into the G-Cloud infrastructure being built around virtualized network resources from cloud nodes in the capital Ouagadougou (which is expected to be completed by first quarter of 2017) and five provinces. Approximately 400 public facilities in 13 regional urban centers will be connected through a 513 km fiber-optic IP/MPLS wide area network. Backhaul will be provided by a 800 km fiber-optic transmission system that will become part of Burkina Faso's National Fiber Optics Backbone.[7] However, the scope of the current G-Cloud project does not cover the entire country nor does it provide for access devices (laptops, computers, etc.) for government office staff to access the future systems; moreover, it does not finance online services or content; nor capacity building for citizens and civil servants to actually exploit the cloud.

10. The Government of Burkina Faso deployed in 2012 a publicly operated internal network infrastructure to connect government agencies (RESINA), established a common Data Center and a Wide Area Network infrastructure (WAN) and is planning a common technology platform for the operation of most of the Information Systems under the leadership of the ANPTIC. Eventually, RESINA will be merged with the G-Cloud infrastructure which will become part of the country's

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[7] See https://www.alcatel-lucent.com/press/2015/alcatel-lucent-and-Burkina Faso-faso-apply-cloud-networking-technology-stimulate-economic-growth-through.

backbone. Additionally, a prospective initiative to be funded by the Government of Luxemburg, would connect eight regions via satellite.

11.   Overall, Burkina Faso is increasingly positioning itself as a champion of innovative applications and was the first country in the region to launch an open data initiative.[8] Burkina Faso Open Data Initiative (BODI), publicly launched in June 2014, received technical and financial support from the World Bank through the Trust Fund for Statistics Capacity-Building.[9] Achievements so far include the setting-up of the BODI unit (Arrêté N2015/0043) under the National Agency of ICT Promotion, the implementation of the open data portal data.gov.bf, and the release of more than 189 datasets from 31 public sector organizations. However, many of the key datasets for e-Services and open data such as map, land, facilities, and company register are still unavailable for reuse, as they have not been released by the agencies producing them or because the data has not been collected nor digitized. Furthermore, despite improvements in the overall ICT sector, the country is still lagging behind in terms of use and access to online e-Services: Burkina Faso ranks 178 out of 193 countries in the 2016 United Nations (UN) e-Government Development Index.[10] Lastly, there is a nascent but active digital innovation ecosystem as evidenced by incubators (La Fabrique, 2IE) and tech hubs (Jokkolabs, Ouagalab, Beoogolab).

12.   The increase in access to the broadband network and reduction of the tariffs of communications offers a unique opportunity for Burkina Faso to develop e-Government application for its citizens (G2C), its businesses (G2B) and for its own administration (G2G). BF-WARCIP and the G-Cloud project will provide some of the key ICT infrastructures for the development of e-Services in the country as all government offices get connected to the shared G-Cloud. However, to ensure that the infrastructure is properly exploited, new services need to be designed in combination with more traditional frontline services through a multichannel service delivery approach tailored to the context.[11] Massive training and capacity building is needed as more than 90 percent of the population still does not use the Internet. Citizen access centers, off-hour school labs, post offices, and Internet cafes are possible vehicles through which the government could reach end users of e-Services in education, health, agriculture and rural development. In parallel, the digital platform will allow the Government to consolidate its web-based presence and services; link its administration together through shared services, ensure cybersecurity; create and sustain a framework for digitization; and for data interoperability and sharing amongst the government institutions.

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[8] See https://theodi.org/news/Burkina Faso-faso-launches-open-data-initiative-with-mentoring-from-the-odi-and-funding-from-the-world-bank.
[9] First steps implementation of the open data initiative are funded through the grant Supporting Burkina Faso Open Data Initiative and addressing drought risks by introducing innovative use of data & Open Data solution http://www.worldbank.org/projects/P151740?lang=en.
[10] With a score of 0.18, Burkina Faso is ranked among the countries with a low e-Government Development Index. See http://unpan3.un.org/egovkb/en-us/Data/Country-Information/id/27-Burkina Faso-Faso.
[11] Multichannel service delivery is the provision of public services through various means in an integrated and coordinated way. See United Nations e-Government Survey 2014, Chapter 5 • Mobile and other channels for inclusive multichannel service delivery, p 95, http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf.

C. Higher Level Objectives to which the Project Contributes

13. The proposed project eBurkina supports the World Bank's Twin Goals of ending extreme poverty and promoting shared prosperity for the bottom 40 percent by leveraging ICT to improve access to information and services. This will be achieved by promoting better governance in the public sector, through public administration's adoption of a digital platform and shared services (email, file sharing, access to common maps and databases via an enterprise service bus, use of payment gateway, cybersecurity, etc.) to improve data exchange between agencies; and to provide timely information and e-Services of relevance to citizen's well-being as well as local companies and entrepreneurs seeking to do business.

14. The impact of such activities will be increased government's effectiveness through the usage of shared electronic services as opposed to current practices. For the citizens and private sector, the impact will be a dramatic simplification in access to information, a reduction of the burden of transacting with the government in long queues, and the building of a new culture of transparency, trust, and knowledge. An immediate result will be stimulating the business environment through greater transparency, accountability, and collaboration. The ICT sector will directly benefit from the project with new job opportunities in digitization, and the Project will also facilitate greater access to information, services, know-how and finances to stimulate doing business in other economic sectors such as agriculture, rural and financial services.

15. By strengthening institutions and improving public sector service delivery, this project will improve governance and enhance social accountability. The proposed Project is also aligned with the World Development Report 2016 (Digital Dividend), which recommends that governments address the issue of capacity building in local ICT sectors and industries (civil servants, society, SMEs), while they introduce ICT to transform public services delivery.

16. Ultimately, the project seeks to promote information sharing, innovations and spillover effects to increase revenues, resilience, and employment within the principal economic sectors of the country. In particular, the project will have a strong focus on agriculture and rural areas (80 percent of the population, mostly rural, relies on agricultural activities) and related climate change adaptation and mitigation plans. Burkina Faso is particularly vulnerable to droughts, storms, and floods, whose severity and frequency have been increasing due to climate change, primarily affecting rural population. In this context, the project will contribute to the National Adaptation Plan (NAP) of the country, which includes a number on data-driven mitigation measures such as better monitoring of small water reservoirs, the implementation of an early warning systems and the provision of real time advice to farmers.[12]

17. Lastly, the proposed Project will leverage on and reinforce current World Bank's activities targeting ICT, e-Governance, or the agricultural sector and rural areas and including the West Africa Regional Communications Infrastructure Project Burkina Faso (P122402); Burkina Faso

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[12] See National Adaptation Plan of Burkina Faso, June 2015,
http://www4.unfccc.int/nap/Documents/Parties/PNA_Version_version%20francaise%20finale%20BF.pdf.

Public Sector Modernization Program (P132216); Economic Governance and Citizen Engagement Project (P155121); Local Government Support Project (PACT[13]) (P120517); Agricultural Productivity and Food Security Project (P149305); Supporting Burkina Faso Open Data Initiative and addressing drought risks by introducing innovative use of data & Open Data solution (P151740).

II. PROJECT DEVELOPMENT OBJECTIVES

A. Project Development Objectives (PDO)

18. The Project Development Objective (PDO) is to improve capacity and use of ICTs by the public administrations and agencies for (i) the provision of information and public e-services and (ii) to foster entrepreneurship in the digital economy, with a specific focus on agriculture and rural areas.

B. Project Beneficiaries

19. Direct beneficiaries of the project include the government units involved in the provision of information and public e-Services, the citizens and businesses using this information and e-Services, either online or through intermediate channels, and entrepreneurs of the digital economy, with women and the youth as a priority. Indirect beneficiaries include potentially all the citizens of Burkina Faso, with a specific focus on the population living in rural areas, notably small farmers and their family.

20. The entry points for project activities will be: (i) key line Ministries, Departments and Agencies (MDA): Ministry of Development of Digital Economy and Posts (MDENP), National Agency of ICT Promotion (ANPTIC), Ministry of Economy, Finance and Development (MINEFID), Ministry of Agriculture and Hydraulic Planning (MAAH), Ministry of Water and Sanitation (MEA), Ministry of Territorial Administration, Decentralization and Internal Security (MATDSI), Ministry of Public Service, Work and Social Security (MFPTSS), Ministry of Infrastructures and Transport, Geographical Institute of Burkina Faso (IGB); (ii) Civil Society Organizations; and (iii) Private Sector in the ICT arena.

C. PDO Level Results Indicators

21. Achievement of the development objectives of the proposed project will be assessed through the key monitoring and evaluation indicators summarized below.

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[13] Projet d'Appui aux Collectivités Territoriales.

Key results	Key indicators	Baseline / Target
Improved capacity, and use of ICT by the government and the population	• People using the Digital Platform for e-Service Delivery (number) • People trained under the project (number) (of which women)	0 / 5000 0 / 5000 (40 percent women)
Provision of information and public e-Services	• e-Services deployed through the Digital Platform for e-Service Delivery (number) • Public authorities and external producers providing information as open data on the portal data.gov.bf (number)	0 / 5 31 / 100
Foster entrepreneurship in the digital economy	• Startups, SMEs and Civic tech incubated (including percent focusing on agriculture or rural areas) (number)	0 / 30 (33 percent focusing on agriculture or rural areas)

III.   PROJECT DESCRIPTION

A.   Project Components

22.   In order to achieve the PDO, the proposed project follows an integrated transformational solutions approach including four components.

23.   **Component 1: Enabling Environment for e-Government, including Policy, Legal and Regulatory Frameworks (approximately US$3 million equivalent).** The aim of this component is to create an enabling environment conducive to a successful implementation of e-Government projects.

24.   This component will include: (i) review and upgrade the e-Government strategy, including a stocktaking of public websites and e-Services; (ii) a feasibility study of the digitization of administrative procedures; (iii) policy and regulatory support and advice on legal framework to enable the development and use of e-Services; (iv) support to the establishment of a dedicated governance and institutional framework for e-Government. This may include the appointment of a Chief Information Officer and capacity building of civil servants; (v) support to the national cybersecurity strategy under the National Agency for Security of Information Systems (ANSSI); and (vi) development of a government interoperability framework, including technical standards and policies for data exchange, data management, and open data in harmony with existing projects (G-Cloud, shared services, BODI).

25.   **Component 2: Data Management and Digital Platform for e-Service Delivery (approximately US$10 million equivalent).** The direct outputs of this component will be a shared digital platform to be used by government units, key public information, open data, a central government portal, as well as targeted e-Services. Information and e-Services will be designed to serve an inclusive audience, including women and young girls.

26.   This component will include:

(i) Deploying a Digital Platform for e-Service Delivery for simplifying and reducing the cost of implementation of e-Services. More specifically, this activity will finance (a) streamlining of a Digital Platform for e-Service Delivery across the Government, including implementation of selected government shared services such as a governmental intranet with document and records management and communication tools in selected administrations; (b) support to the digitization and implementation of key administrative procedures or e-Services to be selected based on the e-Government strategy; and (c) capacity building for the establishment and development of a community of local developers for e-Services;

(ii) Strengthening data management and open data in key sectors. This activity will build on first successes of the Burkina Faso Open Data Initiative to reinforce the production and dissemination of information in priority sectors including education, agriculture, rural and finance; and

(iii) Expanding accessibility of information and e-Services through a central government portal, including a mobile version. This portal will list all administrative procedures and e-Services available online. This activity will build on and extend the *Guichet Virtuel de l'Administration Publique* (GVAP) currently developed under the Public Sector Modernization Program.

27.   Additionally, this component will support the development of selected e-Services targeting rural areas and the agro-business supply chains.

(iv) Deploying an online geospatial information system (GIS) for rural development and food security management. This sub-component will support the development of an online open source platform that facilitates the creation, sharing, and collaborative use of geospatial data, with a specific focus on agriculture and food security in the context of climate change adaptation and mitigation. This sub-component and the following one may also contribute to the early warning systems by integrating and enhancing the diffusion of weather and climate data;[14]

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[14] The early warning system of Burkina Faso is currently being reinforced thanks to a UNDP-GEF project which aims to implement an automatic weather stations network. See last mission report of the project: http://undp-cirda.blogspot.fr/2016/05/Burkina Faso-faso-mission-report.html.

(v) Implementing an information platform aimed at providing relevant information for rural development, including commodity market prices, weather data and farming tips to farmers. There is growing evidence that better access to price information through ICT can increase farmers' revenues and reduce price for consumers; and

(vi) Establishing an annual municipal performance tracking system that provides reliable, timely open data on the performance and institutional capacity of municipalities. This municipal performance tracking system would build on and expand an existing, low-cost annual municipal performance and institutional capacity survey initiated by the *Programme d'Appui aux Collectivités Territoriales* (PACT).

28.   Lastly, this component will strongly benefit from the two e-Government projects currently under implementation. On one hand, the Government of Burkina Faso is implementing the World Bank Public Sector Modernization Program which includes the development of a unified and consolidated on-line portal for the Burkinabe administration, the so-called *Guichet Virtuel de l'Administration Publique*. The web-based portal, under development, will have a limited range of information and e-Services, targeting civil servants and students only. Also, ANPTIC launched in November 2015 its G-Cloud project. Implemented by NOKIA, the G-Cloud project is expected to bring the preliminary components of a shared public service delivery infrastructure, including fiber connectivity and access to shared data centers (G-Cloud nodes) for 400 public facilities across the country, as well as a Platform as a Service (PaaS). To the extent possible, eBurkina will seek to expand and leverage on these projects, with a focus on bringing data management and e-Services deployment capacity. Below is a summary of the project timelines, which show the potential for implementation synergies.

Figure 1: e-Government projects timelines
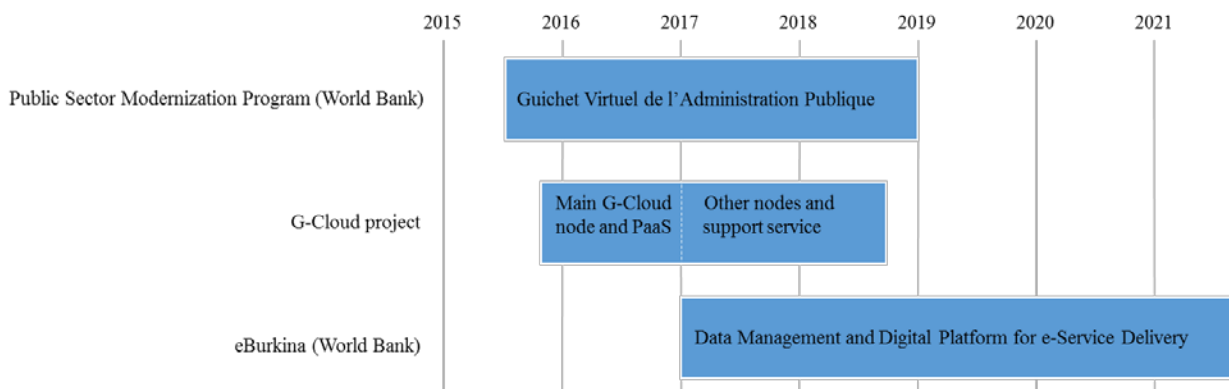
29.   **Component 3: Foster local skills and entrepreneurship in the digital economy (US$4.5 million equivalent).** Tech hubs and incubators are one of the key drivers of the digital economy across Africa. They can significantly help collaboration between academia, government and the private sector to develop a vibrant ecosystem that facilitates innovation and market entry. They are a good complement to e-Government initiatives for stimulating demand, use, and the development of local digital content. In Burkina Faso, existing tech hubs (Beoogolab, Jokkolabs, Ouagalab) gather an active community of young developers, but they do not offer business support.

Furthermore, the limited capacity of current facilities is an important constraint. Therefore, this component seeks to reinforce the existing business incubators and tech hubs ecosystem in Burkina Faso to provide a critical mass of local entrepreneurs with affordable and reliable access to broadband internet, office space, training, business support services, and business incubation in a single facility. It will also develop the right technological and entrepreneurial skills and knowledge for local content production.

30.   This component will include:

(i) Conducting detailed feasibility studies for each incubator to finalize the concept and preparing a study aimed at creating the governance structure and sustainable business model of the incubator;

(ii) Setting up an incubator in Ouagadougou (with a possible extension in Bobo-Dioulasso) including rental and revamping of office space, IT and office equipment, operating costs and the hiring of the managers;

(iii) Training and knowledge management (e.g. study tours, competition and mentoring) for the digital economy, including setting up a fellowship program for entrepreneurs;

(iv) Developing and implementing a strategy to stimulate the production of local digital content, including competition and communication, with a special focus on the agricultural and rural sectors; and

(v) Strengthening the capacity of the MDENP and the ANPTIC to lead and promote the digital economy agenda.

31.   This activity will build on the extensive engagement with private sector innovation actors, fostered under the Open Data initiative, and similar experiences led by *Info*Dev.[15] It will also be coordinated with ongoing initiatives in Burkina Faso such as the regional integration Africa Center of Excellence (ACE) located in Ouagadougou 2iE Institute and dedicated to Water, Energy and Environment Sciences and Technology.

32.   **Component 4: Project Management, Monitoring and Evaluation (US$2.5 million equivalent).** This component will support ANPTIC in project management as the Implementing Agency and will also cover training, office equipment, operating costs, audits, sensitization and communications as well as monitoring and evaluation. ANPTIC will be responsible for project implementation and execution with initial support on financial management and procurement from the already established Permanent Secretariat of the Transport Sector Program (SP-PST). This component will also include strengthening institutional and project management capacity of ANPTIC and help prepare a potential second phase of eBurkina.

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[15] *InfoDev* is a World Bank Group program that supports entrepreneurs in developing countries through business incubators for climate, agribusiness and digital.

B.   Project Cost and Financing

33.   The instrument is an Investment Project Financing (IPF).

34.   Total project financing requirements (including contingencies) are estimated at EUR 18.80 million equivalent to US$20.00 million with an additional in-kind national counterpart funding estimated of EUR 342.803 (as per Burkinabe legislation) that is in parallel and under a different umbrella.

35.   Retroactive Financing: No withdrawal shall be made for payments made prior to the signing date of the Financial Agreement, except for payments up to an aggregate amount not to exceed EUR 700,000 may be made for payments made prior to this date but on or after October 1, 2016, for Eligible Expenditures.

Figure 2. **Total Costs (Including Contingencies) and Financing Sources for the Project**

Project Components	Project cost (in US$ million equivalent)	IDA (in US$ million equivalent)	% financing
Component 1: Enabling Environment for e-Government, including Policy, Legal and Regulatory Frameworks	3.0	3.0	100
Component 2 : Data Management and Digital Platform for Service Delivery	10.0	10.0	100
Component 3: Foster local skills and entrepreneurship through in the digital economy	4.50	4.50	100
Component 4: Project Management, Monitoring and Evaluation	2.50	2.50	100
TOTAL PROJECT COSTS	20.0	20.0	100
TOTAL FINANCING REQUIRED	20.0	20.0	100

C.   Lessons Learned and Reflected in the Project Design

36.   **Government commitment and ownership of the project.** The team recognizes the importance of client commitment and ownership for an efficient implementation of project activities. A strong partnership with key private and public stakeholders in the digital economy has been developed throughout the implementation of the WARCIP project. There are also clear signs that the World Bank's engagement in the Education, Agriculture and Public Sector in Burkina Faso has generated pertinent and usable knowledge and information, which is being absorbed by policy- and decision-makers.

37.   **Strong project management.** Experience in several countries has shown that strong

project management is needed to avoid initial implementation delays for transformational integrated projects. The support of a multi-sectoral steering committee comprising stakeholders across Government (including the private sector in Component 3) would be essential in mitigating these risks, together with a strong project management committee and technical teams.

38.   **Emphasis on change management and developing capacity.** The implementation of Components 2 and 4 will result in fundamental changes in the way public services will be delivered, and these changes need to be successfully anticipated and managed if it is going to be successful. The required shifts in work processes, mindsets, culture and behavior cannot be achieved without a strong commitment to change management. This should go hand-in-hand with human capacity development. The complexity of project design needs to be balanced carefully against the client's human resource endowment and readiness to execute. Capacity must be assessed realistically, and minimum professional and administrative frameworks should be in place before launching activities and building momentum. Accordingly, eBurkina contains several activities ranging from a detailed change management strategy, the development of a cadre of trainers in the new incubators to the strengthening capacity of technicians and information system capabilities administrators within Ministries and related agencies activity.

39.   **A strong focus on e-Services' uptake.** As seen in previous World Bank projects, the uptake (adoption and use of e-Services) is a critical but too often neglected step of an e-Government value chain. The project has been therefore designed to address this specific phase by putting users at the center. This includes: (i) the participation of users and beneficiaries early on in the design and implementation of the Digital Platform for e-Service Delivery and related e-Services; (ii) extensive communication and sensitization work; (iii) a business-friendly approach through support to entrepreneurship; and (iv) dedicated training programs targeting digital services developers, civil servants in ministries and agencies in charge of administrative procedures and other intermediaries delivering public services, as well as e-Government project leadership.

40.   **There is no good e-Government service without good quality data.** Data is a critical and first asset of any e-Government project and, as such, needs the attention it deserves. Many Government IT Systems have failed to deliver positive outcomes or became useless because of poor quality data. Therefore, the project will address key data management, from collection to dissemination, through the implementation of proper and common data management standards and procedures, a dedicated data exchange platform for administrations and specific initiatives to leverage public data beyond the Government, thanks to the Open Data Initiative.

41.   **A Shared Digital Platform at the core of e-Government**. Shared infrastructure and applications are becoming the standard for e-Government projects to enable a rapid and low-cost deployment of ICT-enabled public services. Shared infrastructure and applications encompass data centers (Government Cloud), data exchange layer, security layer as well as enabling components for digital services deployment (authentication, e-Signature, e-Payment, etc.). This also includes mobile delivery systems, a key success factor in countries with a low fixed-broadband subscription rate such as Burkina Faso.

42.   **Incubation and innovation programs can be a powerful complement to e-Government.** Previous business-support programs, such as the ones developed under InfoDev

support, have demonstrated that the design of a sound and tailored business model is key to the long-term success of these digital hubs. For eBurkina, the feasibility study, including the design of a business model, will be critical to the impact of the component and should be supported by international experts.

43.   **Involving private sector ICT companies to support eBurkina is key.** The design of eRwanda was based on the well-learned lesson that the private sector is better placed to develop and operate ICT infrastructure and services. However, with regard to the innovative nature of ICT projects, implementing partners should be carefully selected and be able to demonstrate live products, which have been successfully deployed elsewhere. In Vietnam, the Danang city performed exceptionally well in modernizing its local services through ICT, in particular, thanks to the close collaboration of the Project Implementation Unit (PIU) with specialist consultancies and clear procurement plans.

IV.   IMPLEMENTATION

A.   Institutional and Implementation Arrangements

44.   ANPTIC will be the Project Implementing Entity (PIE) for the project. ANPTIC shall establish a Project Management Team (PMT). The PMT will be responsible for day to day Project coordination and implementation, including: (i) carrying out Project financial management and procurement activities; (ii) preparing Annual Work Plans; (iii) monitoring, evaluation and sensitization of Project activities and preparing Project progress reports and monitoring and evaluation reports; (iv) coordinating with other stakeholders on Project implementation; and (v) technical and financial audits of Project activities. ANPTIC will be supported initially in financial management (FM) and procurement by an already established and experienced PIU called SP-PST. SP-PST has been implementing successfully the BF-WARCIP project and has vast experience with WB Guidelines and Procedures and will allow a quick start of the implementation, building on lessons learned and taking advantage of the regulatory reforms supported by WARCIP. The SP-PST will also work closely with the ANPTIC to provide training in financial management and procurement specifically.

45.   A Project Steering Committee (chaired by the MDENP and incorporating other relevant key ministries and agencies such as MATDSI, MINEFID, MFPTSS, MAAH, ANSSI with ANPTIC reporting[16]) will be established for overall guidance, direction, and coordination as well as for fiduciary and governance oversight. The Ministerial Order (*Arrêté Ministériel*) setting up the Steering Committee will need to be established by a Decision of the Burkinabe Government in line with other World Bank projects.

46.   ANPTIC will be in charge of all technical matters providing all fiduciary support in the implementation of the eBurkina project, including Procurement, Financial Management (FM), Monitoring & Evaluation (M&E) and Safeguards supported initially by the SP-PST for all

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[16] ANPTIC, being an Agency and not a Ministry, will be in charge of the Secretariat function and reporting (e.g. Rapporteur) for the Steering Committee.

fiduciary, FM and procurement related activities. A project manager (Chargé de projet) will be hired under the project to provide project management support to the Project Steering Committee to which the ANPTIC will be reporting to.

47.   A Framework Agreement between MINEFID, MDENP and ANPTIC will be signed not later than one month after effective date and acceptable to the Association. The Framework Agreement ("Contrat Plan") will set forth the flow of Project funds from the Recipient to ANPTIC, as well as all provisions relating to the implementation of the Project, procurement, financial management, monitoring, and disbursement; all in accordance with the provisions of this Agreement.

B.   Results Monitoring and Evaluation

48.   Results monitoring will be an integral part of the eBurkina project, and ANPTIC will have overall responsibility for reporting to the MDENP and the Project Steering Committee. ANPTIC will prepare Monitoring and Evaluation Reports on a quarterly basis that will include the updated Results Frameworks, with supporting comments on the trends and associated action table, listing the corrective actions to be implemented and persons responsible clearly identified. The reports will be sent to the World Bank for information.

49.   ANPTIC will be responsible for collecting the relevant data throughout the project implementation. ANPTIC will get its information directly from the project team, incubators set up under Component 3 and from regular surveys. In addition, funding will be provided by the eBurkina project to support the mid-term review and completion review and to do an evaluation of the impact of the project.

C.   Sustainability

50.   Sustainability of the eBurkina project is determined by the Government of Burkina Faso's commitment, as well as the rate of adoption and implementation by key Ministries of shared services on digital platforms (Component 2) and private sector participation for Component 3 and at the Project Steering Committee. The Government is highly committed to the project, as it is fully aligned with the broader "Modernization of Public Administration Strategy" (*Stratégie de Modernisation de l'Administration* 2011-2020 with the Action Plan 2015-2018 and Pillar 4 referring to e-governance) and with the strategic framework for Burkina Faso's new "Digital Development Strategy" (*Cyberstratégie Sectorielle e-Gov - Burkina Faso*), these in turn under the umbrella of the Government's "Strategy for Accelerated Growth and Sustainable Development" (*Stratégie de Croissance Accélérée et de Développement Durable* - SCADD), increasing the sustainability of the project outcome. As shown in the economic and financial analysis (Annex 4), it is expected that the annual operating cost of expenditures can be sustained within the existing budget, even given the current fiscal constraints. Looking at the existing studies and similar projects in other countries, it is expected that the dissemination of ICT and e-Services in the agriculture sector may lead to an increase of 10 percent of revenues for the farmers. Likewise, private sector participation in the design and implementation of the activities aiming at advancing the development of a digital innovation ecosystem under Component 3 is a key requisite for sustained growth of the digital economy. The team has met with various private-sector

stakeholders during preparation missions, including telecom operators, potential tech hubs and incubation space (Jokkolabs, Ouagalab, La Fabrique, 2IE, Beoogolab). Private sector stakeholders consider the project will have a positive impact and will help to expand digital content and services for the citizens. They are happy to engage during project implementation and get involved in the activities (e.g. Component 3) and finally want to ensure their participation at the Project Steering Committee.

V.   KEY RISKS

A.   Overall Risk Rating and Explanation of Key Risks

51.   The risk for the proposed project is substantial. Primary risks include: (i) changes in political leadership and senior officials following the formation of a new Government which may hamper ownership of the project; (ii) major macro-economic instability due to combined low revenue collection and high unpredictability of revenue and cash availability for expenditures; (iii) potential delays in decision-making and implementation of activities due to the fact that several ministries/agencies will be involved in the project; (iv) potentially weak private sector and entrepreneurial participation, which would make the achievement of the PDO challenging, because their involvement is essential for developing local e-Services and applications; (v) potential problems posed due to limited institutional capacity and lack of expertise in some areas of the components.

52.   **Political and Governance (high):** This project's design is the result of several years of interactions with the former administration. Following recent changes in Government leadership, at all levels, it will be critical to ensure appropriation of the project by new appointees. Therefore, the project team will engage with multiple levels of leadership within targeted Ministries to ensure broad, institutional ownership, mitigating the risks posed by turnover. Additionally, engagement with high-level appointees will be facilitated by the new President's commitments to ICT and e-Government, a priority of its presidential program.

53.   **Macroeconomic (substantial):** The macroeconomic environment in Burkina Faso is precarious as actual government revenue is consistently less than that budgeted, while budgets continue to over-run. In addition, political instability, and regular replacing of ministers, undermines investor confidence. Through components 2 and 3 of the project, the team will seek to achieve quick and tangible outputs, building on what has already been achieved in previous engagements, and implementing recommendations from the WARCIP.

54.   **Technical Design of Project (substantial):** The main risks regarding technical design of the project are related to connectivity and hosting capacities behind the digital platform, as well as knowledge transfer to ensure its full adoption. The improvement of connectivity and hosting mainly depend on WARCIP and G-Cloud ongoing projects. WARCIP project has been moving faster in the last months and the roll out of the fiber optic should began shortly. Regarding the G-Cloud project, the main G-Cloud node in Ouagadougou is expected to be completed by first quarter of 2017. As for knowledge transfer, the project includes dedicated training sub-components with the sole task of transferring knowledge to both administrations and the private sector. Moreover, training and development will be expanded to other economic regions. M&E will be conducted to

ensure knowledge transfer.

55.   **Institutional Capacity for Implementation and Sustainability (substantial)**: Most of targeted institutions are lacking staff with the required skills to implement the technical components of the project and related institutional reforms. Therefore, the eBurkina project will be looking to strengthen government and private sector capacities in terms of performance and public-private cooperation. This will help lay, over the longer term, foundations for better sector performance, accountability and improved communications.

56.   **Other: Security (substantial):** Insecurity in the region poses a high risk to human security (World Bank staff and client) and project implementation and sustainability. It creates severe limitations on access to the operating environment, which in turn elicits a number of additional project risks, creating challenges for project design, implementation and monitoring. Recognizing that the risk of insecurity cannot be completely mitigated, the project is designed to incorporate agile and flexible implementation planning, taking account of the regular security advice issued by the World Bank.

57.   The overall risk is rated Substantial because of the substantial residual risk in the risk categories (Annex 5). The likelihood of these risks to be realized is relatively low but, if they occur, their impact would substantially affect the PDO. At the operating environment level, vested interests, resistance to change within the Administration and political interference in the management of public funds pose substantial risk.

VI.   APPRAISAL SUMMARY

A.   Economic and Financial Analysis

58.   **There is a strong rationale for public financing because most of the activities financed under the Project (information, e-Services) are essentially pure public goods.** Public investment in the Project is also justified by the significant positive externalities associated with achieving efficiency in service delivery and cost savings for the public administration thanks to the shared digital platform. There is also strong evidence that taking away barriers (charging cost) for reuse of public sector information (open data) is most efficiently done through public investment. Finally, the lack of business support to high-potential digital entrepreneurs is justifying initial public financing of an incubator and tech hub program.

59.   **The World Bank's value-added arises from the task team's technical expertise as well as the global knowledge experience in areas such as e-Government and associated change management strategy to foster adoption and uptake of ICT for more efficient delivery of public services.** The World Bank has supported several e-Government initiatives with a view to leverage a push with the roll-out of e-services to create a pull on the digital innovation ecosystem, such as the Regional Communications Infrastructure Program (RCIP) Adaptable Program Loan 1 – Kenya Transparency and Communication Infrastructure Project (P149043), the eRwanda (P098926), eGhana (P093610) and the eBenin (P113370) projects. The World Bank has also extensive experience with business-support programs and benefits from a strong collaboration with *Info*Dev.

60.   **There is growing evidence of the positive impact of ICT on agriculture, in particular on access to market information with up to 24 percent increase in farmers' income.** Overall, it is reasonable to expect a 5 to 10 percent increase in farmers' revenue in Burkina Faso, thanks to the use of price information mobile e-Service and in savings of their time and spending on transport and logistics.

61.   **ICT in agriculture can help beyond information asymmetry issues and should be considered a key asset to climate change adaptation**. It is expected that rise in temperature and longer dry seasons will decrease crop yields by at least 18 percent by 2050 across Sub-Saharan Africa.[17] Therefore, ICT technologies or approaches that have the potential to support farmers and institutions in the fields of soil conservation and water management, such as a shared geospatial platform, are likely to make a difference in mitigating climate change impact.

62.   **The economic impact of the eBurkina project will be closely linked to the development of connectivity in the country, which is, for a part, currently addressed through the WARCIP project.** The number of Internet users has grown from 1 percent in 2009 to 9.4 percent in 2014 (about 1.85 million people) but the majority of users access Internet via a mobile connection (1 million subscriptions). Therefore, one way of increasing the impact will be to develop mobile (smartphone and SMS) versions of digital services where possible.

63.   **The Project has been designed to maximize the chance of success in e-Services' uptake.** First, the choice of rural development for preliminary e-Services is aligned with the demand expressed both by high-level officials, main stakeholders of the sectors, and the local population. Second, the agricultural sector, and in particular, the cotton sector, is a well-structured one. Third, there is an important community of international partners and projects already in place that will enable to facilitate the adoption of e-Government solution in the rural areas. Fourth, the adoption of a multichannel approach will be key to ensuring new digital services really benefit to the illiterate and offline population. Lastly, it is expected that the support of local skills, innovation and entrepreneurship will enhance the chance of developing digital services and content tailored to the needs of rural population.

64.   **The Project is a good investment for Burkina Faso.** The economic analysis (Annex 4) shows that, using a 15-year timeframe, the overall Benefit-Cost Ratio is 3.5.

65.   **The investment in e-Government is timely for the country as it will help to leverage current World Bank projects on public sector modernization and connectivity**. As concluded in the last World Development Report, e-Government projects outcomes are strongly positively linked to the quality of government institutions and the state of connectivity.[18] The Public Sector Modernization Program will offer downstream the necessary change to address and mainstream e-Government within the institutions, while the current broadband projects such as WARCIP-BF and G-Cloud will bring the necessary connectivity so that e-Services can reach and be effectively

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[17] M. Waongoa, P. Lauxb, H. Kunstmann, Adaptation to climate change: The impacts of optimized planting dates on attainable maize yields under rainfed conditions in Burkina Faso, June 2015
[18] World Bank, World Development Report 2016: Digital Dividends, p179.

used by a substantial part of the population.

B. Technical

66.   The technical design of the project benefits from the lessons learned during the first phase. In particular, the hybrid implementation (ANPTIC, with initial support from existing SP-PST, and a Steering Committee) structure has been shown to work well during trust fund (TF) implementation. The range of external partnerships is also being extended in the second phase to ensure an integrated approach to investments in the digital sector. The program will assess government fiduciary and procurement capacity for Ministry of Digital Economy and actively collaborate with the Ministries of Education, Agriculture, Health and Finance.

67.   The appraisal mission has confirmed the status of ongoing e-Government related projects and active collaboration with dedicated ministries and partners. The private sector, especially the telecom operators, and academia have expressed active interest in collaborating with the Project, in particular to develop the digital innovation ecosystem mainly addressed in Component 3.

68.   The project will build and benefit from the successful first steps of the Burkina Faso Open Data Initiative supported through the TF, including the launch of the open data portal data.gov.bf, the formalization of a dedicated project, the release of 189 datasets from 31 organizations, a partnership with the National Institute of Sciences for Socities *(Institut National des Sciences des Sociétés, INSS)* and Research Institute for Development *(Institut de Recherche pour le Développement, IRD)* for the collection of school GPS points, the project Our Data, Our Schools *(Nos Écoles, Nos Données, NENDO)*, an online platform for school's performance data visualization and the Open Election project which brought extensive media coverage to the initiative.[19]

C. Financial Management

69.   A Financial Management (FM) assessment of the National Agency of ICT Promotion (ANPTIC), implementing entity of the eBurkina Project, was carried out in November 2016. It was agreed that the Permanent Secretary of the Transport Sector Program (SP-PST) will support the ANPTIC team, and, specifically for Financial Management, will provide on the job training to the ANPTIC financial management staff. The assessment complied with the Financial Management Manual for World Bank-Financed Investment Operations, updated on February 4, 2015, as well as with the Financial Management Assessment and Risk Rating Principles.

70.   The objective of the assessment was to determine whether the ANPTIC has adequate FM arrangements in place to ensure that the eBurkina Project funds will be used only for the intended purposes with due attention to considerations of economy and efficiency. Arrangements are acceptable if they are capable of recording accurately all transactions and balances, supporting the

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[19] The Guardian, Why data was crucial to Burkina Faso's first election since uprising, 4 December 2015, http://www.theguardian.com/news/datablog/2015/dec/04/why-data-was-crucial-to-Burkina Faso-fasos-first-election-since-uprising.

preparation of regular and reliable financial statements, safeguarding the Project's assets, and are subject to auditing arrangements acceptable to the World Bank. These arrangements should be in place when project implementation starts and be maintained as such during project implementation.

71.   The FM assessment revealed that ANPTIC has a number of strengths including (i) financial management procedures named "Procedures of the Finances and Accounting Directorate, dated of June, 2016" (Budget, Accounting, Funds Flow, Assets management) which are acceptable to the Bank; (ii) sufficient qualified financial management staff on board; (iii) an internal auditor expected to be on board by end of December 2016; (iv) an accounting software (TOMPRO) which is adequate for project management; and (v) has recruited a statutory auditor (*Commissaire aux comptes*) for the year 2015 (first audited year), 2016 and 2017. However, the FM assessment found that the staff of ANPTIC does not have practical experience in financial management of World Bank funded projects. Based on that, an accountant was appointed to be in charge of the Project and started on the job training in the SP-PST by project negotiation.

72.   As a result of the above, the following measures were agreed: (i) by effective date, a Project Implementation Manual (including specific financial management policies for the project) acceptable to the World Bank will be adopted: (ii) by negotiation, ANPTIC agreed with the Bank on the Financial reporting template; and (iii) by six months after effectiveness date, ANPTIC should recruit an external auditor.

73.   Based on the World Bank's assessment and the current arrangement in place at the ANPTIC, the residual FM risk for the project is deemed **Substantial**. The proposed FM arrangements are considered satisfactory in fulfillment of the requirements of Bank OP/BP 10.00. The ANPTIC will thus ensure that (i) the proposed mitigation measures are implemented and (ii) the World Bank's Guidelines: Preventing and Combating Fraud and Corruption in Projects financed by IBRD Loans and IDA Credits and Grants (revised January 2011) are followed under the project.

74. Details of the Financial Management arrangements are provided in Annex 3.

D.   Procurement

75.   Procurement for goods, non-consulting, and consulting services for the project will be carried out in accordance with the procedures specified in the "World Bank Procurement Regulations for IPF Borrowers" dated July, 2016 (Procurement Regulations) and the provisions stipulated in the Financing Agreement.

76.   All goods and non-consulting services will be procured in accordance with the requirements set forth or referred to in the Section VI. Approved Selection Methods: Goods, Works and Non-Consulting Services of the "Procurement Regulations," and the consulting services will be procured in accordance with the requirements set forth or referred to in the Section VII. Approved Selection Methods: Consulting Services of the "Procurement Regulations," the Project Procurement Strategy for Development (PPSD), and Procurement Plan approved by the World Bank. The Procurement Plan, including its updates, shall include for each contract (a) a

brief description of the activities/contracts; (b) the selection methods to be applied; (c) the cost estimates; (d) time schedules; (e) the Bank's review requirements; and (f) any other relevant procurement information. The Procurement Plan covering the first eighteen (18) months of the project implementation was submitted to World Bank's approval before project negotiation and was discussed and approved by the Bank duringproject negotiation on 1 December 2016 as reflected in the signed minutes. Any updates of the Procurement plan shall be submitted to the World Bank's approval. The Recipient shall use the World Bank's online procurement planning and tracking tools to prepare, clear and update its Procurement Plans and conduct all procurement transactions.

77.   The National Agency of ICT Promotion (ANPTIC/PIE) through the Project Management Team (PMT) will be responsible for procurement implementation under the Project. The ANPTIC will designate a full time professional staff for the PMT who will be responsible for procurement activities of the Project and he/she shall be trained on procurement regulations. Until the ANPTIC hires a procurement specialist to support the PMT, the full time professional responsible for procurement activities will work closely with the procurement specialist of the SP-PST and will benefit from her coaching and assistance.

78.   **Procurement Assessment**: A procurement risk assessment of the ANPTIC has been completed. The overall capacity of the institution to implement a World Bank financed operation is poor. ANPTIC has been created two years ago and has no experience working with the World Bank and applying related policies and procedures. In addition, this will be the first project to be implemented in Burkina Faso under the World Bank New Procurement Framework. A Project Procurement Strategy for Development (PPSD) has been prepared and every endeavor is being made to ensure the procurement activities are packaged and prepared in such a way as to minimize the risk.

Brief summary of the Project Procurement Strategy for Development (PPSD)

79.   The client has been informed of the obligation to prepare and submit for Bank approval a PPSD. With Bank support, the team has finalized and reviewed the PPSD (including procurement plan) which can be summarized as follows: *(...) the national and international environment is favorable for the procurement of goods intended for the implementation of the eBurkina Faso project. The national market is able to meet the needs of computer equipment, office equipment and furniture as well as office consumables which will be purchased according to the relevant procedures. The same applies to the market for consultant services. The contracts are also open to the sub-regional and international market for specific supplies and services that may require the participation of companies located at the international level. ANPTIC has experience in managing these types of markets and therefore has a clear knowledge of the national, sub-regional and international market.*

E.   Social (including Safeguards)

80.   The project will primarily focus on capacity development and advisory services to public institutions. Minor works carried out in public space will consist only of the excavation of short ditches to accommodate cables, and even this activity may be further reduced by making use of

existing ducts. These works will be of minor scale and will not negatively impact livelihoods, require the acquisition or temporary use of land, or necessitate the physical relocation of people. Therefore there are no social safeguards related risk that may result from the implementation of this project. However, due to the fragile nature of the state, there may arise challenging group dynamics between staff hired under the project and those already in the civil service. Therefore, measures to address such challenges, such as continuous team building activities, will be included in the project.

81.   **Gender.** The project is classified as gender informed; gender-specific actions are to be undertaken during project implementation and are reflected in the results framework. When seeking to advance the development of a digital innovation ecosystem under Component 3, activities will be organized that both attract and support the participation of women entrepreneurs, building on lessons learned by organizations such as Akirachix of Kenya.[20]

F.   Environment (including Safeguards)

82.   The project is classified as environmental Category C (no, or negligible environmental or social negative impacts), as the planned physical activities will only relate to very small-scale civil works for the refurbishment of existing structures. Indoor works will include painting, cabling and possibly the installation of new hardware in areas encompassing several rooms only, within existing buildings. The project activities will not include civil works of a significant scale or the utilization of materials or production of wastes or green gas house emissions that could pose any environmental risk. The incubator to be financed under Component 3 will be established in Ouagadougou, within one of the existing and available facilities identified during the appraisal mission.

83.   The minor scale of the physical activities and their impacts would not warrant the productions of safeguards instruments and the World Bank task team will provide advice and guidance on good environmental and social practice and management during the implementation phase.

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		×	
Natural Habitats OP/BP 4.04		×	
Forests OP/BP 4.36		×	
Pest Management OP 4.09		×	
Physical Cultural Resources OP/BP 4.11		×	
Indigenous Peoples OP/BP 4.10		×	
Involuntary Resettlement OP/BP 4.12		×	
Safety of Dams OP/BP 4.37		×	

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[20] Akirachix collaborates closely with local technology hubs and incubators, and as a result there has been a very positive level of participation of women in digital entrepreneurship and innovation activities in general. See: http://akirachix.com/.

Projects on International Waterways OP/BP 7.50		×	
Projects in Disputed Areas OP/BP 7.60		×	

G.   World Bank Grievance Redress

84.   Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/GRS. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VII. RESULTS FRAMEWORK AND MONITORING

Project Development Objectives

PDO Statement

The Project Development Objective (PDO) is to improve capacity and use of ICTs by the public administrations and agencies for (i) the provision of information and public e-services and (ii) to foster entrepreneurship in the digital economy, with a specific focus on agriculture and rural areas.

These results are at	Project Level

Project Development Objective Indicators

Indicator Name	Core Sector Indicator	Baseline	Cumulative Target Values					End Target	Frequency	Data source/ Methodology	Responsibility for Data Collection
			YR1	YR2	YR3	YR4	FY5				
(1) People using the Digital Platform for e-Service Delivery (number)		0	0	1000	2000	3000	5000	5000	Yearly	Survey	ANPTIC
(2) People trained under the project (number) (including % of women)		0	1000 (25 %)	2000 (25 %)	3000 (33 %)	4000 (33 %)	5000 (40 %)	5000 (40 %)	Yearly	Project data	ANPTIC

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Indicator Name	Core Sector Indicator	Baseline	YR1	YR2	YR3	YR4	FY5	End Target	Frequency	Data source/ Methodology	Responsibility for Data Collection
(3) e-Services deployed through the Digital Platform for e-Service Delivery (number), including number of e-Services targeting rural areas (number)		0	0	2 (1)	3 (2)	4 (3)	5 (3)	5 (3)	Yearly	Project data	ANPTIC
(4) Public authorities and external producers providing information as open data on the portal data.gov.bf (number)		31	50	60	70	80	90	100	Yearly	Statistics from data.gov.bf	ANPTIC
(5) Startups, SMEs and Civic tech incubated (number) (including percent focusing on agriculture or rural areas) (percent)		0	0	0	10 (50%)	20 (40%)	30 (33%)	30 (33%)	Yearly	Incubator	Incubator

Intermediate Results Indicators Component 1:

Indicator Name	Core Sector Indicator	Baseline	YR1	YR2	YR3	YR4	FY5	End Target	Frequency	Data source/ Methodology	Responsibility for Data Collection
			Cumulative Target Values								
(6) Publication of a national e-Government strategy (yes / no)		No	No	Yes	Yes	Yes	Yes	Yes	Yearly	Online publication of the report(s)	ANPTIC
(7) Publication of an e-Government technical framework (yes/no)		No	No	Yes	Yes	Yes	Yes	Yes	Yearly	Online publication of the report(s)	ANPTIC

Intermediate Results Indicators Component 2:

Indicator Name	Core Sector Indicator	Baseline	YR1	YR2	YR3	YR4	FY5	End Target	Frequency	Data source/ Methodology	Responsibility for Data Collection
				Cumulative Target Values							
(8) Citizens consulted for the design and delivery of e-Services (number) (citizen engagement)		0	200	400	600	800	1000	1000	Yearly	Online and offline citizen consultations	ANPTIC
(9) Unique users of GIS e-Service for rural development and food security management (number)		0	0	1000	2000	3000	4000	4000	Yearly	Statistics from the e-Service	ANPTIC
(10) Unique users of the e-Service for agricultural markets information (number)		0	0	10000	20000	30000	40000	40000	Yearly	Statistics from the e-Service	ANPTIC
(11) Number of municipalities having their performance indicators available as open data (number)		140	140	200	250	300	350	350	Yearly	Statistics from the e-Service	ANPTIC

Intermediate Results Indicators Component 3:

Indicator Name	Core Sector Indicator	Baseline	Cumulative Target Values						Frequency	Data source/ Methodology	Responsibility for Data Collection
			YR1	YR2	YR3	YR4	FY5	End Target			
(12) Incubator open to the public (yes / no)		No	No	No	Yes	Yes	Yes	Yes	Yearly	Incubator	ANPTIC /Incubator
(13) Number of visitors at the incubator (number), including women (percent)		0	0	0	1000 (20%)	3000 (30%)	5000 (40%)	5000 (40%)	Yearly	Incubator	ANPTIC /Incubator

Indicators' description

Indicator Name	Description (indicator definition)
(1) People using the Digital Platform for e-Service Delivery (number)	Number of civil servants accessing one or more applications, information, portal, or e-Services delivered through the Digital Platform to handle an administrative task.
(2) People trained under the project (number) (including percent of women)	Number of individuals who received at least one training through the project to improve their capacity and skills to provide or use digital information, e-Services, or to foster entrepreneurship in the digital economy.
(3) e-Services deployed through the Digital Platform for e-Service Delivery (number), including number of e-Services targeting rural areas (number)	This includes the deployment of e-Services supported by the project (Component 2) or e-Services not supported by the project but deployed thanks to the Digital Platform for e-Service Delivery.
(4) Public authorities and external producers providing information as open data on the portal data.gov.bf (number)	Number of entities publishing at least one dataset as open data on data.gov.bf. A dataset is defined as one resource, which can contains several files. If relevant, the dataset should be of national coverage. Open data means data published online, in a machine-readable format, under an open license. The Burkina Faso Open Data Initiative aims at making any non-sensitive data relevant to the country available as open data, including therefore datasets produced by non-public authorities.
(5) Startups, SMEs and Civic tech incubated (number) (including percent focusing on agriculture or rural areas) (percent)	Number of projects, either business-oriented or non-profit, supported through the incubator programs delivered by the incubator.
(6) Publication of an e-Government strategy (yes / no)	The e-Government strategy may include an audit of public websites and an identification of public administrative procedures and e-Service.
(7) Publication of an e-Government technical framework (yes/no)	The technical framework may include data security and risk mitigation, data exchange, data management, and open data.

(8) Citizens consulted for the design and delivery of e-Services (number)	Citizens consulted either through offline consultations (workshops, meetings, etc.) or through online consultations.
(9) Unique users of GIS e-Service for rural development and food security management (number)	Number of unique visitors to the GIS e-Service.
(10) Unique users of the e-Service for agricultural markets information (number)	Number of unique subscribers to the e-Service receiving information via SMS, Internet mobile, or other channels.
(11) Number of municipalities having their performance indicators available as open data (number)	Only municipalities releasing the complete list of indicators should be taken into account.
(12) Incubator open to the public (Yes / No)	The official date of opening will be taken into account.
(13) Number of visitors at the incubator (number), including women (percent)	Number of individuals who registered either for an event, a training or a program hosted or organized by the incubator.

Results chain

Components/ Focus Area	Constraints/Issues	Evidence on Possible Interventions	Inputs	Activities and Processes	Outputs	Intermediate Results	Outcomes	Impact (SDGs)
Component 1: Enabling Environment for e-Government	ICT is not considered as a strategic function within the administration and is lacking a whole of government approach	Timely and accurate information can inform relevant policy and reform decisions. When poor information is the main barrier to improving service outcomes, informing citizen through Internet and SMS-based technology often has a high impact. Digitizing and streamlining processes, when soundly implemented, lead to reduction of transaction costs.	Project funding to implement Component 1 ($3 million) Project funding to implement Component 2 ($10 million) Project funding to implement Component 3 ($4.5 million) Project management structure to implement the activities Implementation support from the Government of Burkina Faso Knowledge and technical expertise from World Bank staff and consultants to support project implementation	Review and upgrade the e-Government strategy, including a stocktaking of public websites and e-Services and a feasibility study of the digitization of administrative procedures Support on legal framework to enable the implementation of e-Government Support to the establishment of a dedicated governance and institutional framework for e-Government; Support to the national cybersecurity strategy under ANSSI Development of a government interoperability framework and policies for data exchange, data management, and open data in harmony with existing projects	The enabling environment for e-Government (strategy, action plan, governance, legal framework, technical standards) has been reviewed, new recommendations have been formulated, and documents have been adopted.	The national e-Government strategy including sectoral focuses (IO 6) and the e-Government technical framework (IO 7) are available for implementation	People (civil servants and non-government staff) are trained (PDO 2) and using the Digital Platform to deliver e-Service (PDO 1). New e-Services are deployed through the Digital Platform (PDO 3) and used by citizens. Public authorities are providing information as open data on the portal data.gov.bf (PDO 4)	Quality, reliable, sustainable and resilient data infrastructure to support economic development and human well-being (SDG 9) Effective, accountable and transparent institutions capacity and use of ICTs by the public administrations and agencies (SDG 16) Access to public information by all (SDG 16) Lay the digital foundation to provide legal identity for all (SDG 16)

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Component 2: Data Management and Digital Platform for e-Service Delivery	The country is lagging behind in terms of use and access to online e-Services and ranks 178 out of 193 countries in the 2016 UN E-Government Development Index.				Deploying a Digital Platform for e-Service delivery	The Digital Platform is operational.	Priority e-Service are deployed (IO 9, 10 and 11)	
	Existing IT systems within the administration do not share information to each other and with the public.				Strengthening data management and open data in key sectors	Priority data have been collected and released as open data.		
	Most of data collected and held by the national government are not available in a way that would facilitate their reuse (not in machine readable format, only in aggregated level, without metadata). Some key datasets are not collected at all.				Expanding accessibility of information and e-Services through a central government portal	The central government portal is online. The open data portal data,gov.bf has been reviewed and updated.		
Component 3: Foster local skills and entrepreneurship in the digital economy	The majority of national income relies upon agriculture and extractive industry.	A number of countries have used ICT to help diversify their economies			Conducting detailed feasibility study for the incubator	Incubator in Ouagadougou is set up and operational.	Incubator is open to the public (IO 12) and welcoming a great number of visitors (IO 13)	Startups, SMEs and Civic tech are incubated (PDO 5) and transformed into sustainable business model.	Jobs creation in the ICT sector (SDG 9)
	Tech people are lacking entrepreneurship skills and support to transform their	Incubators are effective in developing startup businesses.			Setting up an incubator in Ouagadougou				

	application into sustainable businesses.			Training and knowledge management Developing and implementing a strategy to stimulate the development of local digital content Strengthening the capacity of the MDENP and the ANPTIC to lead and promote the digital economy agenda				
Focus on agriculture and rural areas	The agricultural sector is the least equipped in terms of ICT (computer and Internet access). It is expected that climate change will significantly decrease crop yields across Sub-Saharan Africa. The level of Internet users is very low, in particular on fixed internet and within rural areas.	In other countries, streamlining ICT into agricultural and rural areas has led to increase in rural population revenues. ICT is used across all sectors to help tackle climate change.		Deploying an online geospatial information system (GIS) for rural development and food security management Implementing an information platform aimed at providing relevant information for rural development Establishing an annual municipal performance tracking system	The GIS is online with data available for download and reuse. The e-Service for agricultural markets information is deployed and users can subscribe. Performance indicators are collected into a single database and updated on a yearly basis.	Unique users of GIS e-Service for rural development and food security management (IO 9) Unique users of the e-Service for agricultural markets information (I0 10) Municipalities are publishing their performance indicators as open data (IO 11)	e-Services targeting agriculture and rural areas are deployed (PDO 5) Startups, SMEs and civic tech focusing on agriculture and rural areas are incubated (PDO 5)	Rise in agricultural productivity and incomes of small-scale food producers (SDG 2)

Annex 1: Detailed Project Description

85.   The eBurkina project will be executed over a five-year period with a total IDA financing of EUR 18.8 million (equivalent to US$20.00 million) and will follow an integrated transformational solutions approach including four components: (1) Enabling environment for e-Government, including policy, legal and regulatory frameworks; (2) Data management and digital platform for e-Service delivery; (3) Foster local skills and entrepreneurship in the digital economy; and (4) Project Management, Monitoring and Evaluation. The estimated cost of the eBurkina project by component and by activity is detailed below excluding physical and price contingencies.

Figure 3: Breakdown of project costs by Components and by Activities (excluding physical and price contingencies)

	Base Cost		
(US$'000)	IDA	Gov't	Total
Component 1: Enabling Environment for e-Government, including Policy, Legal and Regulatory Frameworks			
Activity 1.1: Review and upgrade the national e-Government Strategy, including a review of public websites and e-Services and feasibility study of the digitization of administrative procedures	1,000.0		1,000.0
Activity 1.2: Policy and regulatory support and advice on legal framework to enable the development and use of e-Services	500.0		500.0
Activity 1.3: Support to the establishment of a dedicated governance and institutional framework for e-Government	500.0		500.0
Activity 1.4: Diagnostic of national cybersecurity, including a roadmap for ANSSI	500.0		500.0
Activity 1.5: Develop the technical standards for interoperability framework, data exchange, data management, and open data	500.0		500.0
Total Component 1	**3,000.0**		**3,000.0**
Component 2 : Data Management and Digital Platform for Service Delivery			
Activity 2.1: Deploying a Digital Platform for e-Service delivery	2,000.0		3,000.0
Activity 2.2: Strengthening data management and open data in key sectors	2,000.0		2,000.0
Activity 2.3: Expanding accessibility of information and e-Services through a central government portal	2,000.0		2,000.0

Activity 2.4: Deploying an online geospatial information system (GIS) for rural development and food security management	1,000.0		1,000.0
Activity 2.5: Implementing an information platform aimed at providing relevant information for rural development	1,000.0		1,000.0
Activity 2.6: Establishing an annual municipal performance tracking system	1,000.0		1,000.0
Total Component 2	**10,000.0**		**10,000.0**
Component 3: Foster local skills and entrepreneurship through in the digital economy			
Activity 3.1: Conducting detailed feasibility studies for each incubator to finalize the concept and preparing a feasibility study aimed at creating the governance structure and sustainable business model	500.0		500.0
Activity 3.2: Setting up and operating an incubator in Ouagadougou	2,500.0		2,500.0
Activity 3.3: Training and knowledge management	1,000.0		1,000.0
Activity 3.4: Develop and implement a strategy to stimulate the development of local digital content	1,000.0		1,000.0
Activity 3.5: Strengthening the capacity of the MDENP and the ANPTIC to lead and promote the digital economy agenda	500.0		500.0
Total Component 3	**4,500.0**		**4,500.0**
Component 4: Project Management, Monitoring and Evaluation			
Total Component 4	**2,500.0**		**2,500.0**
Total base cost			
Physical contingencies			
Price contingencies			
Total Project Cost	**20,000.0**		**20,000.0**

86. **Component 1: Enabling Environment for e-Government, including Policy, Legal and Regulatory Frameworks (approximately US$3 million equivalent).** The aim of this component is to create an enabling environment and connectivity conducive to a successful implementation of e-Government and open data projects across the whole of government. This activity will build on findings from and align with work undertaken as part of the Public Sector Modernization Program lead by the Ministry of Public Sector, Work, and Social Welfare, as well as other ICT projects such as the G-Cloud project.

87. **Activity 1.1: Review and upgrade the e-Government Strategy**, including a review of

public websites and e-Services and feasibility study of the digitization of administrative procedures. To have an impact, an e-Government system needs to be accompanied by regulatory and institutional reforms, changing laws and management practices, and reviewing administrative procedures. Work on e-Government reform in Burkina Faso dates back to 2004 when the country published its first cyber strategy and latter in 2013 when the Government defined three sectoral strategies including e-Education, e-Commerce, and e-Government. Today, there is a need to revise these strategies taking into account new technologies and findings on e-Government best practices for developing countries. Additionally, this activity should include a focus on agriculture and rural areas. This component will also include a review of public websites and e-Services, as well as identification and feasibility study for the digitization of administrative procedures. The results of this activity will also help to provide better information on administrative procedures to citizen and companies through the single government portal.

88.   **Activity 1.2: Policy and regulatory support and advice on legal framework options including benchmarking to enable the development and use of e-Services.** This activity seeks to ensure that the legal and regulatory environment will be conducive for an efficient and inclusive e-Government initiative. The legal and regulatory framework for e-Government includes, but is not limited to, administration, cybersecurity, data privacy, digital identification (ID), digital signature, e-payment, public access to information. This activity will provide support to the regulatory and legal framework, as well as technical inputs based on benchmarking with other legislation.

89.   **Activity 1.3: Support to the establishment of a dedicated governance and institutional framework for e-Government.** This activity will support the design and implementation of an appropriate governance structure for e-Government projects, including identification of key roles such as a Chief Information and / or Chief Data Officer and a Security lead, as well as capacity building of civil servants.

90.   **Activity 1.4: Support to the national cybersecurity strategy**, including support to ANSSI, and, if necessary, the review and development of technical standards for security and risk mitigation (CERT), as well as certification processes for online users and websites (public key infrastructure).

91.   **Activity 1.5: Develop the technical standards for interoperability framework, data exchange, data management**, and open data in harmony with existing projects (such as the building of the G-Cloud and the shared government data center). This activity will help to develop the necessary technical standards for (i) interoperability between IT systems; (ii) data management procedures, including data collection and dictionary, in order to foster the production of high quality datasets; and (iii) a set of technical standards and procedures for open data such as metadata, publication and format.

92.   **Component 2: Data Management and Digital Platform for Service Delivery (approximately US$10 million equivalent).** This component is designed to provide the necessary digital infrastructure for e-Services development across the Government. It aims at improving the availability and quality of key data and offering a common digital platform including basic services such as online authentication and payment mechanisms. The direct outputs of this component will

be a digital platform, key open data, enhanced government portal with a multichannel approach for information and service delivery, as well as targeted e-Services.

93.   This component is designed to enable the Data Revolution for Sustainable Development as prescribed by the United Nations (UN).[21] To do so, this component will first support and foster the collection, management, interoperability and use of key and high-value data for the country through an integrated approach. Key data includes, but is not limited to, map, land register, company register, population statistics, financial data, and key datasets in education, health, agriculture, energy, and local government performance in basic service delivery (e.g. education, health, water and sanitation, civil registry, etc.) and in terms of institutional capacity. This component will leverage the implementation of data management systems by extending the availability of key datasets, avoiding the duplication of collection and database management systems ("once only" principle), improving collection and production mechanisms, and fostering reuse.[22] This component will increase collaboration between the office of statistics currently working on Sustainable Development Goal (SDG) monitoring and the open data ecosystem which is expected to play a significant role in data collection, hence enriching data quality for government agencies.

94.   Building on this data made available, this component will then support the development of e-Services and applications, for improving public service delivery and extending it to all the administrations, citizens and companies of Burkina Faso. This component will also foster the participation of citizen and services users in the design, implementation, and accountability of public service delivery. For this purpose, this component will support the public agencies to put in place a robust framework for service delivery, benefitting from economies of scale on ICT infrastructure, and expediting the pace of e-Service delivery in response to citizen's needs. Among the agencies, this component will support the Ministry of Digital Economy, and *Agence Nationale pour la Promotion des TIC* (ANPTIC) as well as other key Ministries (e.g. Education, Agriculture, Water and Sanitation, Decentralization, Finance, etc.). This component will ensure that women and young girls are included as users and producers of on-line services: several of the on-line services produced through the project in health, education, and agriculture, will tailor to a large audience of women and girls.

95.   **Activity 2.1: Deploying a Digital Platform for e-Service Delivery for simplifying and reducing cost of implementation of e-Services.** This activity will support the development of a "Build Once, Reuse Always" Digital Platform for e-Service Delivery, in order to enable MDAs to deliver e-Services to citizens in a fast and cost-efficient manner. The Digital Platform for e-Service Delivery will have several advantages over traditional systems including: (i) financial savings from not having to build duplicate infrastructure at individual MDAs; (ii) the ability to capitalize on shared human resources; and (iii) faster implementation of e-Services in various sectors. Once the shared platform is in place, MDAs will not need to set up individual data centers or independently

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[21] See http://www.undatarevolution.org/.
[22] According to the UN, the Data Revolution for Sustainable Development entails the integration of non-traditional and traditional data to produce high-quality information that is more detailed, timely and relevant for many purposes and users, especially to foster and monitor sustainable development, notably through much greater degree of openness and transparency.

develop common elements, such as authentication and payment mechanisms that are needed to deploy e-Services. In addition, the shared government cloud will provide data back-up for many of the existing ministries that already have data centers.

96.   The G-Cloud Project, currently under implementation, is expected to bring the preliminary components of a Digital Platform for e-Service Delivery. More specifically the G-Cloud project, through its Government-Cloud Enablement Platform (G-CEP), should provide a distributed Cloud service infrastructure encompassing the following elements: eight Cloud nodes distributed over six locations in the country including hosting and network management resources; each user has access to the whole national G-Cloud resources (3800 virtual servers, 585 Terabytes of Storage and Virtual Private Network services); a main node in Ouagadougou bringing upper-level services focused on Government to Government services and including Identity services (authentication) for civil servants; SMS transactions; e-Trust services (e-Signature, e-Safe) and e-Learning.

97.   To the extent possible, this activity will seek to expand and leverage on the ongoing implementation of the G-Cloud project. More specifically, this activity will finance: (a) streamlining of a Digital Platform for e-Service Delivery across the Government, including implementation of selected government shared services such as a governmental intranet with document and records management and communication tools in selected administrations; (b) support to the digitization and implementation of key administrative procedures or e-Services to be selected based on Activity 1.1; and (c) capacity building for the establishment and development of a community of local developers for e-Services;

98.   **Activity 2.2: Strengthening data management and open data in key sectors including education, agriculture, rural and finance.** Public authorities in Burkina Faso need various core information about individuals, businesses, properties and other key sectoral data to operate efficiently. Today, many of this core data are missing or collected but in low quality, with an insufficient level of granularity. As a result, the Government and its Development Partners are regularly wasting money in inefficient and costly data surveys for specific sectors.

99.   This activity seeks to improve the whole data management framework within the Government, in particular data collection and storage, in order to provide high-quality data, an essential asset for e-Services and public authorities. This activity will identify and focus on key operational datasets for the country such as the company register, land register, master lists of public facilities (schools, health facilities, etc.) as well as their related performance indicators. This activity will reduce the cost of data production while improving data quality by seeking innovative partnerships with the private sector, academics and NGOs and the use of efficient technology solutions. This activity will implement guidance and standards defined in the Activity 1.3. It is suggested that this activity will be led by a specific High-Level Data Task Force, including at least a Chief Data Officer.

100.   One of the direct outcomes of this activity will be the enhancement of data management within the Education sector. There is currently no central digital register for data on schools (Master List), their resources and their performance. A current partnership which includes INSS (local Research Center), IRD (French Research Center), OpenStreetMap and the Open Data Initiative is seeking to enhance the data workflow in the education sector with the collaboration of

the Ministry of Education. This activity will seek to leverage such an initiative by supporting data collection campaign and facilitating implementation of new data structure, procedures and tools by the relevant stakeholders including the Ministry of Education and local authorities. The activity will support similar outcomes in other key sectors including Health and Agriculture. Wherever possible, this activity will look for economies of scale, with, for example, pooling of data collection efforts.**Activity 2.3: Expanding accessibility of information and e-Services through a central government portal**. This activity will include the development of a central government portal, including a mobile (small device) version. This portal will list all administrative procedures and e-Services available online. The activity could build on and extend the *Guichet Virtuel de l'Administration Publique* (GVAP) currently developed under the Public Sector Modernization Program.

101. **Activity 2.4: Deploying an online geospatial information system (GIS) for rural development and food security management.** The eBurkina project offers an opportunity to work on GIS data management and lay the foundation for an integrated GIS system for the country which would benefit to all (open data by default). The project's preparation identified agriculture and food security sector as a potential pilot to work on GIS sectoral and basic data. This component will support the development of an online geospatial information system for rural development and food security management to be used by all.

102. There is a critical need for better data management and related applications in the agricultural sector of Burkina Faso and several current and upcoming projects and initiatives could substantially benefit from it. The International Finance Corporation (IFC) Advisory Service is seeking to support SOFITEX, the biggest cotton company, through an Output-based Aid program, managed by the Global Partnership on Output-based Aid (GPOBA). This project would help SOFITEX and its clients, local farmers, to strengthen water and irrigation management. The current World Bank Agricultural Productivity and Food Security Project will also benefit from enhanced mobile applications targeting inputs distributors and food producers. Lastly, Burkina Faso is a member of the Global Open Data for Agriculture and Nutrition initiative (GODAN) and as such has been recently selected by the Interest Group on Agricultural Data (IGAD) of the Research Data Alliance to be the first country to benefit from a capacity program in data science for agriculture. The project seeks to develop through a series of workshops and training a community of data experts on agriculture. Several international partners have already expressed their interest in supporting the program, including the Food and Agriculture Organization (FAO), and the French Institute for Agronomic Research (INRA).

103. This activity is also an opportunity to pilot the development of an integrated open geospatial system. The IGB, the national geospatial institute in Burkina Faso, has recently updated its 1:200 000 maps but the country only have 50 percent of its territory covered with 1:50 000 scale, which is considered international standard for GIS. Additionally, GIS digital data maintained by the IGB are not free to access and reuse (for revenue model reasons) substantially reducing the potential to develop services based on geospatial data. Lastly, the GIS system does not include sector layers such as in health, education, agriculture, energy, etc. When it exists, this data is only available from line ministries. This activity will, therefore, include a study on revenue model for the IGB in light of open data opportunities and integrated approach.

104.   **Activity 2.5: Implementing an information platform aimed at providing relevant information for rural development**, including commodity market prices, weather data and farming tips to farmers**.** This activity will support the development of an e-Service to deliver farmers, intermediaries and the rural population with market information, weather, agronomic tips and other information tailored to their needs. Information will be delivered through a combination of SMS text messages, voice and radio services. The e-Service should also enable SMS polls by sending out simple questions via SMS and collect and map the answers automatically. There is evidence that the use of mobile technology providing commodity price and agronomic information via text messages to farmers can help to improve their revenues and secure their yields (See Annex 4). In return, the use of e-Services by farmers can help the sector to collect better data and improve monitoring of market price, stock, crops or diseases.

105.   **Activity 2.6: Establishing an annual municipal performance tracking system** that provides reliable, up-to-date and publicly accessible data on the performance and institutional capacity of local governments. This municipal performance tracking system (*suivi de la performance municipale*/SUPERMUN) will build on and expand an existing, low-cost and highly scalable annual municipal performance and institutional capacity survey that has been initiated by the *Programme d'Appui aux Collectivités Territoriales* (PACT) in collaboration with different line ministries in six out of Burkina Faso's 13 administrative regions since 2014, with technical support from the World Bank and Yale University. This activity will fully benefit from the Digital Platform, Open Data Initiative and enhanced data management across the Government.

106.   The SUPERMUN sub-component will expand and institutionalize the annual municipal performance monitoring exercise, render it accessible to government, civil society, and citizens via the Open Data portal, and encourage innovation and experimentation to put the data to optimal use. The scope of activities under this subcomponent encompasses the integration of data sources from different line Ministries, complementary data collection through an annual municipal performance survey, data processing, development and calculation of performance indicators, data management and documentation, integration with the Open Data platform and other dissemination activities (such as municipal performance scorecards), as well as potential capacity building activities to support the use of data by the MATDSI and by programs intervening in local government support. Additionally, eBurkina will collaborate with a broad range of stakeholders to continue to improve the SUPERMUN indicators and data collection procedures, to integrate further existing administrative data sources, to facilitate collaboration with local and international researchers, and to encourage innovation and application of the data in municipal governance support. Finally, the project will work towards a permanent institutional solution for SUPERMUN beyond the lifespan of the project by facilitating collaboration between all stakeholders who have an interest in monitoring the performance and institutional capacity of municipal governments in Burkina Faso.

107.   **Component 3: Foster local skills and entrepreneurship in the digital economy (US$4.5 million equivalent).** Reinforce the existing business incubators in Ouagadougou, Bobo and other

main cities (such as Jokkolabs Ouaga[23], 2IE[24], Beoogolab,[25] etc.) to provide a critical mass of local entrepreneurs with affordable and reliable access to broadband Internet, office space, training, business support services, and business incubation in a single facility. These incubation and nurturing activities in specific "high tech" facilities are critical to support the emergence of a long-term upward spiral of learning and innovation related to the use of ICT, based on our global incubator experience acquired from InfoDev. The hand holding and customized capabilities building will allow digital entrepreneurs (existing SMEs and/or new and start-ups) to take technology from ideation to commercialization, using venture incubation, acceleration, mentoring, training and networking, as well as foster multinational and global partnerships. They also help the scale up of innovative applications and services to address every day development challenges (e.g. health information, sanitation and transportation management, teacher absenteeism, etc.) in the country and create employment opportunities for local entrepreneurs.

108.   This component will be developed, building on lessons learned by InfoDev with ICT-oriented business incubators in Senegal (CTIC[26]), Kenya (iHub[27], mLab[28]) and South Africa (mLab Southern Africa[29]), which have demonstrated a positive role in supporting ICT/mobile innovation ecosystem growth and in encouraging the formation of startups and production of mobile applications with local and international relevance[30] as well as with *Info*Dev's new Digital Entrepreneurship Africa project (P152724) currently under preparation. However, most of these experiences were deployed in East Africa. Burkina Faso, and the West African continent have not been included in the first rounds of financing/nurturing the ICT innovation ecosystem.

109.   **Activity 3.1: Conducting detailed feasibility studies for each incubator** to finalize the concept and preparation of a feasibility study aimed at creating the governance structure and sustainable business model. This activity will comprise feasibility studies for the establishment of tech hubs / incubators in Ouagadougou and Bobo-Dioulasso covering the particular market potential and promising sectors, mapping of actors and stakeholder expectations, expected activities and impacts, inputs and incubation models, success and risk factors, planning project and initial business plan. An additional detailed feasibility study will present the overall strategy for the design, realization and effective implementation of a digital innovation ecosystem in Burkina Faso.

110.   **Activity 3.2: Setting up and operating an incubator in Ouagadougou (with a possible extension in Bobo-Dioulasso)** including rental / reuse of office space, revamping of office space, IT and office equipment, other operating costs and the hiring of the managers. This activity will allow a critical mass of local entrepreneurs (selected competitively) to access affordable and reliable broadband Internet, office space, training, business support services, and business

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[23] ouaga.jokkolabs.net
[24] www.2ie-edu.org/technopole
[25] www.beoogolab.org
[26] www.cticdakar.com
[27] ihub.co.ke/
[28] www.mlab.co.ke
[29] www.mlab.co.za
[30] See *InfoDev*, "The Business Models of mLabs and mHubs – An Evaluation of *infoDev*'s Mobile Innovation Support Pilots".

incubation in a single facility. It will also help the scaling up of innovative applications and services to address every day development challenges (e.g. health, education, agriculture, energy, etc.) in the country, and create employment opportunities for local entrepreneurs.

111.   **Activity 3.3: Training and knowledge management (e.g. study tours, competition and mentoring) for the digital economy, including setting up a fellowship program for entrepreneurs.** The government and the digital ecosystem must develop its resources and capabilities to build up the technological and managerial knowledge needed to successfully deploy e-Services and foster entrepreneurship in the ICT sector. This activity will include the development of skills and know-how to successfully perform e-Government and open data activities, including: digitizing information; performing transactions; streamlining processes; managing data; providing access to public information (open data); fostering citizen and private sector participation.

112.   **Activity 3.4: Develop and implement a strategy to stimulate the development of local digital content**, including competition, communication and the use of the digital platform to provide new e-Services, in order to foster entrepreneurship, with a specific focus on the agricultural and rural sectors. This activity will provide the capacity building strategy to respond to the array of different needs, with a specific focus on women, either as entrepreneur or beneficiary of applications. Capacity building efforts will be based on an initial diagnostic using maturity level analysis, gap analysis, and identification of areas requiring urgent improvement. This activity will, therefore, support the promotion and the creation of the enabling environment for developing a digital innovation ecosystem. Nationwide activities such as tech boot camps, hackathons, and business plan competitions will be organized on a regular basis to attract new talents to become incubator tenants, and to generate private sector interest. These activities will be managed by the incubators in partnership with external entities, from the private sector, the academia, or the technical support of ANPTIC. This activity will build on the extensive engagement under the Burkina Faso Open Data Initiative and collaboration with the private sector. Half of the activity will be dedicated to ICT for agriculture and climate change adaptation and mitigation.

113.   **Activity 3.5: Strengthening the capacity of the MDENP and the ANPTIC to lead and promote the digital economy agenda.** This activity aims at improving the capacity in digital economy policy design, oversight and implementation in the Ministry in charge of Digital Economy (and related agencies as appropriate, including the ANPTIC).

114.   **Component 4: Project Management, Monitoring and Evaluation (US$2.5 million equivalent).** This component will support ANPTIC for project management as the Implementing Agency and will also cover training, office equipment, operating costs, audits, sensitization and communications as well as monitoring and evaluation. ANPTIC will be responsible for project implementation and execution with initial support on financial management and procurement from the already established SP-PST. This component will also include strengthening institutional and project management capacity of ANPTIC and help prepare a potential second phase of eBurkina.

115.   **Furthermore, the proposed Project will also leverage or reinforce other World Bank's activities in Burkina Faso including:**

- **West Africa Regional Communications Infrastructure Project Burkina Faso (P122402)** seeks to increase the geographical reach of broadband networks and to reduce costs of communications services in Burkina Faso and other West African countries. This project will provide for enhanced connectivity in the country, in turn enabling a greater impact of e-Government across the country.
- **Burkina Faso Public Sector Modernization Program (P132216)** seeks to improve the quality of the public administration system to provide better services for sustainable development. Pillar 4 of the project addresses the promotion of e-Governance and includes the implementation of a unified and consolidated on-line portal of the Burkinabe administration. The proposed eBurkina Project will extend the impact of this project a) by ensuring the administration portal is well integrated in the shared digital platform built on the G-Cloud; b) by providing with high-quality data access to be used and re-used by all government agencies; c) by developing tailored e-Services for specific sectors; and d) by extending the reach of the portal through a multi-channels approach (mobile, SMS-based, telecenters, etc.), while ensuring consistency and compliance to standards as individual agencies develop their own web services yet in compliance to a new government inter-operability framework, implemented under e-Government.
- **Economic Governance and Citizen Engagement Project (P155121)** seeks to improve the use of public resources by strengthening accountability mechanisms and public expenditure management and to enhance domestic revenue mobilization. Activities include increasing proactive disclosure and stimulating utilization of financial information and upgrading related financial IT systems. The proposed eBurkina Project is therefore well aligned as it will support and extend both disclosure and use of financial data through its open data component and ensure upgraded financial IT systems (tax collection, customs, budget, accounts, procurement) meet and comply with international and regional standards, and that all digital platforms and services deployed for citizen engagement are harmonized and integrated into the shared digital platform and inter-operability framework implemented under eBurkina.
- **Local Government Support Project (PACT) (P120517)** seeks to harness emerging government commitment to local government reforms by supporting the implementation of critical aspects of fiscal and administrative decentralization in six of the 13 regions of Burkina Faso. The primary objective of the project is to strengthen both the central government's capacity for decentralization and the institutional capacities of municipalities ("communes"). Component C of the Project aims to improve accountability linkages between local policy makers and citizens in target municipalities. As part of this component, the Project is testing a novel intervention to produce and disseminate municipal scorecards based on each municipality's performance relative to national norms. These scorecards are then used both to inform municipal administrations and their constituents of performance targets and a municipality's performance relative to these targets, and as a tool to promote demand for accountability by civil society. The proposed eBurkina project, as part of Component 2 (Addressing development of digital platforms for service delivery) can build on the experiences of PACT to institutionalize the collection, processing, and publishing of indicators through, for example, the Open Data Burkina Faso platform, informing citizens and local civil society of the performance of local governments in terms of basic services delivery and institutional capacity to manage local government affairs.

On the long run, all survey data will be stored, shared, mapped on the digital platform implemented under e-Government, and all datasets collected will be based on standard processes and international format standards; as well as on an inter-operability framework implemented under e-Government, allowing re-use by multiple agencies, and development actors.

- **Agricultural Productivity and Food Security Project (P149305)** seeks to improve the capacity of poor producers to increase food production and to ensure improved availability of food products in rural markets" thereby contributing to fight poverty and promote inclusive growth and strengthening the resilience of poor farmers to climate shocks in the Sahel context. In particular, through its sub-component Strengthening agricultural input supply delivery systems, this project support the expansion of the existing network of input distributors in the rural areas and strengthening their capacities to provide advisory services to farmers. Moreover, the project will promote the use of Information and Communication Technologies (ICT) in targeting project beneficiaries and in facilitating project monitoring and evaluation. The e-extension / e-voucher technologies will be piloted and implemented and could eventually be integrated into a shared service built on top of the shared digital platform implemented under e-Government, to the benefit of other agencies.

- **Supporting Burkina Faso Open Data Initiative and addressing drought risks by introducing innovative use of data & Open Data solution (P151740).** This grant, completed in July 2016, aimed at laying the foundation for the Burkina Faso Open Data Initiative with the inventory and release of key data in the agricultural and water sectors. The project will extensively built on these preliminary activities to improve data quality and collection and ensure identified content is released as open data and responding to the agricultural sector development and climate change adaptation and mitigation needs.

Annex 2: Implementation Arrangements

Project Institutional and Implementation Arrangements

Project administration mechanisms

116. Building upon institutional and implementation arrangements that worked out satisfactorily under the WARCIP (PRICAO) project, the institutional and implementation arrangements for eBurkina will involve two organizational levels.

117. **Project Steering Committee (PSC):** the Ministerial Order (*Arrêté Ministériel*) setting up the Project Steering Committee will need to be passed not later than three months after the Effective Date and the PSC needs to be maintained, throughout the Project implementation period, with terms of reference, mandate and resources, satisfactory to the Association. The PSC will include representative of eBurkina's main implementing and beneficiary agencies such as MATDSI, MINEFID, MFPTSS, MAAH, ANSSI as well as the participation of the private sector. The PSC will be chaired by the Secretary General of the Ministry in charge of Digital Economy and Posts (MDENP), with ANPTIC reporting, and shall ensure the strategic orientation and general oversight of the project as well as the coordination with MDNEP and the sectorial strategies. The PSC will meet each semester to follow the project's progress, and ensure its strategic alignment.

118. **Project Implementation Entity (PIE):** The PIE/ANPTIC shall maintain a Project Management Team (PMT) which will be responsible for day to day Project coordination and implementation, including: (i) carrying out Project financial management and procurement activities; (ii) preparing Annual Work Plans; (iii) monitoring and evaluating and sensitization of Project activities and preparing Project progress reports and monitoring and evaluation reports; (iv) coordinating with other stakeholders on Project implementation; and (v) technical and financial audits of Project activities.

a) The ANPTIC includes both technical and functional components, to address the e-Government and technical aspects of the project. The functional component has cells devoted to project support, financial management and procurement, while the technical component includes cells for studies, information and database management, applications and network and communications infrastructure. ANPTIC and beneficiary ministries have all been active in the preparation of the project.

b) Space has been allocated in the ANPTIC (new office and location) for the project team (including anticipated consultants), the procurement will be launched for technical assistance and the purchase of necessary office furniture, IT equipment and goods.

c) A Framework Agreement between MINEFID, MDENP and ANPTIC will be signed not later than one month after effective date and acceptable to the Association. The Framework Agreement ("Contrat Plan") will set forth the flow of Project funds from the Recipient to ANPTIC, as well as all provisions relating to the implementation of the Project,

procurement, financial management, monitoring, and disbursement; all in accordance with the provisions of this Agreement.

Measures to address capacity constraints

119.   Extensive technical assistance with international experience is being providedin project management through hiring seasoned experts for the three initial years of the eBurkina project. ANPTIC/PIE is supported by an existing PIU (SP-PST) for fiduciary support and will be strengthened with a project manager to provide project management support to the Project Steering Committee to which ANPTIC will be reporting to for eBurkina project. Training will also be organized throughout project implementation for the staff of the beneficiary agencies on the World Bank's project cycle and procurement and FM guidelines of World Bank funded projects.

Financial Management, Disbursements and Procurement

Financial Management

120.   A Financial Management (FM) assessment of the National Agency of ICT Promotion (ANPTIC), implementing entity of the eBurkina Project, was carried out in November 2016. It was agreed that the Permanent Secretary of the Transport Sector Program (SP-PST) will support the ANPTIC team, and, specifically for Financial Management, will provide on the job training to the ANPTIC financial management staff. The assessment complied with the Financial Management Manual for World Bank-Financed Investment Operations, updated on February 4, 2015, as well as the Financial Management Assessment and Risk Rating Principles.

121.   The objective of the assessment was to determine whether the ANPTIC has adequate FM arrangements in place to ensure that the eBurkina Project funds will be used only for the intended purposes with due attention to considerations of economy and efficiency. Arrangements are acceptable if they are capable of recording accurately all transactions and balances, supporting the preparation of regular and reliable financial statements, safeguarding the Project's assets, and are subject to auditing arrangements acceptable to the World Bank. These arrangements should be in place when project implementation starts and be maintained as such during project implementation.

122.   The FM assessment revealed that ANPTIC has a number of strengths including (i) financial management procedures named "Procedures of the Finances and Accounting Directorate, dated of June, 2016" (Budget, Accounting, Funds Flow, Assets management) which are acceptable to the Bank, (ii) sufficient qualified financial management staff on board, (iii) an internal auditor expected to be on board by end of December 2016, (iv) an accounting software (TOMPRO) which is adequate for project management, and (v) has recruited a statutory auditor (*Commissaire aux comptes*) for the year 2015 (first audited year), 2016 and 2017. However, the FM assessment found that the staff of ANPTIC does not have practical experience in financial management of Bank funded Projects. Based on that, an Accountant was appointed to be in charge of the Project and started on the job training in the SP-PST before project negotiation.

As a result of the above, the following action plan was agreed.

#	Item	Condition
	Internal Control	
1	Adopt a Project Implementation Manual (including specific financial management policies for the project)	no later than three months after effective date
	Financial reporting	
2	Agreed on the Financial reporting template	Completed before negotiations
	Auditing	
3	Recruit an external auditor	By six months after effective date

Financial management arrangements

123. ***Internal control system***: a Project Steering Committee will be set up and will ensure the overall oversight, including financial and technical oversight, of the Project activities. ANPTIC will be in charge of the execution of the Project. The Procedures of the Finances and Accounting Directorate, dated of June, 2016 are acceptable for the Bank and will be used for the project. A Project Implementation Manual, which will include specific Financial Management policies for the project, will be adopted. The ANPTIC is recruiting staff to operationalize its Internal Audit Unit, which will be in charge to perform ex-poste review of projects activities, review the internal control system, and produce an internal control review report. ANPTIC will furnish to the Bank, no later than 45 days following the end of each trimester, a copy of the internal control review report which summarized the key findings of the reviews completed during the trimester.

124. ***Planning and Budgeting***: The ANPTIC will prepare a detailed annual work plan and a budget (AWP&B), which should be approved by the Project Steering Committee. The ANPTIC will submit the approved AWP&B to the World Bank, for comments, before the end of the calendar year.

125. ***Accounting***: The SYSCOHADA, assigned accounting system in West African Francophone countries, will be applicable. Project accounts will be maintained on an accrual basis, supported with appropriate records and procedures to safeguard assets. Annual financial statements will be prepared by ANPTIC in accordance with the SYSCOHADA but taking into accounting specificities related to external financed investment projects. Project specific accounting and control procedures will be documented in the Project implementation Manual. The existing "multi-projects" accounting software (TOMPRO) of ANPTIC will be customized to host the eBurkina Project. The FM staff comprises of a Finances and Administration Director, a Head of the Accountant and Treasury Department, one Accountant, A Head of the Finances and Budget Department, and a Head of the Acquisition and Assets Department. An Accountant was appointed to be in charge of the Project andstarted, before negotiations, on the job training in the SP-PST.

126. ***Financial Reporting***: The ANPTIC will submit the Interim Financial Report (IFR) to the Bank within 45 days after the end of the calendar quarter period. The IFRs should provide sufficient pertinent information for a reader to establish whether (i) funds disbursed to projects are

being used for the purpose intended; (ii) project implementation is on track; and (iii) budgeted costs will not be exceeded. ANPTIC agreed with the Bank on the format of the IFR. The report may include:

- an introductory narrative discussion of project developments and progress during the period, to provide context to (or other explanations of) financial information reported;
- a Sources and Uses of funds Statement, both cumulatively and for the period covered by the report, showing separately funds provided under the Project (IDA, Recipient…);
- a Uses of funds by Components Statement, cumulatively and for the period covered by the report;
- the designated account reconciliation, including bank statements and general ledger of the bank account;
- the disbursement forecasts of the upcoming six months; and
- Explanation of variances between the actual and planned activities and budget.

Annually, the ANPTIC will produce Project Annual Financial Statements, which will comply with SYSCOHADA and World Bank requirements. Financial Statements may comprise:

- project presentation and project developments and progress during the year, to provide context to (or other explanations of) financial information reported;
- a Statement of Sources and Uses of Funds which recognizes all cash receipts, cash payments and cash balances,
- a Statement of Commitments,
- accounting policies adopted and explanatory notes,
- a Management Assertion that project funds have been expended for the intended purposes as specified in the relevant financing agreements.

127.   *Auditing*: the ANPTIC will submit Audited Project Financial Statements (PFS) satisfactory to the World Bank every year within six (6) months after closure of the fiscal year. A single opinion on the Audited Project Financial Statements in compliance with International Federation of Accountant (IFAC) will be required. In addition, a Management Letter will be required. The Management Letter will contain auditor observations and comments, and recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the Financial Agreement. ANPTIC will recruit an auditor acceptable to the Bank by 6 six months after effective date.

Disbursement arrangements

128.   *Policy*: disbursements under this project will be carried out in accordance with the provisions of the IDA Disbursement Guidelines (" *World Bank Disbursement Guidelines for Projects*, dated May 1, 2006"), the Disbursement Letters and the Financing Agreements.

129.   *Disbursement procedures and methods*: Disbursements under the project would be transactions based. In addition to making advances to the Designated Account, other disbursement

methods (reimbursement, direct payment and special commitment) will be available for use under the project. Further instructions on disbursement and details on the operations of the Withdrawal Applications and Direct Payments will be outlined in the disbursement letter.

130.   *Designated Account:* the ANPTIC will open and manage a designated account at the Central Bank of West African Countries "BCEAO" in XOF and a transaction account in XOF in a commercial bank acceptable to IDA.

131.   *Designated Account Replenishment and documentation*: the designated account will be replenished through the submission of withdrawal applications. Replenishment (requests for reimbursement) and reporting on the use of advances will be accompanied by a Statement of Expenditure and records required by the Bank for specific expenditures in the Disbursement Letter. All supporting documentation will be retained at the ANPTIC and must be made available for periodic review by Bank' missions and external auditors.

Figure 4: Funds Flow chart
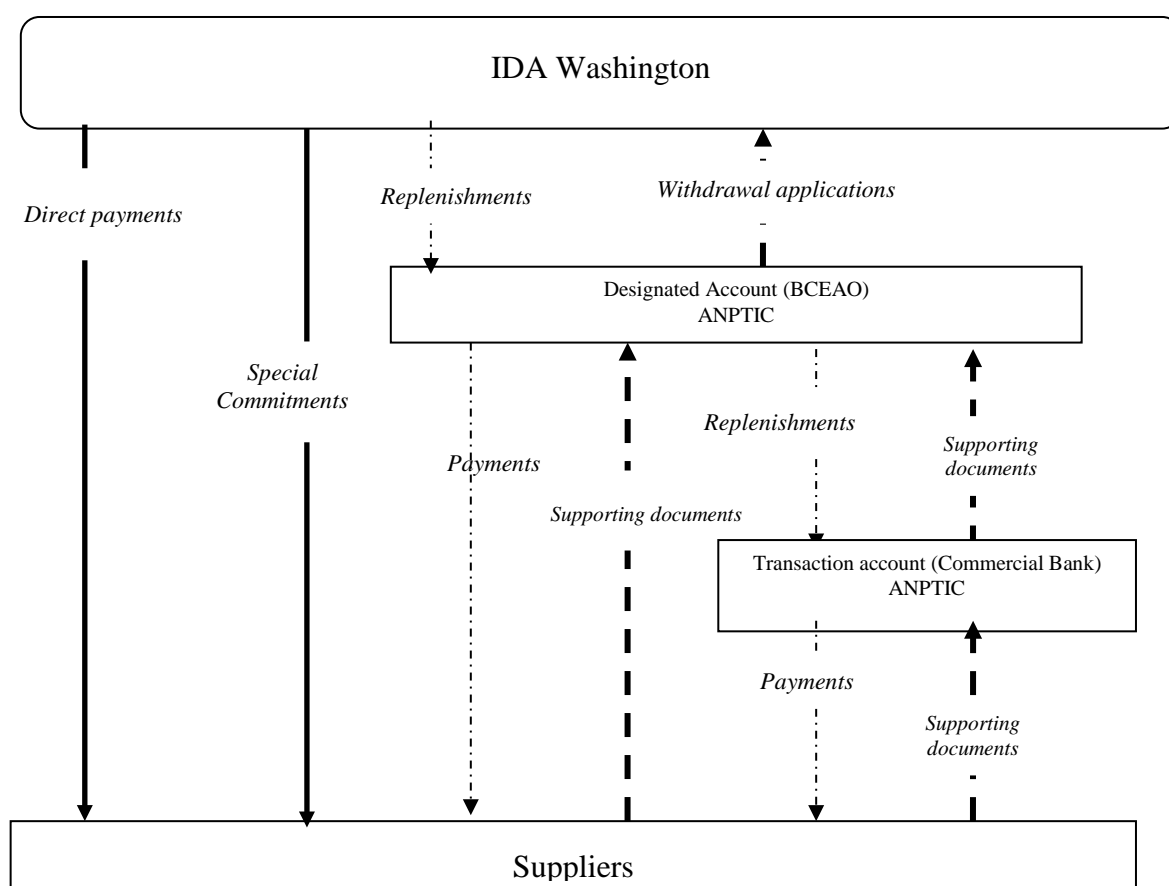
132.   Retroactive Financing: No withdrawal shall be made for payments made prior to the signing date of the Financial Agreement, except for payments up to an aggregate amount not to exceed seven hundred thousand Euros (EUR 700,000) may be made for payments made prior to this date but on or after October 1, 2016, for Eligible Expenditures.

133.   Disbursement by category. The table below sets out the expenditure categories to be financed out of the Loan proceeds. This table takes into recognition the prevailing Country Financing Parameter for Burkina Faso in setting out the financing levels.

Figure 5: Disbursement Categories

Components	Amount of the Financing Allocated (expressed in EUROS)	Percentage of Expenditures to be Financed (inclusive of Taxes)
(1) Goods, minor works, non-consulting services, and consultants' services, Training and Operating Costs for the Project	18,800,000	100%
TOTAL AMOUNT	18,800,000	

Conclusions of the FM assessment. The overall FM risk rating for the project is assessed as **Substantial.**

Procurement

134.   **Procurement Assessment**: A procurement risk assessment of the ANPTIC has been completed. The overall capacity of the institution to implement a World Bank financed operation is poor. ANPTIC has been created two years ago and has no experience working with the World Bank and applying related policies and procedures. In addition, this will be the first project to be implemented in Burkina Faso under the World Bank New Procurement Framework. A Project Procurement Strategy for Development (PPSD) has been prepared and every endeavor is being made to ensure the procurement activities are packaged and prepared in such a way as to minimize the risk.

Brief summary of the Project Procurement Strategy for Development (PPSD)

135.   The client has been informed of the obligation to prepare and submit for Bank approval a PPSD. With Bank support, the team has finalized and reviewed the PPSD (including procurement plan) which can be summarized as follows: *(...) the national and international environment is favorable for the procurement of goods intended for the implementation of the eBurkina Faso project. The national market is able to meet the needs of computer equipment, office equipment and furniture as well as office consumables which will be purchased according to the relevant procedures. The same applies to the market for consultant services. The contracts are also open to the sub-regional and international market for specific supplies and services that may require the participation of companies located at the international level. ANPTIC has experience in managing these types of markets and therefore has a clear knowledge of the national, sub-regional*

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and international market.

136.   **Applicable procurement rules and procedures.** Procurement for the proposed project will be carried out in accordance with the World Bank Procurement Regulations for IPF Borrowers (Borrowers Regulations), July 2016, and the provisions stipulated in the Financing Agreement.

137.   **Institutional arrangement for procurement.** The National Agency of ICT Promotion (ANPTIC) will be the implementing agency of the project and is responsible for ensuring that the fiduciary aspects of the project are managed (procurement and FM). The ANPTIC will designate a full time professional staff who will be responsible for procurement activities of the Project and he/she shall be trained on procurement regulations. Until the ANPTIC hires a procurement specialist to support them, the full time professional responsible for procurement activities will work closely with the procurement specialist of the SP-PST and will benefit from her coaching and assist.

138.   **Procurement risk assessment.** A procurement risk assessment of the ANPTIC to implement procurement actions for the project was carried out and the overall procurement risk rating is **Substantial**. The ANPTIC has no recent experience working with the World Bank and applying related policies and procedures. In addition, this will be the first project to be implemented in BF under the New Procurement Framework. Thirdly, there is risk due to the complex and lengthy Government procurement processes that need to be navigated.

139.   The main procurement-related risks identified are

   (a)   Limited capacity of the ANPTIC staff on procurement and contract management;

   (b)   Lack of knowledge and practice in application of the New Procurement Framework; and

   (c)   Lengthy government approval processes.

140.   The following mitigation measures are proposed:

   (a)   The ANPTIC will be responsible for all aspects of project implementation, including procurement. Accordingly, the ANPTIC will need to provide dedicated procurement resourcing to ensure that all procurement activities are carried out in accordance with World Bank requirements under the New Procurement Regulations for IPF Borrowers.

   (b)   One of the agreed ways to mitigate the risk of ANPTIC's weaknesses to implement the project shall be to be supported initially by the PST's Procurement Specialist (PS), until hiring a procurement consultant to coach and monitor dedicated procurement staff.

   (c)   The ANPTIC will apply the procurement procedures detailed in the Project Implementation Manual (PIM) and will develop detailed checklists to ensure consistent and compliant project procurement.

(d) The ANPTIC will also develop a contract management system to ensure that all contracts under the project are effectively and efficiently managed; this will include the tracking of key contract milestones and performance indicators as well as capturing all procurement and contract records.

141. **Procurement methods.** The various procurement methods to be used for activities financed by the proposed IDA credit have been set in the procurement plan approved by the Bank during negotiations on December 1, 2016.

142. **Procurement of works.** Works are not envisaged at this stage.

143. **Procurement of goods and non-consulting services.** Procurement of goods will include computer equipment, vehicles, licensing, energy equipment, furniture and office equipment (anticipated value US$2 million).

144. **Procurement of consulting services (firms and individuals).** Procurement of consulting services will be carried out in accordance with the World Bank Procurement Regulation for Investment Project Financing Borrowers. A number of specialist individual consultants/ firms may need to be hired to either support ANPTIC's efforts or to assist the Government with policy development, like Deploying a Digital Platform for e-Service Delivery for simplifying and reducing the cost of implementation of e-Services, Feasibility study for the incubator, Developing and implementing a strategy to stimulate the production of local digital content, including competition and communication, with a special focus on the agricultural and rural sectors, Deploying an online geospatial information system (GIS) for rural development and food security management, capacity building for the establishment and development of a community of local developers for e-Services, etc. (anticipated value USD 7.345 million). Consulting services also include the services of training, coordinating the electronic BF recording and reporting information system.

145. **Frequency of procurement supervision.** In addition to the prior review to be carried out by the World Bank, supervision missions will be undertaken at least once per year. One in five procurement packages not subject to World Bank prior review will be examined ex post on an annual basis.

146. **Procurement Plan**. The Procurement Plan covering the first eighteen (18) months of the project implementation was prepared and submitted to Bank's approval before project negotiation and was discussed and approved by the Bank during project negotiation on 1 December 2016 as reflected in the signed minutes. The Procurement Plan will be updated by the ANPTIC on an annual or as-needed basis to reflect actual project implementation need. Updates of the Procurement Plan will be submitted to the World Bank for No Objection and the PPSD updated accordingly.

Environmental and Social (including safeguards)

147. The eBurkina project is classified as **Environmental Assessment (EA) Category C** (no, or negligible environmental or social negative impacts). There will be no land acquisition, and no

new construction of premises under the project. Potential adverse negative impacts and risks linked to revamping of office space in existing identified premises for the incubators to be set up under Component 3 are likely to be small-scale and site-specific and thus easily remediable and reversible with usual mitigation measures on the waste management and workers health surety and security measures in the contractor contracts.

148.   The eBurkina project is expected to lead to substantial social benefits. Indirect beneficiaries of the project potentially include all of the country's population, benefiting from increased availability and quality of affordable government services and other useful applications tailored for local needs.

149.   Taking into account the nature and the scope of activities and associated impacts, no safeguard policy were triggered.

Figure 9: Safeguard Policies

Safeguard Policies Triggered by the Project	Yes	No	TBD
Environmental Assessment OP/BP 4.01		×	
Natural Habitats OP/BP 4.04		×	
Forests OP/BP 4.36		×	
Pest Management OP/BP 4.09		×	
Physical Cultural Resources OP/BP 4.11		×	
Indigenous Peoples OP/BP 4.10		×	
Involuntary Resettlement OP/BP 4.12		×	
Safety of Dams OP/BP 4.37		×	
Projects on International Waterways OP/BP 7.50		×	
Projects in Disputed Areas OP/BP 7.60		×	

Monitoring & Evaluation

150.   The ANPTIC/PIE will have overall responsibility for reporting to the PSC and to the World Bank. ANPTIC will prepare Monitoring and Evaluation Reports on a quarterly basis that will include the updated Results Frameworks, with supporting comments on the trends and associated action table, as well as the environmental and social safeguards indicators, listing the corrective actions to be implemented and persons responsible clearly identified. The reports will be sent to the World Bank for information.

151.   The ANPTIC will be responsible for collecting the relevant data throughout project implementation. ANPTIC will get its information directly from the project team (especially monitoring and evaluation specialist) and from the incubators set up under Component 3. In addition, funding will be provided by the eBurkina project to support the mid-term review and completion review, and to do an evaluation of the implementation of the e-Government.

152.   Mid-Term Review. The PSC and ANPTIC will have one opportunity to revise the results framework: the mid-term review mission will look at the realism and relevance of the indicators and targets and will propose changes if necessary.

Role of Partners

153.   Meetings with DANIDA and AFDB as well as Luxemburg Cooperation have taken place during project preparation, and those partners requested to be regularly updated about progress in the implementation of the eBurkina project.

Annex 3: Implementation Support Plan

Strategy and Approach for Implementation Support

154. The Implementation Support Plan describes how the World Bank will support the implementation of the risk mitigation measures (identified in the SORT) and provide the technical advice necessary to facilitate achievement of the PDO, in a flexible and efficient manner. The Implementation Support Plan also identifies the minimum requirements needed to meet the World Bank's fiduciary obligations.

155. Implementation support is a core element of the eBurkina Project, and will involve continuous World Bank engagement in partnering with the Government on two dimensions:

   a. *Sectoral and technical aspects*, including: (i) development and implementation of the e-Services system, and related activities; (ii) establishment and operation of the incubators and related activities; and (iii) project implementation.
   b. Continuous *fiduciary oversight* in terms of regular supervision of fiduciary functions (procurement, financial management, safeguards, M&E), specific advice and assistance on fiduciary issues as they come up, and review of audit and other third-party reports on project fiduciary management.

156. The project will require intensive supervision and support, given: (a) the "newness" of both the e-Government concept and the incubator approach in Burkina Faso; (b) the geographic spread of the proposed operation (initially one region for Component 2, then expanding to the entire country; two locations for Component 3); and (c) the need for support and capacity building in both components. The Component 1 of the eBurkina project will also be implemented at three levels: the central level, regions, and districts. A budget of US$150,000 would be required for the Bank team to thoroughly supervise the project during the first 12 months of implementation, with standard supervision funding according to established coefficients for subsequent years.

157. World Bank supervision will leverage the supervision carried out by the project team under the Steering Committee for the project, to be project manager (*Chargé de projet*) embedded in the PIE on a regular basis. Members of project team will visit the project locations several times per year, and will prepare action-oriented supervision reports that will be reviewed by the World Bank during its bi-annual supervision missions, and through desk reviews. This system will allow the eBurkina to be monitored and its performance assessed on an ongoing basis.

158. Some of the skills required by the World Bank team for supervision will be needed on a regular basis while others will be required periodically. It is therefore proposed to establish a core supervision group, that will emphasize financial, procurement, e-Government, ICT, and operational basic needs, complemented by technical specialists on a need basis (such as safeguards or M&E specialists).

159. While regular World Bank supervision will take place at least twice a year, this will be leveraged by regular visits by CMU-based procurement and financial management specialists who take advantage of their closeness to Burkina Faso to verify progress and provide ongoing

assistance to the client.

160.   A much more intensive than usual supervision program should be carried out during the first year of the project to verify the establishment of a sound institutional base and ensure that the key project interventions get off to a good start.

161.   The supervision team includes the following members: (i) the *Task Team Leader*; (ii) the *co-Task Team Leader*; (iii) a *technical e-Government specialist* with specific expertise in the field; (iv) a *financial management specialist* who will review adherence to Bank procedures with regard to fiduciary responsibilities; and (v) a *procurement specialist. Environmental and social specialists* and *M&E specialists* as well as specialists from the Agriculture and Governance Global Practice will be added to the team as needed.

162.   *Financial management.* FM supervisions will be conducted over the project's lifetime. The project will be supervised on a risk-based approach. Supervision will focus on the status of financial management system to verify whether the system continues to operate well throughout the project's lifetime and to ensure that expenditures incurred by the project remain eligible for IDA funding. It will comprise inter alia, the review of audit reports and IFRs, advice to task team on all FM issues. Based on the current risk assessment which is **substantial**, we envisage at least two supervision missions per year. The Implementation Status and Results Report (ISR) will include a FM rating of the project. An implementation support mission will be carried before effectiveness to ensure the project readiness. To the extent possible, mixed on-site supervision missions will be undertaken with procurement monitoring and evaluation and disbursement colleagues. The supervision intensity will be adjusted over time taking into account the project FM performance and FM risk level.

163.   *Procurement.* Implementation support will include: (i) provision of training to the ANPTIC staff as needed; (ii) review of procurement documents and provision of timely feedback to ANPTIC; (iii) provision of guidance on the Bank's Procurement Guidelines to the ANPTIC; (iv) monitoring of procurement progress against the detailed Procurement Plan; (v) monitoring that implementation of contracts is compliant with the World Bank's fiduciary guidelines as well as with contract obligations.

164.   *Environmental and Social Safeguards.* Implementation support will include: (i) guidance on the implementation of environmental safeguards; (ii) supervision of the adherence to these safeguards and provision of training and guidance to the ANPTIC team, as needed.

165.   *Coordination with other Development Partners*. Implementation support will include close coordination with other development partners (especially DANIDA and Luxemburg as well as AFDB), research institutions and international, national and local NGOs engaged in the agriculture and ICT sectors in Burkina Faso.

Implementation Support Plan

166.   The project will require substantive technical support due to the rather complex and technical nature of the activities to be financed. Formal implementation support missions and field

visits are expected to be carried out roughly every six months. Detailed inputs from the World Bank team and partners are outlined below:

- **Technical inputs:** Technical inputs will be provided by members of the above mentioned supervision team, and additional World Bank staff who have expertise in Monitoring & Evaluation, incubators and various aspects of e-Government; drawing from the Transport and ICT Global Practice, the Agriculture Global Practice, the Governance Global Practice, the Trade and Competitiveness Global Practice and other Global Practices as required. The task team will also seek additional highly-specialized technical inputs from technical partners with whom close coordination and collaboration was established during project preparation.

- **Fiduciary requirements inputs:** Training will be provided by the World Bank's financial management specialist and procurement specialist before the commencement of project implementation. The task team will further provide support to the ANPTIC to improve fiduciary efficiency. Formal supervision of financial management will be carried out semi-annually, while procurement supervision will be carried out on a timely basis as required by the client.

- **Safeguards:** Inputs from an environment specialist will be provided, despite the project's limited expected environmental impacts.

- **Operational:** The TTL and co-TTL will provide timely supervision of all operational aspects, as well as ensure coordination with the client and among World Bank team members. The TTL and/or co-TTL will lead at least two formal field supervisions a year and conduct additional missions as needed to resolve operational issues. The main focus in terms of support to implementation during various periods of project implementation are outlined below.

Figure 10: Implementation Support Plan for the eBurkina project

Time	Focus	Skills Needed	Resource Estimate	Partner Role
First twelve months	▪ finalizing design and supporting initial roll-out of key interventions ▪ operational support to ensure smooth start-up of project implementation	▪ e-Government standards design ▪ e-Service feasibility study design and implementation, ▪ incubator design ▪ Develop strategy to promote the development of local digital content,	▪ 4 staff weeks ▪ 4 staff weeks	May provide or contribute some of the needed TA

		applications and services ▪ Study tours in best practice countries ▪ project management, M&E, fiduciary, safeguards	▪ 4 staff weeks ▪ 12 staff weeks	
12-48 months	▪ ongoing technical support for key areas ▪ fiduciary, safeguards and project management (including M&E) support	▪ e-Government and e-Services, change management, knowledge management ▪ Implementation support to incubators ▪ Implementation support to strategy to promote the development of local digital content, applications and services ▪ FM, safeguards procurement, and project management support	▪ 10-12 staff weeks ▪ 10-12 staff weeks	May provide or contribute some of the needed TA
Other				

Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task team leader and Lead ICT Policy Specialist	7 SWs annually	Fields trips as required.	Washington, DC or Country office based
Co-Task team Leader and ICT Policy Specialist	5 SWs annually	Fields trips as required.	Washington, DC or Country office based
Agriculture Specialist	3 SWs annually	Fields trips as required	Country office based
Private Sector Development Specialist / Innovation Specialist	2 SWs annually	Fields trips as required.	Washington, DC or Country office based
Procurement specialist	3 SWs annually first twelve months 2 SWs annually	2-3 per year.	Country office based
Financial management specialist	2 SWs annually	2-3 per year.	Country office based
M&E specialist	0.5 SWs annually 1	Fields trips as required.	Country office based
Environment specialist	1 SW first twelve months 0.5 SWs annually afterwards	Fields trips as required.	Country office based
M&E specialist	1 SWs annually	Fields trips as required.	Country office based

Note: SW – Staff-Week

Partners

Name	Institution/Country	Role
BKF	Luxemburg	e-Government and e-Services support
G-Cloud	DANIDA	Connectivity support

Annex 4: Economic and Financial Analysis

eBurkina project

Rationale for Public Financing and Bank Value-added

167.   **There is a strong rationale for public financing because most of the activities financed under the Project are essentially pure public goods.** By definition, information and e-Services produced and delivered through eBurkina are non-excludable and non-rivalrous public services. The more individuals will access and use them, the greater the return on investments will be. Public investment in the Project is also justified by the significant positive externalities associated with achieving efficiency in service delivery and cost savings for the public administration thanks to the shared digital platform and growth in tax revenues.

168.   **There is growing evidence that making public sector information available to all for reuse (open data) can have a strong positive impact on socioeconomic development, but also on the public sector itself,** due to observed increases in efficiency and effectiveness. This is also true in low economies.[31] There is also strong evidence that taking away barriers (charging cost) for reuse of public sector information is most efficiently done through public investment.[32]

169.   **Lack of business support to high-potential digital entrepreneurs is justifying initial public financing of an incubator and tech hub program.** However, such public financing should be only considered as an investment and clearly target a break-even point in order to achieve sustainability of the program and return on investment.

170.   **The World Bank's value-added arises from the task team's technical expertise as well as the global knowledge experience in areas such as e-Government and associated change management strategy to foster adoption and uptake of ICT for more efficient delivery of public services.**

- The World Bank has supported several e-Government initiatives with a view to leverage a push with the roll-out of e-services to create a pull on the digital innovation ecosystem, such as the RCIP Adaptable Program Loan 1 – Kenya Transparency and Communication Infrastructure Project, the eRwanda, eGhana and the eBenin projects.

- World Bank has also extensive experience with business-support programs and benefits from a strong collaboration with InfoDev. For instance, in projects incubated under the eGhana-supported Kumasi Business Incubator, the implementation of innovation and incubation program in educational institutions has proven highly successful.

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[31] See references and case studies gathered as part of the Open data for developing economies project of the Gov Lab, http://thegovlab.org/the-govlab-selected-readings-on-open-data-for-developing-economies/

[32] See "Funding of a system of key registers in a PSI-conomis and contemporary perspective – the Dutch experience in a Danish context", by Marc de Vries under assignment from the Danish Ministry for Housing, Urban and Rural Affairs, The Hague, Copenhagen, 28 April 2012.

Figure 11: Overview of World Bank supported e-Government Projects

Project name	Board approval	Amount (USD m)	Project Development Objective (PDO)	PDO indicators
eBenin (P113370)	25-Mar-2010	15	The objectives of the Project are to (i) improve access to lower cost and better quality ICT services, and (ii) enable the development of e-applications, in the Recipient's territory.	Impact on Telecom sector of World Bank Technical Assistance (composite score: 1-low impact to 5-high impact) (Number, Core) Retail Price of Internet Services (per Mbit/s per Month, in USD), Core) Number of eGov services in pilot phase (Percentage, Custom) Increase in percentage of ICT SMEs (Percentage, Custom)
eGabon (P132824)	3-June-2021	56	The Project Development Objective (PDO) is to: (i) improve the timeliness and availability of information to support the delivery and management of public health services; and (ii) to foster the development and roll-out of eHealth applications and services, and Information and Communication Technology (ICT) services more generally.	(a) Prescriptions transmitted electronically (percent), (b) Health workers reporting that they regularly use and update the patients' electronic medical record during clinical consultations (percent), (c) Start-up projects incubated (including percent of start-up projects in eHealth) (number), (d) Increase in the level of satisfaction by ICT sector actors regarding government's promotion of the digital economy (percent), and (e) Direct project beneficiaries (cumulative), and percent female (core).
eTransform Ghana (P144140)	24-Oct-2013	97	The Project Development Objective is to improve the efficiency and coverage of government service delivery using Information and Communication Technologies (ICT).	Improve efficiency of government service delivery using ICT o Average time from initiation of service request to issuance of service (disaggregated by Birth & Death certificates, Company registration, and National passport). o New e-government applications providing service to the public (procurement, justice, immigration, parliament). Improve coverage of government service delivery using ICT. o Number of new e-services available to the public online. o Number of teachers or students using education portals including in rural areas. o Numbers of health providers or clinics in rural areas using e-health system. Direct project beneficiaries, (of which female).

Governance e-Transformation Moldova (P121231)	1-Nov-2011	20	The project development objective is to transform delivery of selected public services using ICT	Direct project beneficiaries (number), of which female (percentage) Citizen perception of quality of public services (% of satisfied users) Citizen uptake of e-services (Percentage of population who accessed a public website at least once over previous 12 months)
Smart Government Mongolia	15-Oct-2014	19.4	The development objective of the project is to use Information Communication Technologies (ICT) to improve accessibility, transparency and efficiency of public services in Mongolia.	Accessibility: Number of new 11-11 center users at the Aimag-level Transparency: Customer satisfaction with the response received through the integrated 11-11 platforms; Volume of government data made publicly available as Open Data through central, searchable platform that are both updated and contain detailed data-related documentation. Efficiency: Reduction in the average number of days to issue a property ownership certificate
eRwanda (P098926)	3-Aug-2016	10	The key objective of the project is to improve: (i) efficiency and effectiveness of some internal processes of the Government of Rwanda; and (ii) the delivery of applications and services in selected key sectors including better access to information through the use of technology.	(i) Service standards for delivery of sectoral services have significantly improved (ii) Core information in the areas of health, education and agriculture are made available through public access points (iii) Information exchange within government (central government, provinces and districts) improved based on the use of IT (iv) Government services use modern technology to deliver services in a timely and transparent manner
RCIP Uganda (P130871)	01-Jul-2015	75	The development objectives of the proposed RCIP Uganda project are consistent with the PDO of the RCIP Program as a whole, namely to support the Recipient's efforts to: (i) Lower prices for international capacity and extend the geographic reach of broadband networks (the connectivity development objective); and (ii) Improve the Government's efficiency and transparency through e-Government applications (the transparency development objective).	1. Direct project beneficiaries (number), of which female (percentage) CORE 2. International Internet bandwidth international capacity and extend the geographic reach of broadband 3. Access to internet services (percentage of individuals using the internet) 4. Access to telephone services (fixed mainlines plus cellular phones per 100 people) CORE 5. Price of wholesale international capacity (per Mbit/s per Month, in USD) 6. Beneficiaries satisfied with quality of e-Government services supported by the project (%) 7. Number of transactions per year utilizing the shared public service delivery platform

Greenhouse Gas (GHG) Emissions accounting

171.   **Greenhouse Gas Emissions accounting is not relevant in the context of the Project.**

Economic Analysis

172.   Burkina Faso has a young and fast growing population (46 percent under 15 years old with a population growth of 3 percent per year), as well as a sustained economic growth (forecast for 2016 and 2017 are above 6 percent). A large part of the population still lives in rural areas (only 6 percent lives in urban areas), and 80 percent of the labor force relies on agriculture. The agricultural sector is one of the main source of revenue for the country, with a contribution to its GDP estimated at about 30 percent. In terms of foreign trade, textiles (raw cotton) and vegetable products account for 26 percent of exportation, while gold represents 55 percent.

173.   The number of Internet users has grown from 1 percent in 2009 to 9.4 percent in 2014 (about 1.85 million people) but the majority of users access Internet via a mobile connection (1 million subscriptions). Regarding businesses, even though recent statistics are lacking, only 4.1 percent of the companies had an Internet connection in 2009. These numbers are even lower for SMEs and companies outside of Ouagadougou and Bobo Dioulasso. Agriculture, especially the cotton sector, are the least well equipped. Additionally, despite efforts to reduce the cost of access, the Internet is still too expensive for the majority of Burkinabe and businesses. The average cost of a monthly fixed Internet access is US$44 when the average income is US$59. The economic impact of the eBurkina project will be closely linked to the development of connectivity in the country, which is, for a part, currently addressed through the WARCIP project.

174.   There is growing evidence of the positive impact of ICT on agriculture, in particular on access to market information. A study found that the use of mobile technology providing commodity price information via text messages to farmers in Ghana (esoko) has helped to improve their revenues by 9 percent.[33] Another 2012 World Bank meta-study on the impact of ICT on crops price has found increase up to 24 percent for farmers' income and price reductions around 4 percent for consumers.[34] Overall, even though the impact of ICT in agriculture depends on many different factors, it is reasonable to expect a 10 percent increase in farmers' revenue in Burkina Faso by the end of the project thanks to the delivery of tailored information.

175.   ICT in agriculture can help beyond information asymmetry issues and should be considered a key asset to tackle climate change. In Colombia, a climate-smart agriculture decision-making tool for rice growers, combining private and public data helped to save US$3.6 million from drought damages.[35] Burkina Faso agricultural sector, which employs 80 percent of the labor force,

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[33] Nicole Hildebrandt and al, Price information, inter-village networks and bargaining spillovers: experimental evidence from Ghana, New York University, NYU Abu Dhabi and CTED, March 2016

[34] Naomi J. Halewood and Priya Surya, Information and Communication for Development 2012, Chapter 2: Mobilizing the agricultural value chain, World Bank, 2012

[35] Global Open Data for Agriculture and Nutrition, How can we improve agriculture, food and nutrition with open data?, May 2015. The portal and relying data are available to everyone at http://www.aclimatecolombia.org/

is also facing great challenges with regard to climate change. It is expected that rise in temperature and longer dry seasons will decrease crop yields by at least 18 percent by 2050 across Sub-Saharan Africa.[36] The use of genetically modified organism (GMO) in the cotton sector has been another issue in Burkina Faso. Cotton producers are seeking compensation to Monsanto firm for the decreasing quality of their cotton, and the resulting loss of their income. The end of GMOs in the cotton sector could have significant consequences for farmers, who would need to adapt to new crops. Therefore, ICT technologies or approaches that have the potential to support farmers in the fields of soil conservation and water management, such as a geospatial platform, are likely to make a difference for food security and agricultural development.

176.   As seen in previous World Bank projects, the uptake (adoption and use of e-Service) is a critical and often neglected phase of an e-Government value chain. The project has been therefore designed to address this very precise phase with the highest chance of success. First, the choice of agricultural and rural sectors for the development of preliminary e-Services is aligned with the demand expressed both by high-level officials, main stakeholders of the sectors, and the local population. Second, the agricultural sector, and in particular, the cotton sector, is a well-structures one with at least 12,000 cooperatives, each one composed by an average of 15 cotton producers. It should be therefore easier to foster adoption and use of new digital services in the cotton sector but also in rural areas, whose local farmers represent a large part. Third, there is an important community of international partners and projects already in place that will enable to facilitate the adoption of e-Government solution in the agricultural and rural sector. Fourth, the adoption of a multichannel approach will be key to ensuring new digital services really benefit to the illiterate and offline population. Lastly, it is expected that the support to local skills, innovation and entrepreneurship will enhance the chance of developing digital services and content tailored to the needs of local population.

Project Costs

177.   The total investment of the Project related to e-Government (Component 1 and 2 of the Project) is estimated at US$13 million. In addition to the e-Government, costs for digital innovation is estimated at US$4.5 million (Component 3). Other costs include support to project implementation (Component 4) and are estimated to be US$2.5 million over the life of the project.

Project Benefits

178.   The economic benefits of this project are expected to come from the following main sources:

179.   **Savings in government IT spending** for operation and maintenance costs derived from the utilization of a centralized shared digital infrastructure, as opposed to having multiple ICT projects in different ministries relying on low-quality data. In terms of IT expenditures, figures are

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[36] M. Waongoa, P. Lauxb, H. Kunstmann, Adaptation to climate change: The impacts of optimized planting dates on attainable maize yields under rainfed conditions in Burkina Faso, June 2015

available for 2013 budget where IT expenditures accounted for US$2.9 million, which was about 1 percent of total public expenditures. As seen in Bangladesh World Bank e-Government project (P122201), percentage of savings in Government IT spending is on its path to reach target of 15 percent at the end of the project. Translated in the case of eBurkina, this would account for savings of US$6.1 million over a period of 15 years.[37]

Figure 11: Government IT spending
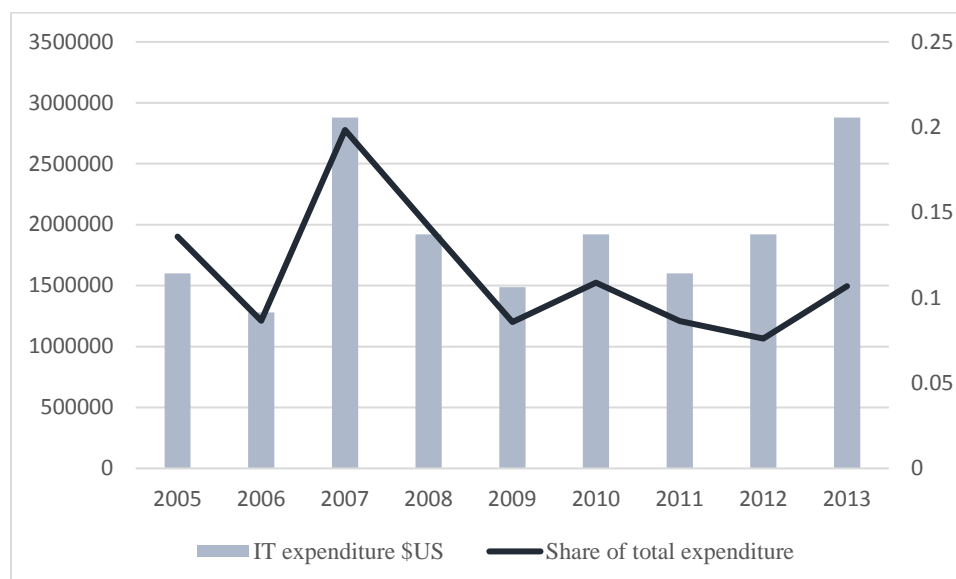
Source: BOOST Burkina Faso http://wbi.worldbank.org/boost/country/Burkina Faso-faso

180. **Increase in tax revenues** thanks to an administration better equipped to manage and control taxpayers, but also thanks to the development of the ICT industry where tax revenues are easily captured. The budget of Burkina Faso suffers from a low tax return, with tax revenues accounting for only 11.5 percent of the GDP. It is expected that the modernization of the administration, combined with e-Services targeting taxpayers, will enable to automate tax collection and substantially increase tax revenues (This potential benefit was not taken into account in the calculation of the Benefit-Cost ration).

181. **Growth in the ICT sector** with the development of businesses and jobs creation, in particular for the young population, in the ICT sector and related digital industries. The contribution of ICT to Burkina Faso GDP was estimated at 4.5 percent in 2012 (US$482 million), mainly due to revenues from the telecom operators. These figures were achieved despite a low number of ICT companies (1000 companies identified in the sector in 2013) and a market focused on the two major cities Ouagadougou and Bobo-Dioulasso. The development of entrepreneurship in the digital sector, with the creation of workspaces and incubations programs for businesses, may

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[37] Taking into account an average of US$3 million on government IT spending annually with a saving of 0, 5, 8, 12, 15 percent for respective five years (2016 – 2021) and then a 15 percent annual saving from year 2022 to 2032.

play a catalyst role for the development of businesses and innovation in ICT sector that may benefit to the whole economy. The development of the sector and successful businesses and innovation may also help attract foreign investment and encourage international partnerships (This potential benefit was not taken into account into the calculation of the Benefit-Cost ration).

182.   **Increase of incomes for the labor force in rural areas**, in particular small-scale farmers. The total of the agricultural population is estimated at 13 million people.[38] Taking into account an average of 5 percent increase for small-scale farmer's revenues over a 15-year timeframe thanks to enhanced access to information and a very conservative 1 percent ratio of this population accessing those information, the benefits in terms of increased revenues for the agricultural population would be US$64 million by 2032.

Summary of costs and benefits

183.   **Using a 15-year timeframe, the expected Benefits-Cost Ratio (BCR) would be as follow:**

Figure 12: Calculation of Expected BCR

Costs	USD million
Support to e-Government (investment)	13
Support to digital innovation ecosystem	4.5
Other costs	2.5
Total costs	20
Benefits	
Savings in government IT spending	6.1
Increase of incomes for agricultural population	64
Total benefits	70.1
Benefit-Cost Ratio	**3.5**

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[38] Source: Annuaire des Statistiques Agricoles 2012, DGESS, Ministère de l'Agriculture et de la Sécurité Alimentaire

Annex 5: Systematic Operations Risk-Rating Tool (SORT)

eBurkina Project

184.   The assessment of risks takes into account both the likelihood of the risk materializing, as well as the severity of its impact on the achievement of the project development objectives (PDO). The SORT focuses on identifying, assessing, and managing risks throughout an operation.

Risk Categories[39]	Rating (H, S, M or L)
1. **Political and governance**	Risks to the development objective stemming from the country's political situation and governance context. *Rating: High* **Changes in leadership (high)** Changes in political leadership/appointees could undermine government ownership of the project and gains in capacity development *Risk mitigation.* The project team will engage with multiple levels of leadership within targeted Ministries to ensure broad, institutional ownership, mitigating the risks posed by turnover of appointed leaders. E-Government is a priority of the new President, as stated so it clearly comes from top level and there is not a high risk of radical shift in priorities within the coming years, or at least before the next presidential elections. **Political competition for project resources (substantial)** Project staff may face difficulties achieving agreement between key government stakeholders on overall division of resources and implementation modalities for the project, especially between the different economic regions. Given the high levels of political competition within government, procurement and consultancy selections for technical assistance hold the potential to be divisive and lead to competition within government. *Risk mitigation.* Project team will engage in transparent dialogue with stakeholders regarding the allocation of resources. The strategic focus and objectives of ICT sector support will be clearly defined. The project team will continue to involve key stakeholders in the evolution of the program, and will continue to mitigate this risk, particularly through continuous monitoring of stakeholders integrity.
2. **Macroeconomic**	External and domestic economic risks that may derail proper preparation, implementation and achievement of results. *Rating: Substantial.* The macroeconomic environment in Burkina Faso is precarious as actual government revenue is consistently less than that budgeted, while budgets continue to over-run. In addition, political instability, and regular replacing of ministers, undermines investor confidence.

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[39] In all risk categories the assessment is of the risk to PDO or the risk of unintended consequences associated with the operational engagement, and does not refer to "country level" risk in and of itself.

		Risk mitigation. Through this project, the team will seek to achieve quick and tangible outputs, building on what has already been achieved in previous engagements, and implementing recommendations from the WARCIP.
3.	**Sector strategies and policies**	Risks associated with the strategies and policies of the sector(s) relevant to the project.
		Rating: Moderate
		Regulatory framework and private sector (substantial) The eBurkina project will support the establishment of a regulatory framework for e-Government implementation. However, there is a risk that sector strategies are not aligned with the wider e-Government strategy and National Plans for ICTs.
		Risk mitigation. As the project scales up, the Government and MDENP/ANPTIC need to continue to include the private sector during consultations on the legal and regulatory framework. The project is aiming to highlight benefits for the private sector. Engaging private sector counterparts to ensure that the program scope and activities responds to their priorities and has their buy-in and commitment will be strengthened.
		Lack of intra-governmental coordination (moderate) Within government, there is a lack of clarity on the division of labor among Ministries, agencies and departments. Government entities often have overlapping functions and exhibit poor communication. This lack of internal coordination could slow project progress.
		Risk mitigation. In this case, the project will support selected institutions regarding the ICT Sector. Technical Operational (and Components) Implementation Committees will support governmental coordination by ensuring strategic alignment of the project with the directives of the Steering Committee. Support to the key Ministries supervised by the Steering Committee, including Ministry of Finance, will enhance government coordination and communication.
		Lack of Development partner coordination (moderate) Potential fragmentation of development partner support/project duplication is a risk. Although project preparation reflects a highly consultative process, it is necessary to maintain dialogue with other donors/projects throughout project implementation.
		Risk mitigation. Donors and the World Bank have established a clear division of labor for support to Burkina Faso's government. The project team will maintain regular communication and coordination with main stakeholders involved such as African Development Bank (AfDB), the Danish International Development Agency (DANIDA), Luxemburg Cooperation, AFD and UN agencies implementing complementary ICT sector activities. For this purpose, the World Bank team will continue leading regular ICT donor coordination meetings.
		Lack of coordination between World Bank projects (moderate) WB projects targeting other sectors (Governance and Administration Modernization, Safety Nets, IFC engagement in cotton…) may be insufficiently coordinated to effectively and efficiently deliver desired results.

		Risk mitigation. The project team will maintain regular communication with related project teams to ensure coordination.
4.	**Technical design of project**	Risks related to the technical design of the project. **Comp 1: Enabling environment for e-Government** **Comp 2: Data Management and Digital Platform for e-Service Delivery** **Comp 3: Foster entrepreneurship and local skills for the digital economy** *Rating: Substantial* **Scope of project activities (substantial)** There are risks related to the implementation of project activities. For instance on Component 1, there are risks associated to the implementation of the e-Government strategies and the effectiveness of the e-Government (regulatory) framework and subsequent regulations. Regarding component 2, the connectivity challenges depending on WARCIP project (and G-Cloud project) could impact feasibility of the platform delivery and effective deployment of e-Services due to the lack of reliable and affordable bandwidth. There is also a risk on the collaboration within Ministries and the implementation of shared digital platform and usage of e-Services. Also, there is a risk on reaching out to the rural areas by providing minimal connectivity there. Therefore, eBurkina project depending partially on the implementation achievements of these other activities and projects increase the project design risk and potential delays. Regarding Component 3, there is a risk regarding the incubator's location due to Government or ecosystem requests. *Risk mitigation.* The implementing agencies being Ministry of Public Administration and Ministry of ICT, the main regulatory framework will be established with the MDENP and ANPTIC and then next reforms, including e-Government framework, will be introduced gradually to ensure government ownership and incremental capacity building tailored to the context. On connectivity, WARCIP project is moving faster in the last months and the fiber-optic contract has just been signed with works starting now. Delaying eBurkina preparation has given time to WARCIP to move quicker. There has been a very close collaboration from the Government Agencies in charge of WARCIP and eBurkina as well as on the Bank's team. The G-Cloud is already under implementation and fiber-optic reaching out to rural areas is under way. eBurkina project is working in close collaboration with other development partners and firm implementing G-Cloud to ensure connectivity is managed satisfactorily. In any case, project development objective can still be achieved independently but might be delayed and Mid-Term Review will be a good proxy to evaluate the likelihood of achieving the objectives in time. The Bank team has identified with the MDENP different solutions for the location and also has been working actively with the ICT ecosystem in Burkina Faso through the Open Data grant. A feasibility study is also planned under this component to assess different issues such as business model, location, sustainability and costing. **Lack of knowledge transfer (substantial)** Given the acute capacity constraints and urgency to deliver results, advisors risk dedicating their time to performing the functions of the individuals they support, rather than transferring knowledge and building their capacity.

		Risk mitigation. The project includes a dedicated coaching component with the sole task of transferring knowledge. Training and development will be expanded to other economic regions. M&E will be conducted to ensure knowledge transfer.
		Flexibility of components (moderate) Given the high uncertainty in such a fragile political and institutional environment, project implementation will struggle if it is not sufficiently flexible in project design and complementarity with other projects' interventions to adapt to changing circumstances. *Risk mitigation.* A mechanism for prioritizing and sequencing will be established to allow the government to make adjustments to the list of beneficiary institutions and respond to changes in priorities.
		Insufficient project funding (moderate) Insufficient funding to cover full project costs could prevent implementation of all project components. *Risk mitigation.* Project budgets established and adapted based on IDA commitments to the country, based on CMU projections and financial planning.
5.	**Institutional capacity for implementation and sustainability**	Risks related to the capacity of government counterparts to implement activities, taking into account the institutional capacity of the implementing agencies, implementation arrangements (including PMT), and monitoring and evaluation arrangements. *Rating: Substantial* **Capacity constraints within relevant ministries (substantial)** Targeted government institutions are staffed with unskilled, aged or absentee employees. Therefore, the project may struggle to achieve the critical mass of capacity necessary to strengthen institutional capacity and implement reform. *Risk mitigation.* The eBurkina project will be looking to strengthen government and private sector capacities in terms of performance and Public-Private cooperation. This will help lay, over the longer term, foundations for better sector performance, accountability and improved communications. **Lack of familiarity with World Bank procedures (moderate)** The clients lack of familiarity with World Bank procedures may lead to delays in implementation. *Risk mitigation.* The World Bank will provide expanded support to the client through an implementation support team. Moreover, the team will hold regular dialogue with the client to explain procedures and provide support. Project design focuses heavily on training and technical assistance in key areas (e.g., FM & procurement) in the early stages of project implementation. **Limited WB oversight (moderate)** Potential access restrictions can constrain the ability for effective oversight of project implementation; increasing the risk of project fund leakage, diversion, or capture. *Risk mitigation.* A results team will be developed, together with the methodology for measuring and tracking project progress at various implementation levels. From

		WARCIP, the ICT Data Collection Unit will have been developed and will support monitoring and tracking progress on PDO-level indicators. Staff will be trained on the project results framework, particularly monitoring, evaluation and reporting. The project will also recruit an M&E firm to support monitoring of the GoBF public sector flagship program and developing M&E capacity in implementing ministries to collect and analyze data.
6.	**Fiduciary**	Risks that funds will not be used to achieve value for money with integrity in delivering sustainable development. *Rating: Substantial* **Limited FM capacity (substantial)** There is a lack of key financial management competencies, weak internal controls and oversight, rudimentary accounting and reporting systems, over-reliance on external technical assistance, nonexistent banking arrangements and inadequate internal and external audit arrangements. *Risk mitigation.* Firstly, this is a continuation of the WARCIP engagement and execution to ensure a high level of technical assistance and support is established, with regular field presence. This will minimize the execution risk and will support capacity-building in the ANPTIC and continuing with SP-PST, both already engaged for few years through other activities. While designing measures to mitigate risks, the project will seek to minimize the risk of creating parallel systems by integrating the financial management function into the use of country systems. The project financial management aspects of accounting, reporting, funds flow, banking arrangements, internal controls, oversight and audit arrangements will be managed by the ANPTIC supported by SP-PST combined with targeted capacity building initiatives supported by Technical Assistance (TA). ANPTIC will recruit later a technical assistant consultant for hand-holding support and implementation of more simplified and flexible procurement, and FM procedures may mitigate these risks. Secondly, ANPTIC will be supported by SP-PST (fiduciary) and will carry out systems risks based audits. However, to mitigate the capacity constraints, external firms acceptable to the Bank will be selected to support the Project Implementing Entity (PIE) in carrying out the external audit of the project. **Limited procurement capacity (substantial)** The overall fiduciary environment has substantial weakness in the integrity of the procurement system (lack of capacity, delays). Extensive technical assistance will also be included in the project to build the ANPTIC capacity, including financial management, procurement, and monitoring and evaluation. *Risk mitigation.* ANPTIC will have a qualified procurement technical assistant consultant (IC) to work as project procurement specialist supporting ANPTIC as well as SP-PST procurement specialist will be supporting ANPTIC. During WARCIP, SP-PST has been trained in fiduciary aspect including project procurement and World Bank guidelines and policies.

	Fraud / corruption (substantial) Given the absence of a robust public financial, legal framework and the nascent rudimentary banking systems, the potential risk of fraud and corruption related cases are high. Other internal control incidences that may expose the project to fraud and corruption include but not limited to (a) late submission of the required supporting documents; (b) poor filing and absence of minimum standards in the maintenance of the project accounting records; (c) noncompliance with the approved project work plans and or budget discipline; (d) unauthorized commitment to suppliers (e) bypassing agreed internal control oversight arrangements particularly in expenditure management expenses (f) high risks in cash handling inherent with the existing cash driven dollarized economy (g) denial of access to information and or limiting the scope of agreed external monitoring and capacity development arrangements. *Risk mitigation:* The project intends to mitigate these potential threats through (i) targeted independent monitoring and risk management mechanism at the portfolio and project specific level; (ii) specific aspects of corruption auditing will be included in the TORs for the external audit; (iii) targeted FM Procedures and internal control mechanisms across the project activities shall be detailed in the project OM; (iv) strong FM staffing arrangements (including qualified Project Accountants in the SP-PST linked to the ANPTIC/PIE); (v) periodic FM supervisions; (vi) stringent reviews and monitoring recommendations of the MPF and project specific monitoring reports and IFRs reviews (vii) measures to improve social accountability and transparency shall be integrated into the project design, for instance, ensuring that project reports are available to the public.	
7. **Environment and social**	Risks posed to the project by environmental and social risks and potential unintended consequences posed by the activity on physical, biological and cultural resources and on human health and safety. *Risk: Moderate* **Social impacts (moderate)** Political sensitivities may result in rivalries and delay implementation of some components. *Risk mitigation.* Clear, merit-based criteria for selection of staff and award of contracts for vendors and PIU. Political sensitivities including relations, power balance, political influence and access to economic assets and natural resources are well studied, documented and accessible to the team for any relevant issue related to the project context (e.g., CPF, SCD). The team will be able to review existing information for implementation purposes on some components. **Environmental risks (low)** The introduction of small-scale constructions within existing buildings (Ministries) can cause some disorder. • *Risk mitigation.* The constructions will not require the acquisition or conversion of land, and will cause very small impacts that are temporary and easily manageable with standards measures of good housekeeping. Key issues to address would be waste management from the construction sites, the potential presence of asbestos and lead-based paints in existing buildings, and the prohibition of their use for new construction, workplace and community health and safety, and more technical issues	

		such as electrical and fire safety (rooms with lots of electronics). The project is classified as environmental category C and the team will help the counterpart to prepare basic due diligence instruments to manage the minor impacts that may occur and build on an Environmental and Safeguard management capacity. The instrument proposed as appropriate is a short, checklist type Environmental and Social Management Plan (ESMP) that will be supplied during the implementation phase together with tender and contract documents to provide guidance, and establish contractual leverage on good housekeeping, waste management, and workplace and community health and safety.
8.	**Stakeholders**	Risks related to stakeholders who may affect successful project completion by delaying or halting its implementation. *Risk: Moderate* **Lack of coordination between nationals and external assistance (moderate)** Experience has demonstrated that national staff often feel international hired support lack sufficient knowledge of the local context. This leads to mistrust and poor coordination between them. *Risk mitigation.* Establishing a minimum duration for contracts will help enable injected staff to build trust and legitimacy. Communication skills and attitude toward national staff will be considered for recruitment, in addition to core professional skills. Regular performance monitoring will also be used to ensure recruited bring value, and not division, to the Civil Service. **Rivalries between contractors and civil servants (moderate)** The nationals hired through the project will be more skilled and better paid than many of the existing civil servants. While necessary to build the capacity of government institutions, this may lead to rivalries and mistrust amongst these two categories of government staff, diminishing the quality of communication and coordination within government. *Risk mitigation.* Salary top-ups, provided by the government, may be used to attract qualified candidates; however, excessive top-ups will be avoided to mitigate the risk of creating internal rivalries and inflating the wage bill to unsustainable levels. Top-ups will be established using information on private and public sector salaries gathered through the benchmarks with other development projects and harmonized pay scale for technical assistance within World Bank projects. The roles of injected capacity will be clearly defined, and recruitment will be conducted in a transparent, open process. **Opposition from private sector stakeholders (substantial)** Existing private sector stakeholders and mobile operators are likely to resist any change in the status quo, in particular contributing to the implementation of e-Government strategies if they don't see the benefits. Private sector is key for implementation and sustainability of e-Government and incubation ecosystem in Burkina Faso. Market demand will ensure continuity of the initiatives and start-ups beyond project lifetime. *Risk mitigation:* Emphasis on consultation and dialogue in all phases of the program. There is a possibility to include private sector representatives within the implementation committees. Also, the project will seek to bring into the discussion potential new players, locked out by current market structure and also expand capacity within private sector

		(training and mentoring) using for instance the incubator (Component 3) to enhance digital ecosystem development and foster local skills.
9.	**Other (Security)**	Additional context-specific risks not captured in the other categories. In the context of Burkina Faso, security risks will always be included in project-level risk management frameworks. *Rating: Substantial* **Insecurity (Substantial)** Insecurity poses a risk to human security (WB staff and client) and project implementation and sustainability. It creates severe limitations on access to the operating environment, which in turn elicits a number of additional project risks, creating challenges for project design, implementation and monitoring. *Risk mitigation.* Recognizing that the risk of insecurity cannot be completely mitigated, the project is designed to incorporate agile and flexible implementation planning, taking account of the regular security advice issued by the World Bank. The World Bank will monitor the political and security environment. Additional measures may include: *i)* issuing contracts to firms, instead of individuals, so the firms provide security arrangements individuals would struggle to make on their own; *ii)* placing greater emphasis on Burkinabe staff to deliver, decreasing reliance on international input. **Political crisis / breakdown (Substantial)** Challenges to state authority by anti-government elements (AGEs) could delay or block project implementation. Moreover, it runs the risk of undoing progress achieved through the project. Opposition is likely to come from insiders that will seek to support the status quo and resist move to new framework. *Risk mitigation.* The CMU will monitor the political and security environment, in collaboration with other development partners. In the case of acute political crisis or breakdown, the project will need to be put on hold and potentially discontinued, based on the severity of the situation.
	Overall	**Substantial -** The overall risk rating for the project is Substantial. The government is unfamiliar with the World Bank requirements and has weak capacity to manage projects. The history of poor governance and financial risks are high. Key stakeholders have agreed to the project and having already worked with the Ministries and Agency/PIE and jointly with other partners can mitigate those risks. In any case, the Bank will continue providing extensive front loaded support to MDENP and ANPTIC (and SP-PST) and ensure coordination with other Ministries.

Annex 6: Adaptation and Mitigation Co-benefits by Project Component

eBurkina Project

Sub-component	Activities	World Bank Commitment by Sub-component	Adaptation Associated Sector	Mitigation Associated Sector
2.4: Deploying an online geospatial information system (GIS) for rural development and food security management.	Development of a web-based GIS solution including information layers on water points, reservoirs, rainfalls, crops, population, roads, etc.	US$1 million	US$ million	0
2.5: Implementing an information platform aimed at providing relevant information for rural development	Development of an e-Service for farmers and intermediaries, including real time weather risks and growing tips.	US$1 million	US$0.5 million	0
3.4: Develop and implement a strategy to stimulate the development of local digital content	Support to applications and e-Services development by local entrepreneurs. Half of the activity will be dedicated to ICT for agriculture and climate change adaptation and mitigation.	US$1 million	US$0.5 million	0