

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: PIDA54516

Project Name	eGabon (P132824)
Region	AFRICA
Country	Gabon
Sector(s)	Public administration- Information and communications (20%), Information technology (10%), Telecommunications (10%), General information and communications sector (10%), Health (50%)
Theme(s)	e-Government (25%), Infrastructure services for private sector development (25%), Micro, Small and Medium Enterprise support (25%), Health system performance (25%)
Lending Instrument	Investment Project Financing
Project ID	P132824
Borrower(s)	Gabonese Republic
Implementing Agency	CN-TIPPEE
Environmental Category	B-Partial Assessment
Date PID Prepared/Updated	29-Feb-2016
Date PID Approved/Disclosed	29-Feb-2016
Estimated Date of Appraisal Completion	02-Mar-2016
Estimated Date of Board Approval	05-Jul-2016
Appraisal Review Decision (from Decision Note)	The chair authorized the team to proceed with a technical mission (February 8-20, 2016) that will be upgraded to appraisal following consultation and disclosure in country and in Infoshop of cleared safeguard documents The review discussed the risk rating of the project and agreed to rate the project Substantial.
Other Decision	A back to back appraisal and negotiations (tentatively February 23, 2016) is authorized, on the assumption that the safeguard documents are processed and cleared within the proposed schedule, which remains very tight.

I. Project Context**Country Context**

Gabon has enjoyed steady economic growth, but the sharp fall in oil prices has resulted in lower growth and a deterioration in the outlook. Real economic growth averaged 5-6 percent per annum from 2008-2013, but the recent decline in oil prices and subsequent loss of revenue has led to a

slow-down, with Gross Domestic Product (GDP) growth falling from 5.6 percent to 4.3 percent (%) between 2013-2014. The Government of Gabon (GoG) data project growth of 4.0% in 2015 and 4.3 in 2016 in a context of continued low oil prices. Fiscal measures have been adopted, but these may prove challenging to implement fully as Gabon is heading towards presidential and other elections in 2016 in the context of heightened social tensions.

Strong economic growth during the past decade has not translated into significant job growth, and unemployment is high, particularly for women and youth. While the population of 1,688,000 (2014 estimate) is relatively small for a land area of 267,667 km², it is very young and growing steadily, with over half of the population under the age of 19 and averaging 2.1% growth between 1998 and 2008. More than 80% of the population live in urban areas, predominantly Libreville (the capital), Port-Gentil (the economic capital), Franceville (the mining region) and Oyem (the agriculture region). An estimated 10,000–15,000 people enter the labor market each year, significantly above the number of new jobs created. As a result the unemployment rate stands at 20%, with women and youth being disproportionately affected.

Despite Gabon's relative wealth, the benefits remain highly concentrated and human development outcomes fall short of countries with similar per capita income. With a Gross National Income (GNI) per capita estimated at US\$19,264 (purchasing power parity current price) in 2013, it is one of only six upper middle-income countries (UMIC) in Sub-Saharan Africa. However, Gabon's ranking under the United Nations Human Development Index remained quasi unchanged at 110th in 2014 compared to 112th in 2008, well below countries with similar GDP per capita. Inequality is high, resulting in highly uneven living standards and opportunities. According to the latest household survey, dating from 2005, poverty is at 33%, an increase compared to 1997 when poverty stood at 25%. A 2013 McKinsey report commissioned by the GoG suggests that about 30% of the population is economically vulnerable. Further, the study finds access to basic social services has deteriorated over time.

New approaches are needed to address the challenges of unbalanced growth and unequal social and economic opportunity, in particular those harnessing the potential of Information and Communication Technology (ICT). In 2010, the GoG began to implement a new economic vision known as the "Emerging Gabon Strategic Plan (PSGE), which aims to reduce the reliance on natural resource extraction and position the country as a top emerging market globally by 2025. The PSGE identifies ICT enabled industry and services sectors, the "Digital Economy," as a critical growth area to diversify the economy and improve both private and public service delivery. The PSGE calls specifically for leveraging investments in ICT to promote productivity gains throughout the economy as well as greater transparency, efficiency and effectiveness of public service delivery. Using ICT to achieve greater efficiency in public service delivery and management in a systematic and impactful manner will however require a significant change in approach. Gabon is the leader in e-government development in the Central Africa, but it still fares poorly in comparison to the rest of the world.

Sectoral and institutional Context

Gabon's impressive progress made in ICT development over the recent years was internationally recognized with the 2015 "ICT for Sustainable Development Award" from the International Telecommunication Union (ITU), the United Nations specialized agency for ICT. The GoG has demonstrated its commitment to developing a dynamic telecommunications market, through

privatizing government owned Gabon Telecom in 2007 by suppressing exclusive rights in fixed telecommunications in 2012 and fostering vibrant competition in the emerging broadband market both mobile (3G/4G global licenses awarded in March 2014 to Airtel Gabon and Gabon Telecom/Moov) and fixed (between Gabon Telecom/Moov and several independent Internet Service Providers). The cellular sector is dynamic and competitive, with three major operators (Airtel Gabon; Gabon Telecom/Moov and Azur) and a mobile penetration rate of 167% (December 2015). Broadband internet penetration is also booming, with 67% penetration as of December 2015. With support from the World Bank under the Central Africa Backbone (CAB) program, the GoG embarked into a policy reform process led by the Line Ministry in charge of Digital Economy (MENP) of: (i) improving the robustness of its ICT legal and regulatory environment for both the basic telecommunications law and for the 2nd generation ICT laws ; and, (ii) developing a national broadband plan to follow up on its five-year plan called “Digital Gabon”. Under the CAB program, Gabon is also: (i) rolling out much needed additional submarine international connectivity and terrestrial fiber optic backbone connectivity under an open access and public-private partnership (PPP) approach; and (ii) setting up a regional Internet Exchange Point (IXP) in coordination with the Axis project of the African Union (AU). Gabon is therefore in a strong position to leverage its competitive telecommunications market and ongoing and future investments in broadband infrastructure to improve both public and private service delivery and to promote the development of a vibrant digital economy.

The GoG has also organized itself to accelerate the implementation of ICT with the aim of achieving greater efficiency in public service delivery and management, and selected health as a priority sector for action because it is not performing up to its potential. An inter-ministerial commission for e-government was created in 2013 to foster the development, roll-out and adoption of e-applications in public service. The National Agency for Digital Infrastructure and Frequencies (ANINF) drafted, in 2013, the National Information System Master Plan (SDNSI) for piloting development and rollout of e-services and is tasked with the set-up of the required shared public service delivery platforms. The primary rationale for choosing the health sector is the widespread view that despite increased resources being devoted to the health sector in Gabon (from 5.5% of the GoG’s budget in 2008 to 7.2% in 2012), the health sector is not performing up to its potential. The GoG believes that increased use of ICT could help to improve overall health system. As evidence of current low level of performance, Gabon has not met its Millennium Development Goal (MDG) targets in health and, compared to countries of similar income and health spending, health status is lower than would be expected. Life expectancy at birth is relatively low, at 63 years. Similarly, the under-5 mortality rate is below that of countries of similar incomes and health spending (65 per 1,000 live births in 2012), while the maternal mortality ratio is 316 per 100,000 live births (GDHS, 2013). This compares to upper middle income averages of 19 and 50 respectively and, at least as far as maternal mortality is concerned, is very far from the SDG target of less than 70 per 100,000 live births by 2030. Further, a recent World Bank analysis of health financing in Gabon highlighted significant inefficiencies, including a high allocation of available resources to curative care – hospitals in particular – and average costs per occupied bed of roughly \$40,000 annually, as a result of higher than average beds per capita and low utilization (bed occupancy averages 40% in regional hospitals). The quality of care is also considered low, especially by international standards, given Gabon’s income level.

The health system in Gabon is relatively large given its population base, and there are a number of key health sector issues. The system is characterized by a large number of fairly small facilities, including 16 general and 13 specialist hospitals (12 public general hospitals, 12 public specialist

hospitals, 2 general and one specialist social security hospitals and two private not-for-profit general hospitals) with a total of 3,800 beds (an average size of 131 beds); 130 health centers, maternities, polyclinics and medical centers; and almost 600 health posts, dispensaries and pharmacies (mostly public). There are close to 6,200 professional staff in the health system, including almost 500 physicians and almost 5,700 nurses and midwives. The distribution of health staff is skewed towards the larger cities and urban areas. There are currently 11 health regions and 52 health departments. The National Health Plan (PNDS) highlighted a number of key issues in the health system, including: governance and leadership in the health sector; an inefficient national health information system; supply chain and stock-out issues; low availability of diagnostic support services (e.g., laboratory and medical imaging); poor planning and training of staff; poor quality of care and use of health services, especially in primary care; and a maldistribution of funding in favor of curative care, especially hospitals. A well-functioning eHealth system could help to address a number of these issues both by supporting improvements in the diagnosis and delivery of care and by providing timely and accurate information which can inform the relevant policy and reform decisions. Annex 5 highlights a number of examples of the potential impact, in low/middle income and higher income countries. A recent health information systems assessment in Gabon showed that, although a limited number of electronic systems already exist, their full potential for improving efficiency and quality cannot be realized because they are largely independent and do not communicate with one another to exchange data. This suggests significant scope for improvement through an integrated and more holistic approach.

The GoG recognizes the need to improve rapidly and significantly overall health system performance leveraging on the use of ICT for health (eHealth) as a key factor in promoting these improvements. In March 2013, the GoG commissioned a five-year strategic framework for Gabon's health system aiming at rapid improvement, with a particular focus in the reduction of maternal, newborn, and child mortality, and priority attention to vulnerable populations. This strategic framework involves interventions and outcomes under the following six pillars of health systems strengthening: (1) strengthened health leadership and governance; (2) improved health care services; (3) strengthened health information systems; (4) improved technical and management capacity of health personnel; (5) improved health financing; and (6) improved pharmaceutical sector and supply chain management. In July 2013, ANINF and the Line Ministry in charge of Health (MSPSSN) commissioned a concept note for a new National Health Information System (NHIS) , addressing pillar 3 above, which covers functional architecture, suggested project planning and initial cost estimates (but not pillar 4 above which is critical for successful adoption of a NHIS). The World Development Report (WDR) 2016 underlines that there is early evidence to suggest that eHealth solutions, while costly to implement, can bring significant cost savings. This is because the implementation of human resources information systems, logistics management information systems, clinical decision support tools, digital payments, financial management information systems, and SMS reminder systems can address a variety of health system problems, including system inefficiencies (leading, for instance, to better spending allocation decisions and higher occupancy rates which are issues which affect Gabon), overuse of procedures, inappropriate hospital admissions, corruption and fraud, and missed appointments. Some of those results are related to behavioral change in frontline workers: the implementation of an NHIS will result in fundamental changes in the way health care is delivered and these changes need to be successfully anticipated and managed if the system 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, which should go hand-in-hand with human capacity development. Effective country ownership, good governance, and strong institutional and human capacity are core to

eHealth planning and implementation.

Widespread availability of mobile phones (including smartphones) as is the case in Gabon also offers a great potential to revolutionize healthcare through development in the devices and their technical capabilities, associated services, content and apps, as well as information gleaned from geolocation devices. The GSMA Mobile for Development programme currently tracks over 1,200 mobile health (or mHealth) products and services and connects the mobile and health industries, with the aim of developing commercially sustainable mHealth services that meet public health needs. In its 2015 The State of Broadband report, the Broadband Commission showcases the benefits of a mobile app designed by a local start-up for improving maternal healthcare in Myanmar. In its Highlight findings for 2014, the Center for Health Market Innovations (CHMI) identified 403 programs working in information and communication technology: the award-winning application MedAfrica, a mobile phone application that allows consumers to access medical information and locate reputable doctors and hospitals, has an average of 1,000 downloads per day and is used in Kenya and Uganda. Common ways of utilizing such ICT-based innovations to achieve an impact on health care outcomes include improving health providers' ability to diagnose and treat patients, improving communications between providers and patients outside traditional doctors' visits, and improving overall data collection and analysis.

In order to go beyond the anecdotal use of broadband for social media or email applications and to seize such mHealth opportunities and more broadly any opportunities for development of local content, services and applications to be made available over its ongoing and future investments in broadband infrastructure, Gabon needs to accelerate the emergence of a digital innovation ecosystem of Gabonese entrepreneurs and businesses. The country was ranked 103 out of 140 economies in the World Economic Forum Global Competitiveness Report 2015-2016 that points Gabon's poor performance on the business sophistication and innovation pillars which are key for innovation driven economies. In Africa alone there are now well over 100 technology hubs, labs, and other initiatives in the digital economy but Gabon was until recently amongst the few economies without any known business enabler tailored to help mobile software developers and entrepreneurs to build, test and market promising and transformative ICT-based applications and seize unparalleled opportunities for digital entrepreneurship. There are however several solid initiatives seeking to develop an enabling environment for digital entrepreneurship on which to build upon. Ogooué Labs is a coworking space located in Libreville, accommodating around 40 young entrepreneurs a year and aiming at promoting and developing entrepreneurship through events and educative programs. The NGO ACTE has been building for several years skills in ICT amongst high school students in Gabon through 8 centers of excellence with free internet access located in high schools (Libreville, Port-Gentil, Lambaréné, Mékambo), including in coding and application development. UNESCO and the Gabonese mobile operator Airtel launched in May 2015 the "Train my Generation – Gabon 5000" project to build ICT skills over a three-year period for 4,400 young people aged 17 to 35. In November 2015, ANINF organized together with the Francophone Fund for Digital Innovation (FFIN) and African Institute of IT (IAI) an application competition with the participation of 15 teams. The active developer's community is estimated by the private sector stakeholders currently at around 150 people, confirming a strong potential for setting up a digital incubator in Libreville with the objective to accelerate and strengthen the emergence of a self-reinforcing digital innovation ecosystem and generating ultimately more digital jobs and national SMEs. In 2015, the MENP commissioned a feasibility study for the establishment of such an incubator in Libreville 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. Due to the relatively small size of the Gabonese market and the absence of a mature entrepreneurship, digital entrepreneurship in various sectors of the economy (e.g. tourism, media, education, energy, banking...) and not only the health sector will be fostered the Libreville digital incubator. With the objective of stimulating digital innovation and more broadly entrepreneurship beyond the capital city, the GoG is also interested to set up, as extensions of the Libreville incubator, smaller scale – more generalist business incubators in Port-Gentil (the economic capital) and in Franceville (where the International Center for Medical Research (CIRMF) is located), to avail of the broadband connectivity established between these 3 cities under the CAB4 project.

Building upon the partnership established through the implementation of the CAB4 project, the GoG has requested support from the World Bank to design a transformational integrated solution to its challenge of developing a dynamic digital economy through mainstreaming ICT in all public policies, starting with the health sector. The GoG also commissioned technical support from MSH to implement the strategic framework for Gabon's new health system, including the roll-out of Results Based Financing (RBF) mechanisms, and insisted that the implementation of eGabon be closely coordinated with the implementation of the strategic framework for Gabon's new health system. In particular, it was requested that eGabon includes activities to support: (i) the new PNDS, given the potentially important role of the PNDS in facilitating the NHIS and vice versa; and (ii) the preparation for a results-based financing (RBF) pilot, given the potential synergies between RBF (which relies heavily on accurate and timely information and focuses on results) and the NHIS, with the RBF providing a strong opportunity to build on the NHIS to further promote efficiency in service delivery and behavioral change of front line providers. Finally, the information provided by the NIHS will benefit all the pillars of the five-year strategic framework for Gabon's health system.

II. Proposed Development Objectives

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.

The PDO would be achieved by developing and rolling out a new National Health Information System (NHIS), harnessing ICT to support the needs of both clinical staff and health system managers, and by advancing the promotion and growth of a local digital ecosystem in Gabon through opportunities arising from the development and roll-out of eHealth applications and services.

Direct beneficiaries of the eGabon Project will be patients of the national health system and health workers, as well as private sector actors and entrepreneurs, with a specific focus on women and youth, seeking to conduct business in the digital economy. Indirect beneficiaries potentially include all of the country's population, benefitting from increased availability and quality of affordable health services as well as mHealth and other useful applications tailored for local needs.

III. Project Description

Component Name

Component 1: Strengthening the National Health Information System (NHIS)

Comments (optional)**Component Name**

Component 2: Advancing the development of a digital innovation ecosystem

Comments (optional)**Component Name**

Component 3: Supporting project implementation

Comments (optional)**IV. Financing (in USD Million)**

Total Project Cost:	57.65	Total Bank Financing:	56.00
Financing Gap:	0.15		
For Loans/Credits/Others			Amount
Borrower			1.50
International Bank for Reconstruction and Development			56.00
Total			57.50

V. Implementation**A. Institutional and Implementation Arrangements**

Building upon institutional and implementation arrangements that worked out satisfactorily under the CAB4 project, the institutional and implementation arrangements for eGabon will involve two organizational levels.

a) Two Steering Committees - “NHIS Strengthening Steering Committee” for Component 1 where MSPSSN is leading the implementation and “Digital Transformation Steering Committee” for Component 2 where MENP is leading the implementation- will be in charge of providing overall technical and operative guidance, direction and coordination during project implementation. They will have fiduciary and governance oversight and will bear responsibility for the compliance of safeguards activities to national and World Bank policies.

- Component 1. The Ministerial Decision setting up the NHIS Strengthening Steering Committee (No. 0276/MPS/SG) was passed on September 11, 2015. Given the implication of the Component on the whole health system, the Steering committee is supported by a project management team, a project team, and regional committees. The composition and function of the various committees is described in Annex 3. The steering committee project management team and the project team have been all active in the preparation of the eGabon project.

- Component 2. The Ministerial Decision setting up the Digital Transformation Steering Committee (No. 0134/PM) was passed on February 11, 2016. The Steering committee is supported by a technical operational committee, which includes private sector, NGOs, youth associations and academia representatives. The composition and function of the various committees is described in Annex 3. The President of the technical operational committee and his team at the MENP have been

active in the preparation of the project.

- To guarantee spill-over effects from Component 1 into Component 2, the following arrangements have been agreed: the Minister in charge of Digital Economy who is the President of the steering committee of Component 2 is the Vice-President of the steering committee of Component 1; and the President of the technical operational committee of Component 2 seats in the project management team of Component 1.

b) The Project Implementation Unit (PIU) in charge of providing all fiduciary support in the implementation of the eGabon project, including Procurement, Financial Management, Monitoring & Evaluation (M&E) and Safeguards. A project manager will be hired under the project to provide project management support to the two commissions to which the PIU will be reporting to for Component 1 and for Component 2 of the eGabon project. This PIU will be the already existing and experienced PIU called CN-TIPPEE .

B. Results Monitoring and Evaluation

Results and monitoring will be an integral part of the eGabon project and the PIU CN-TIPPEE will have overall responsibility for reporting to the Commissions and to the World Bank. CN-TIPPEE will prepare Monitoring and Evaluation Reports on a quarterly basis that will include the updated Results Framework, 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 (see Annex 3).

The PIU CN-TIPPEE will be responsible for collecting the relevant data throughout project implementation. CN-TIPPEE will get its information directly from the Component 1 project team, the incubators set up under Component 2 and from regular surveys to measure the level of satisfaction among key stakeholders with the project interventions. In Component 1 this will include surveys of health workers, health administrators and owners, and central agencies such as CNAM-GS, as well as the general public, while in Component 2 these surveys will target those involved in the ICT industry. In addition, funding will be provided by the eGabon project to support the mid-term review and completion review, and to do an evaluation of the implementation of the NHIS and of the reach of the applications developed by the incubators.

VI. Safeguard Policies (including public consultation)

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

Comments (optional)

VII. Contact point

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