



1. Project Data

Project ID P113370	Project Name eBenin Project		
Country Benin	Practice Area(Lead) Transport & ICT		
L/C/TF Number(s) IDA-H5530	Closing Date (Original) 30-Jun-2015		Total Project Cost (USD) 15,000,000.00
Bank Approval Date 25-Mar-2010	Closing Date (Actual) 30-Jun-2015		
	IBRD/IDA (USD)		Grants (USD)
Original Commitment	15,000,000.00		0.00
Revised Commitment	14,836,194.28		0.00
Actual	14,488,527.90		0.00
Sector(s) Public Administration - Information and Communications Technologies(41%):ICT Infrastructure(40%):Other Industry, Trade and Services(12%):Other Information and Communications Technologies(5%):ICT Services(2%)			
Theme(s) Infrastructure services for private sector development(30%):Other public sector governance(30%):Regulation and competition policy(20%):Legal institutions for a market economy(10%):Micro, Small and Medium Enterprise support(10%)			
Prepared by Ranga Rajan Krishnamani	Reviewed by John R. Eriksson	ICR Review Coordinator Christopher David Nelson	Group IEGSD (Unit 4)

2. Project Objectives and Components

a. Objectives

The Project Development Objectives (PDOs) as stated in the Financing Agreement (Schedule 1, page 5) and in the Project Appraisal Document (PAD, page 7) were.

(i) improve access to lower cost and better quality of Information and Communication Technology (ICT) services. (ii) enable the development of e-applications in the Recipient's territory.



- b. Were the project objectives/key associated outcome targets revised during implementation?

No

- c. Components

Component One. Enabling Environment. Appraisal estimate US\$5.6 million. Actual cost US\$4.60 million. This component financed technical assistance activities aimed at supporting the Government's efforts to develop legal, regulatory and institutional frameworks in the ICT sector. Activities included: (i) Helping the Government to implement the new legal framework. (ii) Support for creating the Transitional Post and Telecommunications Regulatory Authority (ATRPT) and strengthening its capacity. (iii) Support for policy-making capacity to the ministry. (iv) Regulatory support for improving service quality. (v) Policy and regulatory support for promoting affordable high-speed Internet connectivity, and (vi) policy, strategic and regulatory support for promoting wider access to ICT services.

Component Two: Enabling e-applications and facilitating uptake of e-business. Appraisal estimate US\$7.0 million. Actual cost US\$7.00 million. This component financed technical assistance activities aimed at enabling e-government applications and supporting development of e-business. Activities included: (i) promoting the growth of existing Small and Medium Enterprises (SMEs) in the sector and supporting innovative applications such as mobile applications through a capital grant scheme. (ii) promoting ICT start-up firms through a business incubator approach (Business incubators are organizations that aim at speeding the growth and success of startup and early stage companies), and (iii) strengthening the capacity of the New Information and Communication Technologies Management Agency (the French acronym – *AGeNTIC*) to implement the e-business agenda.

Component Three. Project Implementation. Monitoring and Evaluation (M&E). Appraisal estimate US\$1.52 million. Actual cost US\$3.20 million. This component provided project implementation support. Activities included, covering operational costs, costs of minor civil works such as office rehabilitation and costs of implementation-related studies.

- d. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project cost. Appraisal estimate US\$ (including an unallocated amount of US\$0.8 million) US\$15.00 million. Actual cost US\$14.90 million.

Project Financing. The project was financed by an IDA Grant. Appraisal estimate US\$15.00 million. Amount disbursed at closure US\$14.90 million.

Borrower Contribution. None was planned.

Dates. There was a Level 2 restructuring on 05/23/2014 for the following reasons. (i) Funds were reallocated between components. (ii) The results framework and some targets were modified and a new indicator was added. The project closed as scheduled on 06/30/2015.

3. Relevance of Objectives & Design

- a. Relevance of Objectives

The PDOs were highly relevant to the Government Strategy. At appraisal, the main constraints in the ICT sector included, uneven access to communications infrastructure with wide disparity in access between urban and rural areas, high prices of international communications as compared to prices elsewhere (a three-minute call to the USA cost US\$4.80 in Benin as compared to US\$2.00 in low-income countries and an average of US\$2.20 in Sub-Saharan Africa), a nascent legal, regulatory and institutional framework, shortage of skilled human resources in the sector and limited diffusion of ICT across Government and within the business community. The Government's strategy for the sector as reflected in the 2008 Sector Development Policy placed reform of the ICT sector at the center of its development policy. The PDOs were consistent with the interim roadmap (*ICT-plan - Benin*) issued by the Office of the President for improving, rehabilitating and revitalizing the ICT sector and the National Program for Electronic Governance issued by the Government to use ICT as a tool for improving governance and transparency. The PDOs were consistent with two pillars - promotion of good governance and human capacity building - of the Growth Strategy for Poverty Reduction for the three year period between 2007-2009.

The PDOs continue to be relevant to the Bank strategy. At appraisal, the project supported two key pillars of the Country Assistance Strategy (CAS) for the Fiscal years 2009-2012 period: (a) Strengthening competitiveness and accelerating private sector-led growth, and (b) Promoting better governance and strengthening institutional capacities. The PDOs were consistent with the three pillars of the Country Partnership Strategy (CPS) for the 2013-2017 period. "Governance and public sector capacity", "sustainable growth, competitiveness and employment",



and “access to basic services and social inclusion.”

Rating

High

b. Relevance of Design

The project design aimed at laying the foundations for the e-government era through incorporating both supply-side factors (connectivity infrastructure) and demand-side factors (e- applications) in conjunction with capacity building features. Project activities and their outputs were likely to produce the specified outcomes which were measurable. While Component 1 technical assistance activities aimed at supporting the Government's efforts to develop the legal , regulatory and institutional frameworks can be expected to contribute to the outcomes of lowering cost and improving quality of ICT services, Component 2 technical assistance activities (such as, promoting the growth of existing SMEs, supporting applications through a capital grant scheme, promoting ICT startup firms through a business incubator approach and strengthening the New Information and Communication Technologies Management Agency's capacity to implement the e-business agenda) can be expected to aid in development of electronic government applications.

The statement of the PDOs was however ambitious in relation to the institutional context, the limited access to ICT infrastructures and the weak capacities of the country. The project objectives created the disproportionate expectation that Benin would transition swiftly to the digital government when in fact the project was only laying the foundations (policy, institutional, legal, and regulatory and capacity building) for the future e-government era.

Rating

Substantial

4. Achievement of Objectives (Efficacy)

Objective 1

Objective

To improve access to lower cost and better quality of ICT services.

Rationale

Outputs.

- Technical assistance was provided as targeted for the following: (i) For preparing the new telecommunication law. The new law, which was enacted in August 2014, would enable the appointment of a regulator with executive powers, the provision of regulatory tools to enhance transparency and greater competition in the sector and creation of the ICT Management Agency to increase internet access. (ii) For developing the regulatory strategies and secondary legislation. (iii) Creating the Benin Regulatory Authority of Electronic Communications and Post (the French acronym - ARCEP). (iv). Setting up the Government portal. (v) Acquiring a management information system. (vi) Legal studies for creating the special purpose vehicle (SPV) in charge of managing international connectivity, developing a universal access and broadband strategy and feasibility study of Internet Access Point (IXP) aimed at lowering internet prices.
- About 67% of the regulated entities expressed satisfaction with the improved capacity of the regulator at project closure. This exceeded the target of 60%.
- A new Management Information Systems (MIS) with the ability to produce profit and loss accounts to better manage the State-Owned Enterprise - La Poste- was not completed at project closure as envisaged.
- A report on enterprise architecture, norms and standards and interoperability framework which was the technical foundation for all e-



government activities aimed at modernizing the public administration was completed and endorsed by a cross-ministerial committee in which IT Directors of 12-15 ministries participated.

- 259 people were trained at project closure (of which about a quarter (23%) were women). This exceeded the revised target of 250 but not the original target of 500.
- Studies on interconnection catalog, number portability, cyber security and postal regulation were completed as targeted.

Outcomes.

- Access to telephone services was targeted to increase by 20% (from 37 per 100 people), at the baseline. Access increased by 282% at project closure.
- Access to internet services (including broadband) broadband was targeted to increase by 20% (from 2.14 per 100 people), at the baseline. Access to internet services increased by 888% at project closure. About 3% of the population at project closure had access to broadband internet services. This exceeded the target of 2.4%.
- The retail price of Internet services (including broadband) dropped from US\$325 in 2010 to US\$50 at project closure in 2015. This exceeded the target of US\$80.

Rating
Substantial

Objective 2

Objective

To enable the development of e-applications in Benin.

Rationale

Outputs.

- E-government program was updated as targeted.
- 800 people of the New Information and Communication Technologies Management agency (AGeNTIC) were trained.
- 24 entrepreneurs benefited from the launch of an incubation program under AGeNTIC.
- 50% of applications were financed through the matching grant as compared to the target of 5%.

Outcomes.

- The percentage of ICT Small and Medium Enterprises increased from 18% at the baseline to 99% at project closure. This exceeded the target of 30%.
- The project financed three pilots which rely on Public-Private Partnerships (PPPs) pertaining to online government services (e government) in the areas of: (i) Civil registry (e-services platform for enabling citizens to demand official documents online). (ii) Education (setting up a database of students of primary, secondary and higher education and to have educational statistics in "real time" on the Beninese education system). and, (iii) e-visa (that allows visitors to submit and track their visa applications). The ICR (page 12) notes that given the delays associated with the launching of these activities, it was not possible to assess the outcomes of these pilot studies.

Rating
Modest



5. Efficiency

Economic Analysis.

There was no economic analysis as the activities financed were mainly technical assistance activities aimed at improving laying the foundations (policy, institutional, legal and regulatory and capacity building) for the future e-government era. The PAD (page 24) notes that ICT activities could confer direct benefits to the government and end-users. Potential direct benefits to the government included (monetary benefits such as due to time savings and greater revenues to the Government) and non-monetary benefits (such as, efficiency gains and transparency gains due to streamlined transactions and system automation). Potential direct benefits to the end-users included time savings and money saving due to the reduction in the number of transactions.

Administrative and Operational Issues. There were delays associated with enacting the telecom law, implementing the e-business component and using the postal network as a platform of government service delivery due to a combination of factors, including limited understanding of the project by beneficiaries, capacity constraints and delays associated with enacting the new law. Since the law was enacted only five months before project closure, it was not possible to assess the effectiveness of the new entities that were enabled by the project. There were no cost overruns and the ICR (page 12) notes that the costs in achieving project objectives were comparable to costs in similar projects although no specific comparisons are shown. There were no time overruns with the project closing as scheduled. The project closed as scheduled on 06/30/2015.

Efficiency Rating
Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal		0	0 <input type="checkbox"/> Not Applicable
ICR Estimate		0	0 <input type="checkbox"/> Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of objective to the Government and Bank Strategy for Benin was rated as High and relevance of design was rated as Substantial. Efficacy of the sub-objective -to improve access to lower cost and better quality ICT services - was rated as Substantial and efficacy of the sub-objective - to enable the development of e-applications - was rated as Modest. Efficiency was rated as Substantial. Therefore, Development Outcome is rated as Moderately Satisfactory.

a. Outcome Rating
Moderately Satisfactory

7. Rationale for Risk to Development Outcome Rating



Government ownership/ Commitment. Although the new legislation was enacted and the regulatory framework with 20 pieces of secondary legislation were adopted, the delays in enacting the law, contributed to delays in the launching of the online pilot government services. Further, although the set of reports on interoperability, enterprise architecture and norms and standards were completed, it is not clear if these reports will be used effectively, given that the e-government team of Ministry of Communications and ICT (MCTIC) has transferred its mandate to the newly created Benin ICT agency, ABETIC).

Technical Risk. At project closure, the pilots were not yet mainstreamed and the outcomes of these pilots is not clear.

- a. Risk to Development Outcome Rating
Substantial

8. Assessment of Bank Performance

a. Quality-at-Entry

The project was the Bank's first ICT project in Benin. The project was prepared based on lessons from ongoing Bank financed projects in ICT in other countries such as the E-Rwanda Project (P098926) and the E-Sri Lanka Additional Financing Project (P128702) and from the recommendations of an Economic and Sector Work (ESW) of the ICT sector published in 2008. The project preparation was prepared in collaboration with Government's experienced sector experts and officials. Adequate measures were adopted for fiduciary compliance (discussed in Section 11).

- The preparation underestimated the time taken for the slow parliamentary process of law adoption as well as the weak capacity of the newly created agency New Information and Communication Technologies Management Agency. The preparation also underestimated the resistance to change by the administrative staff of the newly created agency.

Quality-at-Entry Rating
Moderately Satisfactory

b. Quality of supervision

Missions were approximately twice a year and after the Mid Term Review, the missions were complemented with regular conference calls.

Country based procurement and financial management specialists provided timely support to the Project Implementation Unit and implementing agencies. Appropriate arrangements were made by the team during implementation to address the delays that rose during implementation, such as hiring a specialist in innovation for the e-Government services pilot project in the last semester of the project.

- It is not clear if the awareness-building and training programs were supervised or overseen adequately during implementation to addressing the resistance to change that affected project outcomes.

Quality of Supervision Rating
Moderately Satisfactory

Overall Bank Performance Rating
Moderately Satisfactory

9. Assessment of Borrower Performance

a. Government Performance

The Government's commitment to the project was demonstrated by the enactment of the new law - although with significant delay, in August 2014, four years after the Project's inception. Project funds were fully disbursed and project activities were completed in time.

- Frequent changes in government – with four ministers in charge of the ministry in charge of the ICT sector – the Ministry of Communications and



ICT (MCTIC)- contributed to the delays in enacting the new law. This in turn: (i) contributed to delays in implementing the new regulatory tools in the areas of interconnection tariffs and quality of service, and, (ii) Since the law was enacted only five months before project closure, it was not possible to assess the effectiveness of the new entities that were enabled by the project. Leadership and implementation capacity of the e-government were weak as demonstrated by the fact that the flagship pilot applications to be supported by the MCTIC and then after by the newly created Benin ICT agency (as of March 2015) were still at an early stage at project closure.

Government Performance Rating
Moderately Unsatisfactory

b. Implementing Agency Performance

There were three implementing agencies: The Ministry of Communication and New Technologies; The New Information and Communication Technologies Management Agency (AGeNTIC); and the postal operator (La Poste du Benin SA). The Project Implementation Unit (PIU) provided timely support to the implementing agencies and was able to address the queries of the Bank Task Team and provide for timely resolution of implementation issues. The PIU had a strong understanding of the sector issues and helped resolve issues pertaining to project implementation. The PIU handled the fiduciary dimensions of project implementation and utilized the M&E data in decision-making.

Implementing Agency Performance Rating
Moderately Satisfactory

Overall Borrower Performance Rating
Moderately Satisfactory

10. M&E Design, Implementation, & Utilization

a. M&E Design

M&E design had four key outcome indicators. Of these, three indicators: (1) improvement of the ICT sector as a result of technical assistance; (2) reduction in the retail price of Internet services including broadband internet; and (3) an increase in the percentage of ICT SMEs – were appropriate for monitoring the PDO of improving access to lower cost and better quality ICT services. The other key indicator, increased percentage of public services using electronic transactions was appropriate for monitoring the PDO of enabling the development of e-applications in Benin. Baselines were set for the indicators at preparation.

At design, information and data for monitoring were to be provided by the Benin Regulatory Agency of Electronic Communications and Data (ARCEP in French), the Ministry of Communications and ICT, existing operators and the national entities in charge of collecting economic and demographic data.

b. M&E Implementation

Following the Mid Term Review, the results framework was adjusted to better reflect what could be attributed to the project. For instance the key indicator “increase in percentage of public services using electronic information” was replaced by “number of e-Government services in a pilot phase.” and some intermediate indicators were modified. The ICR (page 8) notes despite some difficulties in getting all data from the different focal points, data was collected regularly by the Project implementation Unit. Good quality reports were submitted in a timely fashion.

c. M&E Utilization

The data were mainly used for monitoring the project implementation. Some data pertaining to the telecommunications sector – such as the retail price of internet services- continued to be collected after project closure.



M&E Quality Rating
Substantial

11. Other Issues

a. Safeguards

The project was classified as a Category C project. No safeguard policies were triggered by the project.

b. Fiduciary Compliance

Financial Management. The ICR (page 8) reports that unqualified audits were submitted in a timely fashion and financial management was satisfactory during implementation.

Procurement. There were specialists in the PIU with experience on Bank's procurement policies and procedures. With the exception of one activity procurement of which was pending for several months at the New Information and Communication Technologies Management Agency (AGeNTIC) due to equipment that did not comply with technical specifications, the procurement of all activities were followed Bank's procurement guidelines and procurement management was deemed to be satisfactory (ICR, page 8).

c. Unintended impacts (Positive or Negative)

d. Other

12. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	---
Risk to Development Outcome	Modest	Substantial	There are substantial risks associated with Government Commitment given the delays associated with the enactment of the law and technical risk given that the pilot operations were not complete at project closure.
Bank Performance	Moderately Satisfactory	Moderately Satisfactory	---
Borrower Performance	Moderately Satisfactory	Moderately Satisfactory	---
Quality of ICR		Substantial	---

Note

When insufficient information is provided by the Bank for IEG to arrive at a clear rating, IEG will downgrade the relevant ratings as warranted beginning July 1, 2006.

The "Reason for Disagreement/Comments" column could cross-reference other sections of the ICR Review, as appropriate.



13. Lessons

The ICR draws the following main lessons from implementing this project.

- (1) **Resistance to change can derail an administration modernization program that embarks in e-Government.** The experience with this project demonstrated that, the change has to happen at every level of the administration organizations. Mitigation measures need to be adequately included in project design and adequate resources need to be expended in awareness building programs and training.
- (2) **Government transformations from paper-based to digital represents a massive undertaking in terms of time and resources and requires leadership, governance and skills.** The experience with this project showed that placing the leadership of the e-Government program in the Ministry in charge of ICT may not be the ideal governance arrangement to insure that changes are spread across the administration. Higher level involvement such as the Prime Minister or President may be more appropriate at the preliminary stage for any e-Government transformation program.

14. Assessment Recommended?

No

15. Comments on Quality of ICR

The ICR is concise and follows the majority of guidelines. The ICR provides a detailed overview of the project. The ICR's lessons are clear, useful and based on evidence outlined in the ICR. It is candid especially while discussing issues pertaining to the delays associated with the enactment of legislation and the pilot e-government services. The ICR's discussion of outcomes is sparse and the ICR could have provided more details on the issues pertaining to resistance to change (what exactly were the issues, whether a different kind of awareness building programs could have helped).

- a. Quality of ICR Rating
Substantial