



## 1. Project Data

<b>Project ID</b> P121231	<b>Project Name</b> MOLDOVA eTRANSFORMATION	
<b>Country</b> Moldova	<b>Practice Area(Lead)</b> Transport & ICT	
<b>L/C/TF Number(s)</b> IDA-50000,TF-11741	<b>Closing Date (Original)</b> 31-Dec-2016	<b>Total Project Cost (USD)</b> 23,000,000.00
<b>Bank Approval Date</b> 09-Jun-2011	<b>Closing Date (Actual)</b> 31-Dec-2016	
	<b>IBRD/IDA (USD)</b>	<b>Grants (USD)</b>
Original Commitment	20,000,000.00	1,485,000.00
Revised Commitment	20,000,000.00	1,481,979.53
Actual	18,417,121.60	1,481,979.53

<b>Prepared by</b> Victoria Alexeeva	<b>Reviewed by</b> George T. K. Pitman	<b>ICR Review Coordinator</b> Christopher David Nelson	<b>Group</b> IEGSD (Unit 4)
---	---	---	--------------------------------

## 2. Project Objectives and Components

### a. Objectives

The project development objective (PDO) was “to transform delivery of selected public services using ICT” (IDA Financing Agreement dated July 1, 2011, page 4).

The PDO is identical in the Project Appraisal Document (PAD, page 4). The PAD further specified that this objective was to be achieved by: (a) improving leadership capacity, enabling environment and management of ICT in the public sector; (b) using a modern service delivery platform to improve access to public services; and (c) increasing transparency in the public sector.



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

No

**c. Will a split evaluation be undertaken?**

No

**d. Components**

**1. e-Leadership Capacity and Enabling Environment** (appraised \$8 million; actual US\$5.10 million).

This component was to provide support to the E-Government Center that was established to drive Government-wide e-Transformation agenda. Support was also be provided for e-leadership training and civil servants capacity building; strategic communications and partnerships; development of policy, technical, legal and regulatory frameworks; and project management.

**2: Shared Infrastructure and e-Services Development** (appraised \$15 million; actual US\$16.54 million).

This component was designed to provide funding for: (a) establishing and implementing the M-Cloud (Government Cloud Computing Infrastructure); and (b) developing a selected number of e-Government services and shared applications to be delivered through multiple channels, including government portals and mobile phones.

**e. Comments on Project Cost, Financing, Borrower Contribution, and Dates**

*Project cost:* According to Annex 1 of the ICR, the actual project cost was US\$21.6 million, as compared to the appraised estimate of US\$23 million. The project team subsequently clarified that the difference between the appraised estimate and the actual project cost was due to SDR exchange rate fluctuations.

*Financing:* The project was financed through an IDA credit in the amount of US\$20 million that was fully disbursed at closure (ICR, Table (b)- Annex 1). The Government of Netherlands provided co-financing through a trust fund.

*Borrower contribution:* The Borrower contributed US\$3 million as planned.

*Dates:* The project closed as scheduled on December 31, 2016. The project was restructured once on June 26, 2015 to re-allocate remaining funds from the project preparation advance to project implementation.

### 3. Relevance of Objectives & Design

**a. Relevance of Objectives**

Public sector governance and anti-corruption measures are increasingly an urgent development priority in Moldova, where significant governance problems persist causing mistrust amongst citizens, businesses, and public sector authorities, as well as possible loss of public revenues. “Justice and Fight against Corruption”



is one of Moldova’s seven national development objectives (Moldova National Development Strategy- 2020). The project appraisal document emphasized that the project aligned with and supported the Government’s Program for 2011-2014 –European Integration: Liberty, Democracy, Welfare - which highlighted e-governance as a priority area towards economic integration with the European Union (PAD, page 5). The World Bank Group Country Partnership Strategy (CPS) FY09-12, in its governance and anti-corruption strategy (Annex 2), emphasized a renewed approach of the Bank to engage with the government on the supply side of good governance through, among other, by stepping up implementation of e-services for businesses and citizens. The objective remained relevant to the current Country Partnership Framework (CPF) FY18-21 for Moldova that aims to help increase inclusive access to selected public services, while recognizing also that there are opportunities to reduce the time- and informal payment-cost of administrative services by expanding e-services (CPF FY18-21, Annex 1).

**Rating**

High

**b. Relevance of Design**

The statement of the project development objective was generic, output-oriented, and lacked clarity. The project intended ‘to transform delivery of selected public services using ICT’; it is not clear what the project was trying to achieve through this transformation using ICT. The PAD stated as part of the project description that “this project aims to transform delivery of a selected number of public services using modern ICT platforms *thereby contributing to overall transformation of public sector governance*” (PAD, page 5). The generic statement of the objective was not sufficiently explained at the outcome level, thus weakening the overall logical chain between the project objective, its outcomes, and outputs. The outcomes expected from the project activities in implementation of M-Cloud, development of the legal/regulatory frameworks and training, were limited only to the access and citizen perception of the quality of services.

**Rating**

Modest

**4. Achievement of Objectives (Efficacy)**

**Objective 1**

**Objective**

To transform delivery of selected public services using ICT.

**Rationale**



### Outputs

- The M-Cloud was implemented as a shared computing infrastructure, comprising core processing, storage, virtualization and service delivery platforms, as well as auxiliary systems such as power supply, air conditioning. More than 115 systems within 36 ministries were hosted on the M-Cloud at project closure.
- 937 data sets became available on the Open Government Data website, above the targeted 600.
- 53.7% of the central government agencies migrated one or more of their services/applications to M-Cloud, above the targeted 25%.
- The E-Government Center (eGC) became fully operational under the project.
- More than 120 training or information sharing events were organized by the project, and additionally eGC delegated its consultants to another 260 training sessions, information sessions, and workshops.
- A total of 2,667 people were trained under the project (the target was 2000).
- 40 policy, legal and technical frameworks were developed (detailed list is in the ICR's Annex 2).

### Outcome

- A total of 634,147 people accessed public services via the government portal and mobile phones, above the targeted 300,000.
- As measured by a citizen survey, 43.6% of the population who accessed a government website at least once over the previous 12 months, above the target of 25%. This was measured through a citizen survey.
- More than half of the users were satisfied with the quality of services. In particular, the degree of users' satisfaction with the overall quality of transaction processing for the main public service (citizens portal) was 66%, slightly above the targeted 60%.

The project outcome targets were achieved and surpassed with regard to the access and perception of the quality of services. The outcome indicators, however, fell short of fully demonstrating the transformational nature of the project pursued in its objective.

### **Rating**

Substantial

## **5. Efficiency**

### *Economic analysis*

At appraisal, the Economic Internal Rate of Return (EIRR) of the project investments into Cloud computing



was estimated at 60 percent over 10 years, with a net present value (NPV) of \$13.4 million at a discount rate of 10 percent. The investment was estimated to be paid back in about 2.5 years (PAD, Annex 7).

The methodology estimated the following benefits from using a cloud-computing infrastructure: (i) savings in investment and operation and maintenance costs derived from the utilization of a centralized shared computer infrastructure (the common Cloud computing platform), as opposed to have multiple computer centers; (ii) reduction in the number of civil servants required to deliver services, as electronic services replace manual processes; (iii) reduction in time and costs of the citizens and businesses that access Government services electronically, instead of physically visiting the Government offices to receive those services; and (iv) savings from reduced use of paper by the Government and citizens.

At closure, the ICR follows a slightly different approach. As it notes (pages 46-47), the predictions made by times of project appraisal had to rely on a range of assumptions and general experience with cloud infrastructure and e-services, and the installation of new infrastructure and introduction of e-services through the project allowed for a more detailed and concrete assessments of gains and benefits of the project. Some potential savings estimated at appraisal were not considered; for example there was no reduction of public servants related to the project activities. The cost savings estimated at closure were as follows: (i) the M-Cloud and its operational cost saving for the government; (b) M-Connect and its cost savings through increased government inter-agency efficiency; and (c) M-Pay and its cost savings through electronic payments. In total, the ex-post savings achieved by the key infrastructure and services installations were estimated at \$7.1 million per annum. As compared to the ex-ante estimation of \$13.4 million of savings in 2.5 years, the ex-post savings estimated were higher- \$20 million.

Administrative/ operational efficiency

The project closed as originally scheduled. There were issues raised on the work of the eGC's cost-effectiveness in terms of high salaries. The project team subsequently clarified that, to address this, an HR benchmarking study was carried out that found the eGC salaries to be comparable to similar ones in the market place. There was no misprocurement under the project, as was confirmed by the project team.

**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	✓	60.00	65.00 <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 is rated high, and that of design is rated modest due to weaknesses in the results framework. The project objective of transforming delivery of selected public services using ICT is assessed as being substantially achieved; the project outcome indicators, however, fell short of fully demonstrating the transformational nature of the project pursued in its objective. Efficiency is rated substantial. The overall outcome rating becomes satisfactory.

### a. Outcome Rating

Satisfactory

## 7. Rationale for Risk to Development Outcome Rating

*Financial.* The project team informed that the Government is financing entirely all expenses related to eGC activity.

*Institutional.* The new, joint ICT infrastructure would necessitate phasing out some of the legacy infrastructure, fully re-engineering work flow in some ministries and likely adapting staffing levels to the new IT realities. Also, some stakeholders that handle critical data – such as the tax office – are still reliant on their own legacy systems and have not yet decided if they would like to persist in using these systems.

### a. Risk to Development Outcome Rating

Modest

## 8. Assessment of Bank Performance

### a. Quality-at-Entry

The project design benefitted from consultations with the world's leading experts on governance e - transformation and built on the Bank's worldwide experience in supporting the overall agenda in e-government. The project team used the Netherlands Trust Fund resources to start the project activities. The Project Preparation Advance was made available to the Government in August 2010 enabling start of procurement of the government portal, drafting of eTransformation Policy, and hiring key staff of the eGC and PIU. Multiple capacity-building events and study visits were organized throughout the year (in Estonia, India, Singapore and USA). By the time of project approval in spring 2011, the concept for Open Government Initiative had been developed, and Open Data Portal (data.gov.md) had been launched with first 50 datasets (PAD, page 23).



The risk assessment and institutional arrangements were adequate. The project design anchored the project directly in the State Chancellery (i.e. the Prime Minister's Office) to guarantee commitment to the project at the highest level.

There were, however, weaknesses in the results framework and moderate shortcomings in the M&E design (see Section 10).

### **Quality-at-Entry Rating**

Moderately Satisfactory

#### **b. Quality of supervision**

There were 12 implementation and status reports (ISRs) filed during the project implementation period of 5 ½ years. The Bank team played a strong role, assisting the PIU to undertake the procurement in a transparent manner and in line with the World Bank's procurement rules and fiduciary principles. Despite slow disbursement levels at the beginning of the project, the Bank team helped facilitate the overall pace of delivery by project closure.

The issues and the need for financial sustainability were flagged early on in project implementation. Specifically, this included development of a more clear and detailed Sustainability Strategy and Business Plan, which included business and financial modeling to allow for a smooth transition to state budget financing starting from January 1, 2014 with the aim of ensuring full financial sustainability in the long term (Aide-memoire of June 2012). While the ICR states on page 31 that the eGC and m-Cloud would remain dependent on the Bank funding for the next years, adding that the eGC's cost-recovery mechanism remains unclear, the project team subsequently informed that the Government is financing entirely all expenses related to eGC activity.

### **Quality of Supervision Rating**

Satisfactory

### **Overall Bank Performance Rating**

Moderately Satisfactory

## **9. Assessment of Borrower Performance**

### **a. Government Performance**

The government ensured the quality of preparation and implementation, and complied with all covenants and agreements. It showed strong commitment in pursuing improvements in the enabling environment through policy and regulatory initiatives. The Government's transfers as part of their co-financing contribution to the project were made at the appropriate times, with few exceptions occasioned by delays in the adoption of the Annual State Budget.



### **Government Performance Rating**

Satisfactory

#### **b. Implementing Agency Performance**

The e-Government Center (eGC) implemented the project and put into operation a large range of e-services. The PIU embedded in the eGC was recruited largely from the private sector. The ICR (page 33) reported it to be effective in the day-to-day management of the project activities.

### **Implementing Agency Performance Rating**

Satisfactory

### **Overall Borrower Performance Rating**

Satisfactory

## **10. M&E Design, Implementation, & Utilization**

### **a. M&E Design**

The project outcomes were related largely to the access and citizen satisfaction with the quality of services. It did not fully clarify the objective related to transformation. The targets were set at appraisal, however some targets seem rather conservative, i.e., the outcome target for perception of quality of services was just set at 60%. It is not clear why outcome #3 related to the access was measured by a citizen survey, and not directly derived from the ICT data. Overall, there was overlap between some outcome and intermediate indicators, which were repetitive (statistics of usage of e-services and webpages, as well as citizen perceptions). The intermediate-level indicators lacked the measurement of progress on the project outputs such as multiple e-services or the ones related to the development of policy, technical, legal and regulatory frameworks.

### **b. M&E Implementation**

The eGC used automated collection of M&E data, and provided a monthly output with detailed statistics on all dimensions of the e-services usage developed under this project. A citizen survey was outsourced to a specialized firm.

### **c. M&E Utilization**

The ICR does not discuss the utilization of the M&E but it is clear that it was utilized to report on the results achieved and design the follow-up project.



**M&E Quality Rating**

Modest

**11. Other Issues**

**a. Safeguards**

The project was classified as Category 'C' under OP/BP4.01 Environmental Assessment—without any negative environmental impact. According to the PAD (page 49), the project did not need to address any safeguard issues, and mechanisms to supervise and monitor agreed-upon plans were not necessary due to the nature of the project.

The ICR (page 22) only noted that the project did not trigger any safeguards.

**b. Fiduciary Compliance**

**Financial Management.** The ICR (page 22) reports that the quarterly interim financial management reports following the agreed format were submitted on time. There were no outstanding audit reports at the end of the project and audit reports were found acceptable to the Bank at all times. All project audits were 'unqualified' (clean).

**Procurement.** There were some delays in procurement due to changes in the Cloud design to procure a cloud with a larger capacity than initially proposed. The procurement of the cloud component had to be restructured and re-issued.

**c. Unintended impacts (Positive or Negative)**

---

**d. Other**

---

**12. Ratings**

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Highly Satisfactory	Satisfactory	Relevance of objective is



			rated high, and that of design is rated modest due to weaknesses in the results framework. The project objective of transforming delivery of selected public services using ICT is assessed as being substantially achieved; the project outcome indicators, however, fell short of fully demonstrating the transformational nature of the project pursued in its objective. Efficiency is rated substantial. The overall outcome rating becomes satisfactory.
Risk to Development Outcome	Modest	Modest	---
Bank Performance	Highly Satisfactory	Moderately Satisfactory	There were moderate shortcomings in the results framework and M&E design.
Borrower Performance	Satisfactory	Satisfactory	---
Quality of ICR		Modest	---

**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**

One lesson is selected from the ICR, with some adaptation of the language, and the second one is identified by the IEG:

- **It is important to set up right implementation arrangements and ensure ownership of the ICT infrastructure with consideration of the overall political economy.** Under this project, the decision to anchor a Cloud system development for the government at the highest level of the government (the State Chancellery and engaging the Prime Minister’s office) ensured coordination but also posed risks such as change in the government and friction between different the implementing agency (eGC) and line ministries.



- **The joint ICT technology can be disruptive in terms of the needs to phase out old infrastructure and changes in staffing.** The new, joint ICT infrastructure would necessitate phasing out some of the legacy infrastructure, fully re-engineering workflow in some ministries, as well as staffing levels and skills. These issues are being addressed in a follow-up Bank project, as reported by the project team.

#### 14. Assessment Recommended?

No

#### 15. Comments on Quality of ICR

This is a concise ICR that provides the supportive information in Annexes. Overall, the report has some clear shortcomings. It is not outcome-oriented, and the efficacy section is a mere repetition of the results framework provided in the ICR Data sheet-F section. The ICR lacks clarity with regard to issues such as financial sustainability of the eGC and m-Cloud and misprocurement. This had to be subsequently clarified between the project team and the IEG. Overall, the ICR could have been more candid in its analysis and assessment. Some discrepancies in the data include reporting that 2,667 people were trained in the results framework, while Annex 2 mentions that there were 2,667 training sessions (page 38).

##### a. Quality of ICR Rating

Modest