INTEGRATED SAFEGUARDS DATA SHEET
APPRaisal STAGE

Report No.: ISDSA5237

Date ISDS Prepared/Updated: 01-Aug-2013
Date ISDS Approved/Disclosed: 02-Aug-2013

I. BASIC INFORMATION

1. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Ghana</th>
<th>Project ID:</th>
<th>P144140</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name:</td>
<td>GH eTransform Ghana (P144140)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Team Leader:</td>
<td>Mavis A. Ampah</td>
<td></td>
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<tr>
<td>Estimated Appraisal Date:</td>
<td>22-Jul-2013</td>
<td>Estimated Board Date:</td>
<td>26-Sep-2013</td>
</tr>
<tr>
<td>Managing Unit:</td>
<td>TWICT</td>
<td>Lending Instrument:</td>
<td>Specific Investment Loan</td>
</tr>
<tr>
<td>Sector(s):</td>
<td>General information and communications sector (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme(s):</td>
<td>e-Government (50%), e-Services (25%), Managing for development results (25%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)? No

Financing (In USD Million)

| Total Project Cost: | 97.00 | Total Bank Financing: | 97.00 |
| Total Cofinancing:  |       | Financing Gap:        | 0.00  |

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>BORROWER/RECIPIENT</td>
<td>0.00</td>
</tr>
<tr>
<td>International Development Association (IDA)</td>
<td>97.00</td>
</tr>
<tr>
<td>Total</td>
<td>97.00</td>
</tr>
</tbody>
</table>

Environmental Category: C - Not Required

Is this a Repeater project? No

2. Project Development Objective(s)

The Project Development Objective of the eTransform Project is to improve the efficiency and coverage of government service delivery using ICT.

3. Project Description

1. The proposed project is expected to be structured along four major components to reflect (a)
government’s efforts to develop more coherent and robust foundation to facilitate access to e-
government services (b) scaled use of ICT to transform quality of service in priority areas of
development; (c) enabling environment conducive to e-government applications and services; and (d) 
Project management support. Details on components are given below:

Component 1 – Enabling Environment for Electronic Government and Business

2. This component will support policies, laws, regulations and institutional capacity building to 
stimulate supply and demand of electronic services with the help of a transparent, secure and open 
environment. On the supply side, it will support the enabling environment for digital economy, 
including facilitating interventions for more efficient storage of electronic data, and opening up of 
data in a format that is usable by citizens for policy, research, and business development. On the 
demand side, it will support better leveraging of digital platforms to create job and entrepreneurship 
opportunities. Details of sub-components are as follows:

3 Storage, Protection, and Opening up of Government Data – The project will support 
development of, and access to open government data with the help of shared infrastructure, 
institutional development, and related policies and regulations. Project funds will finance the 
software and hardware for developing a “private cloud”—a storage and back-up facility (with 
increased storage capacity of about 4PB) that is managed in partnership with the private sector. The 
new cloud infrastructure will be suitable for actively used data and will allow organizations, such as 
NIA, Births and Deaths and other MDAs, to have more security and control over their data. Project 
funds will also support the development of administrative and institutional arrangements for data 
protection and electronic transactions as stipulated under the country’s Acts. Finally, project funds 
will finance development of policies, regulations, development of datasets, capacity building for data 
analytics, upgrade of any shared facilities for open data, and set up of certification authorities.

4. Support for Innovation Centers for Entrepreneurship and Job Creation. The project will 
support an environment where entrepreneurs can participate in launching new products and services, 
scaling up e-applications and services, and increasing uptake of e-applications. These activities have 
potential to create job opportunities. Project funds in the form of grants will be provided to 
strengthen the entrepreneurial and job-creation potential of the country through the development of 
innovation hubs, including mHubs and mLabs. Innovation hubs will support young entrepreneurs in 
Ghana’s mobile industry through venture incubation, and foster multinational and global 
partnerships. To ensure sustainable operations, infoDev will act as a technical partner through the 
course of project implementation and will provide technical support in the design of the mLab 
including its governing structure, management, and performance monitoring.

5. Institutional Capacity Building for Policy and Regulatory Institutions– The sub-component 
will provide necessary capacity building to key policy and regulatory institutions in areas including 
content, cybersecurity, consumer protection, and data protection. Regulating new information and 
content is a potential challenge for today’s policymaking agencies and regulatory authorities in an 
increasingly converged ICT industry. Regulation of content pushes the boundaries of the traditional 
role of a telecommunications regulator. The unique role of broadcast signals, for example, is rapidly 
disappearing amidst the world of convergence and the deluge of alternative content sources and 
transmission media. Issues such as spectrum management, consumer protection in the commercial 
mobile and digital space, and protection of increasingly sophisticated networks and infrastructure 
present new challenges for both policy makers and regulators. Regulators and policy makers have to 
decide on what or what not to regulate, how to use/manage scarce resources such as spectrum, and
how to incentivize further development of the ICT marketplace. The project will support capacity building of policy and regulatory institutions in Ghana to develop necessary capacity to define standards, policies and relevant regulations to protect both government and citizens.

Component 2 – Support for Upgrading National Identification System and Online Verification Services

6. This component will provide support to develop a robust national identification system based on international standards to help prepare Ghana for a modern e-commerce industry, improved e-government services, and greater poverty alleviation. Support will also be extended to selected agencies and institutions in adopting electronic identification and verification services into their operating processes. The project will assist the government to link key agencies, including the Births and Deaths Registries, the Department of Social Welfare, Electoral Commission, Statistics Department, Social Security and National Insurance, and Immigration, using the national identification number as a common identifier. Details under this component are as follows:

7. Support for National Electronic ID System – The National ID system, in its current form with 2D Bar code, has limitations in terms of durability, ability to store information, and does not conform to some of the specifications provided by international organizations, such as ICAO, ISO and ANSI. The limitation is also preventing a number of potential user agencies, including the financial institutions, from using the current Ghanacard. The sub-component will therefore support the government of Ghana to complete implementation and deployment of a well-functioning national electronic ID system. The project will support distribution of 12 million biometric cards, including 3 million cards that have already been printed and 9 million cards that will be printed once citizen data is confirmed. The project will review and update the back-office systems and processes under NIA to ensure that the electronic ID system is properly functioning and the central office interacts seamlessly with field offices and downstream agencies. To improve the speed and reduce the cost of distribution of cards, project funds will finance the deployment of mobile registration workstations, mobile verification systems and related software. Project funds will support the development of a needs assessment, a strategic plan and an implementation plan for the National ID Authority. Project funds will also support an integrated solution that ensures the new Ghanacard meets international standards and which spans: i) upgrade of the Automated Fingerprint Identification System (AFIS) that allows capturing of 10 instead of the current 4 fingerprints, ii) data center and disaster recovery center, iii) upgrade of printers for smart cards, and iv) instant issuance printers to allow on the spot printing of electronic Identification cards. The new cards will be issued as replacement cards for a fee to citizens.

8. Support for Digitizing and Integrating Digital Identity and Verification Systems into User Agency Operations - A prerequisite for effectively integrating a national identity system is digitizing related paper-based public records such as birth and death certificates, and tax records. The digitization program also offers unique employment opportunities for the youth that jobs to scan, index, and electronically manage paper records, and setting up searchable and easy-to-use electronic databases. Specific emphasis will be given on supporting key user agencies such as the Births and Deaths Registry, the Registrar Generals, the Ghana Revenue Authority, and Immigration Services. The program is expected to be extended to medical as well as digital content for schools. There is potential to use the ten regional innovation centers, built under the eGhana project, as possible venues for carrying out or administering the digitization work from the districts. Project funds will also support key user agencies in the public sector to adjust their operating processes and software systems to use e-ID verification services offered by the NIA system. Support to such agencies will be in form of limited equipment, upgrade of databases, and related capacity building. All of these
agencies are expected to use the National Identification number as a common identifier. Project funds will also be used to finance software and hardware for the development of a functional identity management system, including Public Key Infrastructure (PKI) and issuance of digital certificates by a Certification Authority (CA). In electronic transactions, CA plays a critical role to guarantee that the individual with a unique digital certificate is in fact who he or she claims to be. Under the NITA Act 771 of 2008, NITA is mandated to facilitate the establishment of the CA and regulate their activities. The location of the CA is being discussed with the government.

Component 3 - Scale up of Applications to improve service delivery in priority sectors (US$40.55 million)

9. In response to the government’s request, project resources will also be used to use ICT to improve quality and reach of services in the health and education sectors where the Government of Ghana is lagging in achieving MDG goals, as well as to complete e-applications currently being implemented under eGhana project. In the health sector, the objective is to: i) extend outreach of medical services to rural and peri-urban areas using low-cost technologies, mobile-based remote tracking and improved training of healthcare professionals; ii) improve communications between rural and urban healthcare professionals, and collaboration between Ghana’s Medical Professionals and counterparts abroad; and iii) provide basic information on health information in local languages to citizens via the web/mobile/ call centers etc. in order to help improve access to basic health, hygiene, reproductive health information etc. The project sub-components are as follows:

10. Support for Integrated eHealth System in Ghana – The Ministry of Health has already prepared a comprehensive scan of eHealth solutions and platforms in the country. The project will build on this work to develop a more detailed strategy for using ICT solutions to improve delivery of health services in Ghana. The strategy will aim to consolidate, map and synergize existing infrastructure, systems and solutions (both from the public and private sectors) used for connectivity and e-applications, and recommend a more integrated and interoperable approach for eHealth/ mHealth. The project will provide connectivity to priority district hospitals in the less developed parts of Ghana. The project will set up three medical call centers to provide first response to citizen inquiries about medical and healthcare issues in remote and rural parts of Ghana. The first response may entail providing healthcare advice and giving referral to appropriate health specialists and health centers. In cases of emergencies, the first response may coordinate an emergency response with ambulatory services and healthcare providers. The project will also support digitization of medical records at selected teaching hospitals.

11. Wireless Networks for the Selected District Hospitals and Secondary Schools. The project will leverage the National IT Agency (NITA) Network to reduce the cost of connectivity to 200 secondary schools that face a greater need to improve quality of teaching and learning, and schools that serve disabled and disadvantaged communities. Selected schools will be eligible for WiMax/ LTE installation to school site, devices, and up to 3Mbps of dedicated capacity for the project duration of 5 years. The team is also working with the National Communications Authority to leverage available spectrum which can be used cost-effectively to provide connectivity to remote schools and hospitals. The project will provide computing equipment for computer labs in secondary schools that have a clear plan for use of ICT in education, and have physical facilities to house computing equipment.

12. Teachers’ Network, Educational Portal and capacity building – The project will work with the various teachers associations to support the development and maintenance of an educational portal where teachers, students, parents and researchers can have access and access to good practice lesson plans, curricular content, teaching and learning aids, on-line advice, research etc. The Portal
could also be a platform for knowledge exchange with national and international networks and for participation in relevant discussion forums. In collaboration with Kofi Annan Center and other international trainers as needed, project funds will also support intensive training to teachers as a part of the top-up teacher training for new and existing teachers in the use of computer/internet aided education (beyond ICT literacy).

13. Support for existing e-Applications – This sub-component will be aimed at completing e-government applications for 4 key agencies and departments under the eGhana project for which procurement packages have already been completed and funding is not available or inadequate under the eGhana project. State-of-the-art technology relevant to Ghana will be used to simplify administrative and business processes within and between agencies. Project resources will finance the hardware, software and institutional capacity building for the implementation of: i) an e-Parliamentary System which will allow a paperless flow of information, ii) e-Justice system - improve on the effectiveness and efficiency of justice delivery in Ghana, iii) e-Procurement - a single platform for “e-Sourcing”, “e-Tendering”, and “e-Purchasing”, iv) and an e-Immigration system – which will improve immigration and border control services in Ghana. e-Immigration is in implementation phase and the tender documents for the remaining 3 e-applications have been completed.

14. Support for e-Services – The project will build on pilot e-service applications conducted under current eGhana project which include: (i) content management application for hosted services on online portals; (ii) payment gateway to enable electronic payments for online services; (iii) electronic form application to collect citizen information; and (iv) applications to electronically manage documents. Project Funds will support expanded services from these institutions such as online applications for permits and licenses, visas, and National ID Cards (both internally and externally).

15. Component 4 – Project Management Support - The MoC will serve as the Project executing agency and will have overall responsibility for the management of the project. and given the multi-sectoral nature of the project, will work with relevant sector agencies for the effective implementation of the project. The MoC has had extensive experience in implementing the eGhana through a dedicated Project Implementation Unit, complemented by core group of consultants from the National IT Agency (NITA) and the ITeS Secretariat who have managed the day-to-day implementation and supervision of the e-Government and ITES components as well the financial management, procurement, disbursement, monitoring and evaluation, progress reporting and communication functions. It is expected that the project will leverage the expertise of some of these experts. Subject to detailed assessment of the existing structure, Project funds will support the existing team for the overall project coordination and management, and will provide communication, procurement, financial management, and M& E. Additional resources will be provided to strengthen capacity as needed, following the assessment. Also in view of the innovative and transformative nature of the project, funds will be allocated to documenting successes and failures, as well as the impact of the project on project beneficiaries.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

Ghana

5. Environmental and Social Safeguards Specialists

Alexandra C. Bezeredi (AFTSG)
Moses Yao Duphey (AFTN3)
Beatrix Allah-Mensah (AFTCS)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Environmental Assessment OP/ BP 4.01</td>
<td>Yes</td>
<td>The anticipated negative environmental impact of the electronic network technologies to be applied in the e-transform project will focus on three aspects: energy, resources and pollution. 1. Energy and Power consumption: The implementation and expansion of the e-Transform services in the country will increase energy use since activities which were previously executed manually will be replaced with the use of electronic systems. 2. Resources: This includes physical and non physical infrastructural acquisition, distribution, installation, use and disposal. As much as possible, the physical components of the project will utilize existing infrastructure such as buildings and existing electrical connections. Where these are inadequate or nonexistent, they will be upgraded or new facilities will be provided. 3. Pollution from e-waste material: This relates to the disposal and management of potential hazardous substances from e-waste. Potential for generation of e-Waste; also there is opportunity to refurbish or use existing government buildings for ihub and mlab. Locations for these have not been confirmed yet.</td>
</tr>
<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>No</td>
<td></td>
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<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
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<td>Pest Management OP 4.09</td>
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<td></td>
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<tr>
<td>Physical Cultural Resources OP/ BP 4.11</td>
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<td></td>
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<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>No</td>
<td>The project is being implemented in facilities or areas already owned</td>
</tr>
<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td>No</td>
<td></td>
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<td>Projects on International Waterways OP/BP 7.50</td>
<td>No</td>
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</table>
II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the Restructured project. Identify and describe any potential large scale, significant and/or irreversible impacts:

   The eTransform Project is largely focused on electronic applications and likely to have minimum environmental impact. It is anticipated that a scaled up use of ICT applications and services in the country will increase energy use since activities which were previously executed manually will be replaced with the use of electronic systems. Pollution from e-waste in terms of its disposal and management of the potential hazardous substances could therefore be anticipated. However, it can be said that the negative environmental impacts expected from the project within the ESMF is minimal.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:

   None anticipated

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.

   Team and clients to ensure that energy efficient resources with minimum negative environmental impact are used.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.

   Borrower has already implemented a similar project and quite familiar with safeguard policy issues and mitigation plans. Borrower already prepared an ESMF which outlines the principles, the institutional arrangements and identifies the potential negative environmental impacts. The ESMF also include management plans for addressing the potential negative impacts, which have been classified as minimal and reversible. There is also capacity building arrangements for relevant staff of the project team and implementing entities to ensure full comprehension prior to and during project implementation. The ESMF was prepared since the specific location of activities that would have such impacts were not known at the time of appraisal. During implementation when these sites have been identified and agreed on, follow up management plans will be elaborated using the outlined one in the ESMF to address specific issues.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.

   Key stakeholders include Ministries of Education & Health, the National Identification Authority and Births and Deaths Registry. Borrower has had public consultations to discuss ESMF as well as published the ESMF in reputable local newspapers.

B. Disclosure Requirements

<table>
<thead>
<tr>
<th>Environmental Assessment/Audit/Management Plan/Other</th>
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</tr>
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<tbody>
<tr>
<td>Date of receipt by the Bank</td>
<td>30-Jul-2013</td>
</tr>
<tr>
<td>Date of submission to InfoShop</td>
<td>31-Jul-2013</td>
</tr>
</tbody>
</table>
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors

"In country" Disclosure

Ghana 31-Jul-2013

Comments:

If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/ Audit/or EMP.

If in-country disclosure of any of the above documents is not expected, please explain why:

C. Compliance Monitoring Indicators at the Corporate Level

<table>
<thead>
<tr>
<th>OP/BP/GP 4.01 - Environment Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does the project require a stand-alone EA (including EMP) report?</td>
</tr>
<tr>
<td>If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?</td>
</tr>
<tr>
<td>Are the cost and the accountabilities for the EMP incorporated in the credit/loan?</td>
</tr>
</tbody>
</table>

The World Bank Policy on Disclosure of Information

| Have relevant safeguard policies documents been sent to the World Bank's Infoshop? | Yes [x] No [ ] NA [ ] |
| Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs? | Yes [x] No [ ] NA [ ] |

All Safeguard Policies

| Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies? | Yes [x] No [ ] NA [ ] |
| Have costs related to safeguard policy measures been included in the project cost? | Yes [ ] No [x] NA [ ] |
| Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies? | Yes [x] No [ ] NA [ ] |
| Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents? | Yes [x] No [ ] NA [ ] |

III. APPROVALS

Task Team Leader: Mavis A. Ampah

Approved By

Sector Manager: Name: Randeep Sudan (SM) Date: 02-Aug-2013