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# Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

Concept Stage | Date Prepared/Updated: 06-Dec-2016 | Report No: PIDISDSC19781



**BASIC INFORMATION**

**A. Basic Project Data**

Country Bangladesh	Project ID P161086	Parent Project ID (if any)	Project Name Bangladesh Integrated E-Government Project (P161086)
Region SOUTH ASIA	Estimated Appraisal Date Apr 03, 2017	Estimated Board Date Aug 08, 2017	Practice Area (Lead) Transport & ICT
Lending Instrument Investment Project Financing	Borrower(s) Ministry of Finance	Implementing Agency Bangladesh Computer Council	

**Proposed Development Objective(s)**

The development objective is to improve whole-of-government digital integration and public services.

**Financing (in USD Million)**

Financing Source	Amount
Borrower	5.00
International Development Association (IDA)	300.00
<b>Total Project Cost</b>	<b>305.00</b>

Environmental Assessment Category C-Not Required	Concept Review Decision Track II-The review did authorize the preparation to continue
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Other Decision (as needed)

**B. Introduction and Context**

Country Context



Bangladesh is one of the more successful developing countries in terms of accelerating growth, making growth pro-poor, and improving the indicators of social progress. Despite these remarkable development achievements, Bangladesh remains one of the poorest countries in South Asia. The country's rankings in global governance and corruption-related indices have also seen little improvement in the past decade, with constrained public services and comparatively weak institutions.

Global indicators suggest that improving governance should remain a key priority for the full realization of development aspirations. This includes the effectiveness of government and the transparency of authorities. Reducing poverty and promoting shared prosperity is predicated on institutions that are effective in not only solving the problems of the past but responding to the changing needs of the citizens they serve. This involves both strengthening core government systems to channel resources to the poorest of the population, and developing a public sector grounded in security, transparency, and citizen participation<sup>1</sup>. Given rapid changes in technologies, business models and global supply chains, there is also a need for Bangladesh to systematically develop strategic foresight to anticipate emerging opportunities and challenges.

Information and communication technologies (ICT) can play an important role in enhancing institutional governance, and are one of the main driving forces to improve national competitiveness and economic growth, and reduce poverty<sup>2</sup>. In particular, e-government, which refers to the use of ICT by government agencies, has the ability to transform relations with citizens, businesses, and other arms of government. These technologies serve a variety of different ends: better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, and more efficient government management. The resulting benefits can be less corruption, increased transparency, greater convenience, revenue growth, and/or cost reductions<sup>3</sup>.

### Sectoral and Institutional Context

ICT is a high priority sector for the government. It has a comprehensive and popular "Digital Bangladesh" agenda, and has identified ICT's important role for its Seventh Five Year Plan for improving governance and empowering citizens. Amongst numerous initiatives and projects to support their ambitious ICT targets, the Government of Bangladesh (GOB) has already implemented a significant e-government component under the Bank-financed Leveraging ICT for Growth, Employment and Governance ("LICT"; P122201) Project, which started in 2012. The \$30 million component has built the basic integrated foundations for e-government; including the country's first national-level datacenter, enterprise architecture, interoperability framework, and a computer emergency incident response team.

The GOB's experience and performance in implementing this e-government component has been highly positive. The component has already achieved one of its two project development objective (PDO) level result targets, with the other on track for achievement. The implementing agency, the Bangladesh Computer Council (BCC), has also experienced overwhelming demand from other agencies for use of these shared e-government foundations.

The GOB also recognizes the need to be strategic in its approach to leveraging ICT in the country's next phase of development. There is a distinct need for GOB to think strategically and plan the use of ICT across its agencies given the rapid developments in this sector. There is also a need for more collaborative, secure, and efficient use of ICT resources

<sup>1</sup> World Bank. *Governance in Bangladesh; and Governance Overview*. Available at: <http://www.worldbank.org/en/country/bangladesh/brief/bangladesh-governance> and <http://www.worldbank.org/en/topic/governance/overview>

<sup>2</sup> Dilip Kumar Roy. 2006. *Governance, Competitiveness and Growth: The Challenges for Bangladesh*. ADB Institute Discussion Paper No. 53. Available at: <https://www.adb.org/sites/default/files/publication/156690/adb-dp53.pdf>

<sup>3</sup> World Bank. 2015. *Brief on e-Government*. Available at: <http://www.worldbank.org/en/topic/ict/brief/e-government>



within GOB, as most of the information systems across government agencies are running on disparate datacenters, component-run architectures, and software development platforms. The absence of a more integrated approach towards IT adoption across GOB has resulted in limited coordination and avoidable duplication across ministries in the public sector, and between the government and the private sector. Such fragmentation impedes effective collaboration and decision making at the political and operational levels in GOB and ultimately increases costs and creates inconvenience to citizens and businesses. It also undermines the delivery of economic and social services, physical security, economic management, and inclusive political processes.

The integrated approach could also help to address key ICT capacity and resource issues that are common in line agencies. These issues include: poor management and utilization of multiple datacenters and systems; challenges in integration, interoperability, data, and information exchange between internal and external systems; high risk critical systems and infrastructure from a cybersecurity perspective; and insufficient technical and strategic ICT management capacity.

Given these issues, and based on GOB's highly positive results from the LICT project's e-government component, the government is keen to take a more strategic, holistic, and integrated whole-of-government (WOG) approach to improving governance, and increasing and improving e-services to citizens and businesses as well as within government. The WOG approach for e-government has been a long-term strategy of many governments around the world over the past 10 years. This "one-stop government" approach moves isolated silos in public administration to formal and informal integrated networks. It is a global trend driven by societal forces and the opportunities presented by the internet, to transform the way that governments work for citizens. The WOG approach for ICT has been proven to achieve higher government efficiencies, enable cross-agency coordination of resources and services, and foster one-stop governance transformation and e-service delivery. Numerous countries have already implemented this WOG approach, such as Australia, the Republic of Korea, Singapore, and the United Kingdom.

Bangladesh could also benefit from the WOG approach to support the country's ambitious development goals, by establishing common infrastructure, development platforms, and services for common use by GOB agencies. The country can also leverage the WOG approach to develop more e-services in a faster manner and provide high-value, integrated e-services to its citizens and businesses. These activities will alleviate or eradicate the need for GOB agencies to invest in their own ICT resources, significantly reduce ICT operational and overhead costs, reduce cyber vulnerability, improve interoperability and coordination between systems and agencies, and enable the agencies to focus on core e-services delivery instead of technologies. Having recently experienced cybersecurity challenges at Bangladesh Bank, GOB appreciates the important need to improve the security of their e-government systems to protect the public administration from continual and evolving cyber threats.



## Relationship to CPF

The proposed Integrated e-Government Project (IEGP) (the Project) is fully aligned with the World Bank Group's Country Partnership Framework (CPF) for fiscal years 2016 to 2020, and contributes directly to its three identified focus areas in multiple ways. The Project's WOG approach for governance reforms and transformation through ICT is fully in line with the CPF's identification of governance reforms as a long-term agenda that requires sustained effort. The activities on ICT policies and platforms proposed under the Project on transparency and e-services also fit squarely into the CPF's stated intention to support policies and systems that improve transparency and efficiency in service delivery.

This Project also supports all three of the CPF's focus areas and its horizontal approach to governance, as ICT is a general purpose and indispensable development tool for every sector.

### **C. Proposed Development Objective(s)**

**Note to Task Teams:** The PDO has been pre-populated from the datasheet for the first time for your convenience. Please keep it up to date whenever it is changed in the datasheet.

The development objective is to improve whole-of-government digital integration and public services.

#### Key Results (From PCN)

Progress towards the achievement of the PDO would be assessed using the following results indicators (the proposed indicators will be refined during the course of Project preparation):

1. Percentage of cost savings on GOB's spending on ICT across agencies
2. Percentage of agencies using two or more WOG functions integrated by the Project (e.g. cloud computing, application service bus, interoperability standards, and enterprise architecture)
3. Percentage of e-services using two or more WOG enablers integrated by the Project (e.g. online authentication, online payment, and SMS gateway)
4. Availability of integrated e-services for citizens and/or businesses

Intermediate outcomes would be tracked using the following results indicators:

1. At least 30 e-services designed and deployed under the Project
2. Improved cybersecurity of GOB agencies and its government-wide network
3. Availability of forward-looking digital strategy and plan for the government
4. Percentage of government beneficiaries satisfied with the capacity building and change management provided
5. 10 million citizens (50 percent women) as demonstrative users of the e-services developed by the Project
6. Percentage of e-services incorporating beneficiary consultation and feedback into its design

### **D. Concept Description**

The Project will (i) provide a WOG digital platform for GOB agencies to use and deliver value to their internal and external constituents; and (ii) develop and promote the use of at least 30 new value-added e-services for citizens and businesses in Bangladesh.



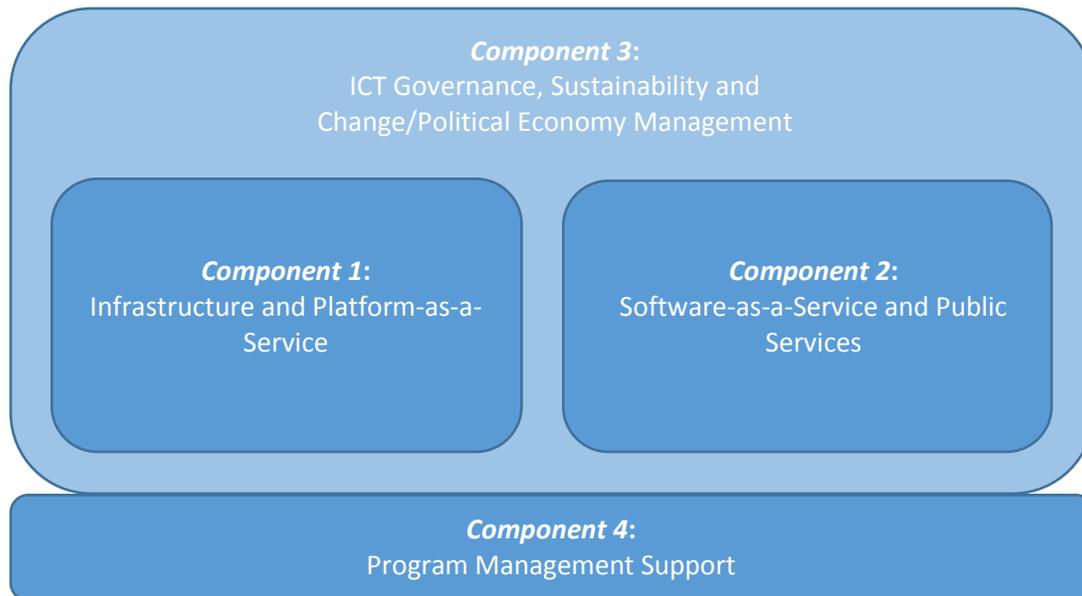
The “build once, reuse everywhere” WOG digital platform will consist of common e-government infrastructure, platform, and software services. The Project does not aim to consolidate and centralize IT systems across other agencies. The line agencies will continue to own and manage their own databases, applications, and services, but would make use of the common WOG platform to build or operate their systems in a more cost-effective, reliable, secure, and convenient manner, and deliver value to their internal and external constituents. For example, the line agencies’ databases, services, or applications would be hosted on the platform’s cloud service; agencies would use the platform’s standards and messaging service buses to connect their internal applications seamlessly, or with other agencies if desired. Agencies would also be able to build their e-services quickly and reliably using the platform’s e-service enablers, such as online authentication, online payment, SMS gateway, and so on.

This strategic platform will also serve as a toolbox that line agencies can use to accelerate the implementation of their e-services. It will also allow these line agencies to collect and analyze data derived from a multitude of sources to generate new insights, and transform public service delivery and enrich collaboration with industry sectors. The Project will also take advantage of new architectural approaches, for example, microservices, containerization, and DevOps, to facilitate speed, agility, and reuse of solutions, as well as allowing for greater innovation in the design and delivery of digital services.

The Project will also promote the development and offering of at least 30 new e-services by GOB agencies, in order for citizens and businesses to benefit from access to more value-added online services. It will also develop up to four key integrated services that incorporate cross-agency coordination in processes and systems. These are expected to bring additional value to citizens and businesses, and demonstrate to other GOB agencies the value of an integrated approach for their constituents.

The WOG platform would consist of four components, which are illustrated in Figure 1.

**Figure 1: Diagrammatic Illustration of WOG Platform**



Component 3 is the most important component for the Project as it focuses on encouraging government agencies to use the integrated e-government/WOG platform. This component’s activities be implemented based on GOB’S clear vision,



policies, strategies, and action plans for WOG. It will also include a detailed stocktake of current and planned ICT investments to avoid duplication, and estimate the demand from the other agencies for the WOG platform to ensure its usefulness. The Project's implementation will also be based on sound political economy analysis, understanding, and action plans; in order to ensure that stakeholder issues are identified and addressed.

### **Component 1: Infrastructure and Platform as a Service (\$70 million)**

Infrastructure as a Service (IaaS) is a form of cloud computing that provides virtualized computing resources over the internet. The IaaS subcomponent would consolidate and strengthen the government's national datacenter located in BCC, built under the Bank-supported LICT Project. It will also virtualize the national datacenter's resources into a cloud-based service for use across government on a service-oriented and financially sustainable basis. This cloud based facility will (i) support GOB agencies' need for redundancy for critical infrastructure; and (ii) enable interoperability between GOB's national cloud (G-Cloud) and agency clouds through a set of internal standards, as agencies may set up dedicated clouds to address specific needs which cannot be met by the G-Cloud; and (iii) provide increased datacenter bandwidth to support the increase in e-service utilization. .

Platform as a service (PaaS) is a category of cloud computing services that provides an application platform allowing government agencies to develop, run, and manage their own applications, without the complexity of building and maintaining the infrastructure typically associated with developing and launching such applications.

### **Component 2: Software-as-a-Service and Public Services (\$123 million)**

Software-as-a-Service (SaaS) is a licensing and delivery model in which the software is licensed on a subscription basis and is centrally hosted. It is sometimes referred to as "on-demand software", and is typically accessed by users through a web browser. This SaaS subcomponent will introduce applications for government-to-employees (G2E) across the whole-of-government. These G2E applications will include a document management system with archiving capability, government-wide e-mail, and government resource planning (GRP) applications, for example, asset management and human resource management.

Electronic Services (e-Services): This subcomponent will comprise constituent-centric websites, WOG mobile portals, and integrated e-services to engage and serve the needs of GOB's constituents. These include: improving the current Bangladesh National Portal to house all government-to-citizen (G2C) and government-to-business (G2B) information and e-services; constituent engagement feedback and grievance redress services to facilitate WOG efforts to engage and connect with citizens and businesses on national and social issues, and facilitate grievance receipt and redress; and enhancements to five key ministries' websites to ensure citizens are able to search, comprehend, and transact online with the government on essential issues that matter to their lives.

### **Component 3: ICT Governance, Sustainability and Change/Political Economy Management (\$50 million)**

ICT Governance and Sustainability: This activity would include the review, update, mainstreaming, and enforcement of organizational structure and e-government leadership to facilitate the transformation of GOB through the Project. It will develop and mainstream the appropriate legal framework on e-government and cybersecurity to the whole-of-government. The policy development and mainstreaming activities include government integration, shared IT infrastructure, data sharing, mobile first, and electronic payments. This subcomponent will also develop a business plan for the WOG platform to ensure its technical, operational, and financial sustainability. The business plan will take into account the cost of operating the platform, including the upgrades needed subsequently to address obsolescence of the



IT assets, and propose possible chargeback mechanisms for their use by the other agencies. It will also leverage innovative public-private partnerships (PPPs) to the extent possible, by using external donor funding to study the feasibility of using PPPs for the Project's integrated e-services, cybersecurity, and data analytics. The operations of BCC should also be considered, including the sustainability of hiring staff at market rates. It will also train government employees in conceptualizing, planning, managing, and monitoring e-government services to help build technical sustainability.

Change/Political Economy Management: This subcomponent will institute a holistic change management program based on a sound political economy analysis and action plan. The change management activity will also have holistic actions needed to facilitate institutional coordination, ownership, and processes, to help the other agencies move towards the use of the common WOG platform.

**Component 4: Project Management Support (\$30 million)**

This component will support the Bangladesh Computer Council (BCC) to manage and implement the program effectively and efficiently, in parallel with the BCC's implementation of the LICT Project. For this purpose it will expand and strengthen the functioning of the Project Coordination Unit (PCU) to conduct project management, coordination, procurement, financial management, monitoring, and evaluation.

The component would also strengthen the functioning of the existing Project Implementation Committee established for program management. Additional component activities would include the provision of Project information through BCC's website and other communication channels, mobile alerts to grant beneficiaries, and provision of internet and mobile phone-based feedback and complaint mechanisms. It will also hire the needed technical and support staff for the Project's activities who will be formalized into BCC's organogram within the Project period.

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**SAFEGUARDS**

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

The project will install mainly software and limited hardware within existing facilities owned by the implementing agencies. Project will not include any notable civil works, except the minor interior works required to install hardware within the aforementioned facilities. Most of the activities will be implemented in Dhaka, as these are national level e-Government systems and services. The only activities to be implemented outside Dhaka are the awareness and usage promotion campaigns for 1 million citizens; and 50,000 business across Bangladesh. The change management program for public officials, is also expected to have activities to engage and train public officials in different levels of government, including district and upazilla levels. The Project will provide specific plans and agreements for managing e-waste and fire-safety issues if the hardware is found to be significantly more than anticipated after appraisal.

**B. Borrower's Institutional Capacity for Safeguard Policies**

The implementing agency does not have any experience with World Bank Safeguard Policies, and might have required augmentation of their implementation support were the activities needed application of World bank safeguard policies.



However, as the Project activities are so chosen to avoid any adverse environmental and social impacts, such augmentation of institutional capacity is not needed for implementation of the Project.

**C. Environmental and Social Safeguards Specialists on the Team**

Tapas Paul, Sabah Moyeen

**D. Policies that might apply**

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

**E. Safeguard Preparation Plan**

Tentative target date for preparing the Appraisal Stage PID/ISDS

May 08, 2017

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

No safeguard-related studies are required.

**CONTACT POINT**

**World Bank**

Siou Chew Kuek, Asna Zareen  
Senior ICT Policy Specialist



**Borrower/Client/Recipient**

Ministry of Finance

**Implementing Agencies**

Bangladesh Computer Council  
Ashraful Islam  
Executive Director  
ed@bcc.net.bd

**FOR MORE INFORMATION CONTACT**

The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>

**APPROVAL**

Task Team Leader(s):	Siou Chew Kuek, Asna Zareen
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**Approved By**

Safeguards Advisor:	Maged Mahmoud Hamed	07-Dec-2016
Practice Manager/Manager:	Juan Navas-Sabater	08-Dec-2016
Country Director:	Rajashree S. Paralkar	14-Dec-2016

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