ADB

Technical Assistance Report

Project Number: 46444
Policy and Advisory Technical Assistance (PATA)
December 2012

Republic of Uzbekistan: E-Government for Effective Public Management

Asian Development Bank

CURRENCY EQUIVALENTS
(as of 12 December 2012)

Currency unit	–	sum (SUM)
SUM1.00	=	$0.00051
$1.00	=	SUM1,972.99

ABBREVIATIONS

ADB	–	Asian Development Bank
ICT	–	information and communication technology
IT	–	information technology
MSEs	–	micro and small enterprises
TA	–	technical assistance
UNDP	–	United Nations Development Programme

TECHNICAL ASSISTANCE CLASSIFICATION

Type	– Policy and advisory technical assistance (PATA)
Targeting classification	– General intervention
Sector (subsectors)	– Public sector management (public administration, information and communication technology)
Themes (subthemes)	– **Governance** (public administration [national, decentralized, and regional]), social development (human development), capacity development (institutional development), private sector development (policy reforms)
Location (impact)	– National (high)

NOTE

In this report, "$" refers to US dollars.

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I.   INTRODUCTION

1.   The Government of Uzbekistan is committed to strengthening governance, increasing transparency and accountability of government, and ensuring results-based delivery of public services. The government has requested Asian Development Bank (ADB) assistance to further accelerate its own e-government initiatives. The TA was discussed with the government and confirmed in a memorandum of understanding signed in November 2012.[1] The design and monitoring framework is in Appendix 1.

II.   ISSUES

2.   Uzbekistan has taken significant steps toward increasing its online presence and is ranked second among countries in Central Asia by the 2012 survey on e-government.[2] While its global ranking among 190 countries remains in the middle range, its score increased by 13.3% in 2012, reflecting impacts of legislative changes adopted in 2007 and 2009 and significant initiatives launched under phase 1 of the national information and communication technology (ICT) strategy.

3.   **National information and communication technology strategy.** The government launched the strategy in 2002.[3] Achievements include establishment of an institutional framework for ICT implementation, nationwide public and government connectivity, preparation of an e-government master plan, and implementation of diverse ICT applications and pilot initiatives including expansion of software and hardware for public financial management[4] and education[5] undertaken with ADB support.

4.   Phase 2 of the strategy was initiated in March 2012.[6] The main objectives of phase 2 are to expand government ICT applications and improve their integration, increase public access to government information, and improve government transparency and accountability. Phase 2 (2012–2014) includes a broad set of ICT activities including assessment and pilot start ups, and phased implementation of major initiatives. The strategic list of ICT applications support advancement of economic growth and private sector development,[7] effective public financial management,[8] needs-based delivery of social services,[9] and more accountable delivery of public services.[10] The next steps are to develop, in coordination with the respective client agencies, detailed plans for implementation of each programmed ICT activity based on confirmed resource commitments.

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[1]   The TA first appeared in the business opportunities section of ADB's website on 30 November 2012.
[2]   The Government Portal of the Republic of Uzbekistan. http://www.gov.uz/en/; United Nations. 2012. *E-government Survey.* New York.
[3]   Presidential decree on development of computerization and introduction of information and communication technologies (UP-3080, issued 30 May 2002).
[4]   ADB. 2007. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Technical Assistance Grant to the Republic of Uzbekistan for the Public Finance Management Reform Project.* Manila.
[5]   ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Uzbekistan for the Information and Communications Technology in Basic Education Project.* Manila.
[6]   Presidential decree on measures for further development of modern information and communication technology (PP-1730, issued 23 March 2012).
[7]   ICT activities include online access to legislation, electronic property and patent registration, online business registration and tax services, electronic border and customs control, and online passport and visa processing.
[8]   ICT activities include strengthening of budgeting, accounting, and financial reporting systems, and initiating e-procurement.
[9]   ICT activities include online access to utility agencies and utility account information.
[10] ICT activities include development of a unique individual identification number, and online information on social services.

5.   **E-government master plan.** An in-depth assessment of the ICT policy and legislative framework and ICT readiness across the government (in terms of ICT infrastructure and capacity) has been undertaken. An e-government master plan was prepared, comprising a road map, implementation plan, and consolidated list of ICT applications across key government agencies. The ICT activities selected for phase 2 were prioritized from the e-government master plan. Of these, ADB support has been requested for assistance in online property registration, single-window business registration, e-procurement, and expanding the government portal to increase access to public information and enable greater interactive public exchange on government programs and services.[11] ADB support is sought to build upon global experiences and best practice, particularly the models in Japan and the Republic of Korea, and e-government results in Armenia and Georgia that have been developed with ADB support.

6.   **Property registration.** According to the World Bank's *Doing Business 2012* report, registering property in Uzbekistan requires 12 procedures, takes 78 days, and costs 0.9% of the property value.[12] To simplify and streamline the registration process, the government has prioritized development of a computerized land registry to enable online title registration through a single window. Integration with collateral registries and credit information systems will reduce time requirements for credit evaluation, and support more effective portfolio risk management. Coordination with the Housing for Integrated Rural Development Investment Program,[13] implemented with ADB support, offers synergy with finance sector policy development and a basis for a nationwide pilot.[14]

7.   **Business registration.** Private sector development is important to ensure sustainable and inclusive economic growth, particularly in rural areas where micro and small enterprises (MSEs) account for 50%–80% of employment. The government reports that the private sector contributes 82.5% of total gross domestic product, with MSEs accounting for 54% of gross domestic product and more than 75.1% of employment nationally. A program of measures to improve the legal, regulatory, and enabling environment for private sector development and promote MSE expansion and employment was launched in 2011—the Year of Small Business and Private Entrepreneurship. *Doing Business 2012* advises that starting a business in Uzbekistan is now easier with lower capital requirements, reduced procedures, and reduced cost of registration (footnote 12).

8.   To further improve the business environment and advance MSE development, an additional set of reforms was initiated in July 2012.[15] The 3-year program (2012–2014) was developed in consultation with the Uzbekistan Chamber of Commerce, United Nations Development Programme (UNDP), and the World Bank. The program prioritizes actions to increase transparency of regulatory and procedural requirements for business registration and operation, and further simplify and reduce administrative barriers. Under this program the launching of an online single window business registration process, and online access to

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[11] Letter from first deputy prime minister and minister of finance dated 19 September 2012, and letter from deputy minister of finance and head of treasury dated 24 October 2012.
[12] World Bank. 2011. *Doing Business 2012*. Washington, DC.
[13] ADB. August 2011. *Report and Recommendation of the President to the Board of Directors: Proposed Multitranche Financing Facility to the Republic of Uzbekistan for the Housing for Integrated Rural Development Investment Program*. Manila.
[14] More than 40,000 new rural houses are programmed to be financed in 2011–2015.
[15] Presidential decree on measures to further improve the business environment (PP-4455 issued on 18 July 2012).

relevant state agencies that includes electronic payment of taxes and other fees, are targeted for 2013.

9.   **Public procurement.** To achieve greater transparency and accountability for public procurement, a new law is being drafted to provide a unified legal framework for public procurement. An e-procurement feasibility study has been undertaken and selected e-procurement components and pilot initiatives launched. All public procurement is posted on the government portal at least 30 days in advance of supplier selection, and through the commodity exchange an electronic bidding system is operated for procurement of public goods and services valued at more than $300 and less than $100,000. The online auction system offers increased transparency and enables small businesses to participate in public procurement. Further development and nationwide rollout of the e-procurement system requires additional policy work and development of procedures in accordance with the new law. A unified end-to-end e-procurement system that addresses the full range of public procurement requirements will require phased development and pilot tests prior to nationwide implementation.

10.   **Public access to information.** Since its establishment in 2003, the government portal has rapidly evolved from a purely informative website with limited links to a more comprehensive and interactive one. Features include (i) access to multilingual (Uzbek, Russian, and English) information on the roles of national, regional, and local governments, and functions of executive and line ministries; (ii) access with search functions to public archives of laws, decrees, and government orders; (iii) access to downloadable forms; and (iv) access to audio, video, and other web-feed formats. Improved and expanded structure, regular updates, and greater integration is required to provide citizens and businesses with access to information on government programs, improve transparency of government delivery of public services, and enable greater public participation in government processes.

11.   **Government coordination and technical oversight.** To address institutional challenges of government-wide implementation of the national ICT strategy, a coordination committee for development of computerization and ICT has been established. The committee is mandated to oversee the prioritization of e-government applications and the development of a 3-year investment plan (2012–2014). The Ministry of Economy is the lead agency with responsibility for coordinating e-government financing and implementation plans across the government and inclusion of these plans in national investment plans.

12.   The committee also oversees e-government design and implementation. The committee is supported by Uzinfocom, a technical agency established to ensure effective integration of e-government software and hardware platforms, and information security of all e-government applications. With its network of regional offices and district focal points, Uzinfocom provides operational and technical information technology (IT) support across the government. Extensive stakeholder consultations and capacity development of technical agencies and client or end user agencies will be critical success factors for the e-government initiatives.

13.   The TA is aligned with the Uzbekistan country partnership strategy, 2012–2016 approved in September 2012.[16] The TA also supports its objectives promoting governance, institutional improvement, and capacity development. UNDP,[17] the World Bank, and the

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[16] ADB. 2012. *Country Partnership Strategy: Uzbekistan,* 2012–2016. Manila.
[17] Since 2001, UNDP has been significantly involved in developing an enabling ICT legal and policy framework and promoting e-government. With the Chamber of Commerce, work has proceeded on e-commerce, e-banking, and an e-digital signature. Support has also been provided for e-taxation, automation of customs administration, and environmental and geographic information system applications.

development agencies of the Republic of Korea,[18] are also providing extensive support for the development and implementation of the government's ICT strategy and e-government initiatives. ADB is working with this group and continued coordination will be critical to ensure synergy, more effective delivery of public services, and accelerated development.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

14. The TA will support strengthened governance and increased transparency and accountability in government interactions. The impact will be improved public access to government processes in Uzbekistan, and the outcome will be increased electronic access to government services.

B. Methodology and Key Activities

15. The TA will have the following outputs:

(i) **Output 1: Strategy to improve government–public and government– business interface.** The TA will (a) review the national ICT strategy, e-government master plan, other relevant documents, and the long list of priority e-government services; (b) prepare process flowcharts and assess proposed ICT approaches; (c) prepare a gap analysis of critical government–public and government–business interface; and (d) prepare a strategy, prioritized action plan, and financing plan.

(ii) **Output 2: Phased strategies for priority e-government services.[19]** For the four prioritized e-government services, the TA will (a) analyze existing studies and documentation; (b) identify global experiences and best practices relevant for Uzbekistan; (c) detail technical and functional system requirements in consultation with stakeholders; and (d) prepare a medium-term (3–5 years) implementation strategy, action plan, and financing plan.

(iii) **Output 3: Action plans for piloting e-government services**. For at least two of the prioritized e-government services, the TA will (a) build on results of output 2 and identify and outline possible components for piloting, (b) prioritize and define the scope of pilots in consultation with client and user agencies and technical agencies, and (c) prepare an action plan and financing plan for their implementation.

(iv) **Output 4: Piloted e-government services**. For at least two of the prioritized e-government services, the TA will (a) implement the pilot; (b) prepare an assessment of the outcome of the pilot and recommend its phased implementation nationwide; and (c) prepare a strategy, action plan, and financing plan for its phased implementation nationwide.

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[18] The World Bank and the Government of the Republic of Korea (through the Economic Development Cooperation Fund and the National IT Industry Promotion Agency) have provided technical support for the Uzbekistan e-government master plan and the Uzbekistan mobile feasibility study.

[19] ADB support has been requested for assistance in the development of four priority e-government services: (i) property registration, (ii) single-window business registration, (iii) e-procurement; and (iv) an expanded government portal that will increase access to public information and enable greater interactive public exchange on government programs and services.

C.   Cost and Financing

16.   The TA is estimated to cost $1,200,000, of which $1,100,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The government will provide counterpart support in the form of counterpart staff, office space, logistics and meeting arrangements; access to appropriate data and ICT services; and other in-kind contributions. The proceeds of the TA will be disbursed in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). The cost estimates and financing plan are in Appendix 2.

D.   Implementation Arrangements

17.   The TA will be implemented over 36 months from January 2013 to December 2015. The Ministry of Economy (MOE) will be the executing agency, and the MOE and Uzinfocom will be the implementing agencies. The executing agency will appoint a TA coordinator who will coordinate with the TA consultant team for all outputs.

18.   The TA will provide a total of 110 person-months of consulting services: 20 person-months of international and 90 person-months of national consulting support. The detailed list of consultants and summary terms of reference are provided in Appendix 3. A consulting firm will be engaged by ADB following the quality- and cost-based method (80:20) and simplified technical proposals in accordance with its Guidelines on the Use of Consultants (2010, as amended from time to time).

19.   The consultants will maintain close working relations with the executing agency and will regularly discuss project progress and findings. Consultants will provide both inception reports and deliverables consistent with the design and monitoring framework activities, outputs, and delivery dates. All deliverables will be linked to the design and monitoring framework. All consultant reports will be prepared and provided in English. Procurement of goods under this TA will be undertaken in accordance with ADB's Procurement Guidelines (2010, as amended from time to time) and undertaken by the selected firm.

20.   The TA will follow monitoring and supervision procedures for ADB-administered TA. The outputs of the TA will be used for policy dialogue and disseminated through workshops, the government portal, and ADB's website. An evaluation of performance and outcomes will be carried out at the end of the TA and reflected in a TA completion report.

IV.   THE PRESIDENT'S DECISION

21.   The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of $1,100,000 on a grant basis to the Republic of Uzbekistan for E-Government for Effective Public Management, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
Impact Improved public access to government processes in Uzbekistan.	The number of public programs available through e-government means increases by 10% by 2016.	Statistics from government agencies operating e-services.	**Assumption** Government's commitment to reengineer public administrative procedures to enable access through e-government interface.
Outcome Increased government service access through electronic means.	Access to e-government services increases by 10% by 2015.	Statistics from government agencies operating e-services.	**Assumption** Good understanding and public confidence in e-government services. **Risk** Inadequate and expensive access to broadband internet.
Outputs 1. A strategy, prioritized action plan, and financing plan to improve government–public and government–business electronic interface. 2. Phased implementation strategies, action plans, and financing plans for priority e-government services. 3. Pilot implementation strategies, action plans, and financing plans for priority e-government services. 4. Prioritized e-government services piloted.	Strategy, prioritized action plan, and financing plan adopted by the government by mid 2014. Phased implementation strategies, action plans, and financing plans for priority e-government services adopted by the government by end 2013. Pilot implementation strategies, action plans, and financing plans for priority e-government services adopted by government by end of Q2 2014. At least two priority e-government services functional in the government portal by the end 2015.	Confirmation letter from appropriate government agency. Confirmation letter from appropriate government agency. Ministries responsible for pilots confirm access to services via portal.	**Assumption** Active participation of stakeholders in strategy development and implementation. **Risk** Varying quality of IT infrastructure, weaknesses of IT security systems, and difficulty synchronizing hardware and software.

Activities with Milestones	Inputs
1.1 Review the national information and communication technology strategy, e-government master plan, and other relevant documents and the long list of priority e-government services by the end of Q2 2013. 1.2 Prepare process flowcharts by the end of Q3 2013. 1.3 Assess proposed ICT approaches by the end of Q4 2013. 1.4 Prepare a gap analysis of critical government–public and government–business interface by the end of Q4 2013. 1.5 Prepare a strategy, prioritized action plan, and financing plan to improve government–public and government–business interface by the end of Q2 2014. 2.1 Analyze existing studies and e-government services by end of Q2 2013. 2.2 Identify global experiences and best practices relevant for Uzbekistan by end of Q2 2013. 2.3 Prepare a medium-term (3–5 years) implementation strategy, action plan, and financing plan by end of Q4 2013. 3. For at least two prioritized e-government services: 3.1 Analyze existing studies and documentation by end of Q3 2013. 3.2 Identify and outline possible components for piloting by end of Q4 2013. 3.3 Prioritize and define the scope of pilots in consultation with client or user agency and technical agencies by end of Q2 2014. 3.4 Prepare a strategy, action plan, and financing plan for implementation of pilot by end of Q2 2014. 4. For at least two prioritized e-Government services: 4.1 Implement the pilots by the end of Q4 2014. 4.2 Prepare an assessment of the outcome of the pilots and recommendations for phased nationwide implementation of the e-government service by end of Q2 2015. 4.3 Prepare a strategy, action plan, and financing plan for phased implementation of the e-government service by the end of Q4 2015.	**ADB:** Technical Assistance Special Fund (TASF-Other Sources) $1,100,000 The government will provide counterpart support in the form of staff, office space, logistics and meeting arrangements; access to appropriate data and information and communication technology services; and other in-kind contributions.

ADB = Asian Development Bank, ICT = information and communication technology, IT = information technology, TASF = Technical Assistance Special Fund, Q = quarter.
Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
($'000)

Item	Amount
Asian Development Bank[a]	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (20 person-months)	400.0
ii. National consultants (90 person-months)	180.0
b. International and local travel	120.0
c. Reports and communications	10.0
2. Equipment and software[b]	250.0
3. Training, seminars, and conferences	
a. Training	50.0
4. Contingencies	90.0
Total	**1,100.0**

Note: The technical assistance (TA) is estimated to cost $1,200,000, of which contributions from the Asian Development Bank are presented in the table above. The government will provide counterpart support in the form of counterpart staff, office space, logistics and meeting arrangements; access to appropriate data and ICT services; and other in-kind contributions. The value of the government contribution is estimated to account for 8% of the total TA cost.

[a] Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF-other sources).

[b] Includes computer hardware such as computers, peripherals, servers and related goods. At the end of the TA this equipment will become the property of the executing agency.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1.   A total of 110 person-months of international and national consulting services will be required to ensure that the technical assistance (TA) project is effectively managed and the intended outcome is achieved. The TA will require 20 person-months from six international consultants, and 90 person-months of national consultant inputs. A consulting firm will be engaged following the quality- and cost-based method (80:20) and simplified technical proposals in accordance with the Asian Development Bank's (ADB) Guidelines on the Use of Consultants (2010, as amended from time to time). The firm inputs will be on an intermittent basis, responding to the government requirements and progress made during implementation. Procurement of goods under this TA will be undertaken by the selected firm in accordance with ADB's Procurement Guidelines (2010, as amended from time to time). The TA will be implemented over 36 months commencing on 1 January 2013 and terminating on 31 December 2015.

A.   Consulting Firm

2.   The consulting firm will:
    (i)   Assign a team leader to provide overall project management including reporting on the status of activities to the ADB project officer, managing the national consultants, and communicating with government officials and other stakeholders as needed.
    (ii)   Develop a project plan through consultation with all stakeholders, including the ADB project officer, government officials and other consultants.
    (iii)   Ensure timely completion of activities and quality delivery of the outputs as defined in the design and monitoring framework.

B.   International Consultants

3.   **E-government advisor and team leader** (international, 8 person-months, intermittent).The advisor should have an advanced degree in public management or related field and at least 10 years experience in the design and implementation of public management systems and e-government projects. Work experience in developing countries, preferably in the Commonwealth of Independent States is an advantage. The team leader will report to the ADB project officer and will perform the following:
    (i)   Review the national information and communication technology strategy, the e-government masterplan, and all relevant government documents related to e-government and the four priority e-government services identified by government: (a) online property registration, (b) one-window online business registration, (c) e-procurement, and (d) expansion of the government portal to support greater online interaction between the government and its citizens including an online public redress process.
    (ii)   Develop, in close coordination with key stakeholders, a definition for e-government for Uzbekistan, and pragmatic criteria for assessing and prioritizing the phased implementation of e-government services across the government.
    (iii)   In the context of the agreed upon definition of e-government and prioritization criteria assess the status of e-government activities, prepare outline business processes for all prioritized e-government services, and define the scope and timing of their phased implementation in accordance with confirmed resources.
    (iv)   In consultation with relevant stakeholders develop a strategy for improving government-to-public and government-to-business interfaces.

(v)   For the four prioritized e-government activities oversee the review of:
  (a) Legal and regulatory frameworks.
  (b) IT software and hardware systems and networks (in close consultation with Uzinfocom).
  (c) Institutional capacity of key government agencies involved in the design and use of each e-government service for supporting implementation and operation of the online service.
(vi) Define the scope of pilot activities and prepare implementation action plans in accordance with confirmed resources.
(vii) Oversee implementation of pilots for two of the four prioritized e-government services, evaluate and incorporate lessons learned, and scale up implementation nationwide.

4.   **Land registration advisor** (international, 4 person-months, intermittent). The advisor should have a degree relevant for land use management. The advisor should have at least 10 years experience in land use management preferably with specific experience in the design and implementation of online land registration systems, with linkages to collateral registries and credit information systems.

5.   **Business registration advisor** (international, 2 person-months, intermittent). The advisor should have an advanced degree in business. The advisor should have at least 10 years experience supporting the development of micro and small businesses, preferably with experience in the design and implementation of online business registration systems.

6.   **E-procurement advisor** (international, 4 person-months, intermittent). The advisor should have a degree in business or public administration or related field. The advisor should have at least 10 years experience in procurement preferably with specific experience in the design and implementation of e-procurement systems.

7.   **Public redress advisor** (international, 1 person-month, intermittent). The advisor should have an advanced degree in business or public administration or related field. The advisor should have at least 10 years experience in customer relations and customer complaint or public redress systems, preferably online.

8.   For each of the four e-government advisors listed above, work experience in developing countries, preferably in the Commonwealth of Independent States is an advantage. Each advisor will report to the ADB project officer, through the team leader, and will perform the following:
(i)   Review relevant legal, regulatory and policy frameworks.
(ii) Assess institutional capacity of government agencies involved in implementation and operation of prioritized processes.
(iii) With the IT advisor assess existing IT software and hardware systems, and prepare outline business processes.
(iv) In close coordination with key stakeholders define the scope of a pilot activity, and prepare an implementation action plan in accordance with confirmed resources that includes:
  (a) Required changes to legislative, regulatory and policy framework.
  (b) Required changes to ICT software and hardware, infrastructure network, and security measures.
  (c) Management of change management process, and capacity building and/or training.

  (v) Oversee implementation of pilot activity.
  (vi) Prepare performance report on pilot process.
  (vii) Incorporating lessons learned scale up implementation nationwide.

9. **Web specialist** (international, 1 person-month, intermittent). The specialist should have a degree in information technology. The specialist should have at least 5 years experience in website design and development, preferably with government websites. Work experience in developing countries, preferably in the Commonwealth of Independent States is an advantage. The specialist will report to the ADB project officer, through the team leader, and will review the government website, and based on global best practices prepare:
  (i) A strategy and prioritized action plan for improving the government-to-public and government-to-business interface.
  (ii) An interface design that builds on existing software and hardware networks and systems, reflects advanced technologies, and offers interactive engagement.
  (iii) An interface template for use by each region.
  (iv) An interface template for use by each major program.

C. National Consultants

10. All national consultants, in addition to the terms of reference below, will (i) liaise and support communication between government officials, the ADB project officer, the team leader, and international consultants to coordinate project activities; (ii) provide the international consultants with local knowledge, experiences and up-to-date information on current national conditions, policies, and pertinent issues, to help with the development of knowledge products and implementation of training programs; and (iii) provide necessary interpretation and translation support for meetings and documents relevant to the assignment .

11. **Systems analyst and IT specialist** (national, 8 person-months, intermittent). The specialist should have an advanced degree in IT or computer science, and at least 8 years experience in the design and implementation of government IT systems. Strong English writing and speaking abilities, and demonstrated capacity to work effectively in international teams to produce results is necessary. The specialist will work closely with the team leader in the following:
  (i) Act as deputy team leader and support the work of the entire team, including ensuring regular meetings, reporting, and results monitoring for all consultants.
  (ii) Identify, collect and help review all relevant government documents related to the national information and communication technology strategy, the e-government masterplan, and all relevant government documents related to e-government and the four priority e-government services.
  (iii) Work with the team leader and other advisors to prepare the e-government strategy and medium-term action plans.
  (iv) Lead the work associated with IT assessments, process outlines and capacity building plans for IT related activities.
  (v) Prepare the necessary technical documents for the procurement of any IT equipment that is required for the pilot e-government services.
  (vi) Advise on IT technical issues associated with assessing bids for IT equipment.
  (vii) Lead work in terms of developing pilot e-government services.
  (viii) Provide guidance and direction to national consultants.

12. **Land registration specialist** (national, 6 person-months, intermittent). The specialist should have a degree relevant for land use management. The specialist should have at least 8

years experience in land use management preferably with specific experience in the design and implementation of IT-based land registry systems. Strong English writing and speaking abilities, and demonstrated capacity to work effectively in international teams to produce results is necessary. The specialist will work closely with the international advisor to deliver terms of reference as specified.

13. **Business registration specialist** (national, 4 person-months, intermittent). The specialist should have an advanced degree in business. The specialist should have at least 8 years experience supporting the development of micro and small businesses, preferably with experience in the design and implementation of online business registration systems. Strong English writing and speaking abilities, and demonstrated capacity to work effectively in international teams to produce results is necessary. The specialist will work closely with the international advisor to deliver terms of reference as specified.

14. **Procurement specialist** (national, 6 person-months, intermittent). The specialist should have a degree in business or public administration. The specialist should have at least 8 years experience in procurement preferably with specific experience in the design and implementation of IT based e-procurement systems. Strong English writing and speaking abilities, and demonstrated capacity to work effectively in international teams to produce results is necessary. The specialist will work closely with the international advisor to deliver terms of reference as specified.

15. **Web specialist** (national, 6 persons-months, intermittent). The specialist should have a degree in information technology. The specialist should have at least 5 years experience in website design and development, preferably with government websites. Strong English writing and speaking abilities, and demonstrated capacity to work effectively in international teams to produce results is necessary. The specialist will work closely with the international advisor to deliver terms of reference as specified.

16. **Regional business process specialists and regional business process assistants** – for 15 ministries or agencies (national, 2 person-months per agency or a total of 30 person-months, intermittent). Regional specialists and regional assistants should have a degree in economics, statistics, or business. Regional specialists should have 2–5 years of government, industry, or other relevant experience, and regional assistants should have or 1–3 years experience. IT skills are required, with training experience desirable. The specialists and assistants will perform the following tasks:
   (i)   With respective team advisors, and in close coordination with relevant ministries and state agencies, develop business process outlines for priority e-government services.
   (ii)   With respective team advisors, and in close coordination with relevant ministries and state agencies, define the scope and timing of the phased implementation of priority e-government services in accordance with confirmed resources.
   (iii)   With respective team advisors, support implementation of pilot activities, scale up of implementation nationwide, and preparation of performance reports.

17. **Regional program specialists and regional program assistants** – for 15 programs (national, 2 person-months per program or a total of 30 person-months, intermittent). Regional specialists and regional assistants should have a degree in economics, statistics, or business. Regional specialists should have 2–5 years of government, industry, or other relevant experience, and regional assistants should have or 1–3 years experience. IT skills are required,

with training experience desirable. The specialists and assistants will perform the following tasks:

(i)   With the team and in close coordination with the web advisor, develop and design web materials on priority government programs and services.

(ii)   With the team, implement training and train government program staff in the regular update of program websites.