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CENTER FOR  
ELECTRONIC GOVERNANCE

Developing Electronic Governance in Afghanistan  
Assessment, Strategy, Implementation  
EGOV.AF Project

## E-Government Strategy Draft for Afghanistan

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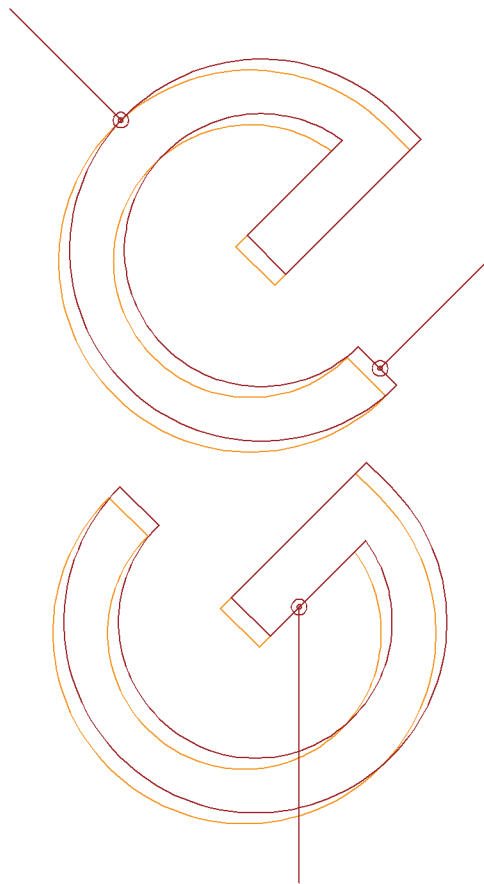
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## UNU-IIST Center for Electronic Governance

**Identity:** An International Center of Excellence on research and practice in Electronic Governance, part of United Nations University - International Institute for Software Technology, located in Macao, China.



**Mission:** To support governments in developing countries in strategic use of technology to transform the working of public organizations and their relationships with citizens, businesses, civil society, and with one another.

**Activities:** Applied and policy research, capacity building, and various forms of development – strategy development, software development, institutional development and development of communities of practice.

## ABOUT THIS DOCUMENT

The current document is one among twenty deliverables produced by the United Nations University – International Institute for Software Technology – Center for Electronic Governance (UNU-IIST-EGOV), jointly with the Ministry of Communications and IT, Islamic Republic of Afghanistan (MCIT) as part of the EGOV.AF project. The project aimed at developing local capacity in Afghanistan for carrying out strategic planning for electronic government (EGOV), supporting the national development and public administration reform goals.

The project included an extensive e-government readiness survey across the government, a series of awareness- and capacity-building events, several visioning and strategy development sessions with large numbers of stakeholders, and several fellowships for government officials from MCIT and lecturers from University of Kabul to carry out research with UNU-IIST-EGOV in Macao.

Besides building human and organizational capacity for EGOV strategic planning in Afghanistan, the project produced the following 20 deliverables:

1. Assessment Instruments - agency-level and national-level assessment instruments prepared, tested and revised to address conditions in Afghanistan
2. Assessment Process - rigorous description of the assessment methodology, stakeholder analysis and the underlying assessment process
3. Assessment Training - materials used to train the assessment team to carry out data gathering, covering the instruments, methodology and process
4. Assessment Data – the data gathered as part of the assessment exercise from agency- and national level surveys, and collected into a knowledge base
5. State of Practice Report - the report describing the state of EGOV practice in Afghanistan
6. State of the Art Report – the report that describes a set of international benchmark studies for EGOV strategic planning in Afghanistan
7. Visioning Workshop – the summary of the visioning workshop for EGOV in Afghanistan
8. Strategy Workshop – the summary of the strategy workshop for EGOV in Afghanistan
9. Strategy Report – the report describing the draft EGOV strategy for Afghanistan
10. Program Report – the report describing the proposed EGOV program for Afghanistan
11. Assessment Workshop – documentation of the assessment workshop including presentations of the survey results and recordings
12. Research Workshop – documentation of the research workshop including presentations of the benchmark methodology and recordings
13. Visioning Workshop – visioning workshop documentation including presentations and recordings.
14. Strategy Workshop – strategy workshop documentation including presentations and recordings
15. Program Workshop – program workshop documentation including presentations
16. Leadership Courseware - training materials for EGOV leaders
17. Assessment Courseware – materials for training the readiness assessment team
18. Strategy Courseware – materials for training the stakeholders of the strategy development process
19. Program Courseware – materials for training the stakeholders of the program development process
20. Management Courseware – materials for training the public managers to execute the program

The current document presents the Electronic Government Strategy Draft for Afghanistan (9). The draft strategy was formulated based on: the results of local EGOV readiness assessment (4) including national development vision and goals for Afghanistan; the resulting state-of-practice report (5); lessons learn from other countries with well-established EGOV practice and also countries with certain similarities to Afghanistan; the resulting state-of-practice report (6); and inputs from various stakeholders obtained as part of visioning (7) and strategy (8) workshops. In turn, the assessment was carried out by the trained local team (3), applying the assessment instruments (1) according to the adopted assessment methodology (2).

## EXECUTIVE SUMMARY

Afghanistan aims at establishing itself as the central interconnection point of goods, ideas, services and people in the fast-expanding Asian economy. Given its location, natural wealth and expanding economy, it is poised towards the vision of becoming a “peaceful meeting place of civilizations”. In pursuit of this vision, the Government of Afghanistan recognizes that quality public services, good governance, rule of law, human rights and public engagement are imperative.

However, achieving meaningful development results, including the real impact on the quality of people’s lives, is difficult. Major risk factors include lack of local ownership of development initiatives and lack of ability of the key stakeholders to organize themselves and to jointly pursue the agreed development goals. Therefore, strategic planning for development requires focusing on the nationally-owned development goals, and should reflect the guiding principles of national ownership and local capacity for development. Increasing the effectiveness of such development efforts requires evidence-based impact assessment against such goals.

Electronic Government (EGOV) is an important tool for developing countries like Afghanistan. Aimed at utilizing Information and Communication Technologies (ICT) to improve the working of public administration and their capacity to pursue the formulation and implementation of the national development goals, EGOV supports and drives public sector reform and modernization efforts, enhances the delivery of public services, helps implement the principles of good governance, and enables human rights and citizen participation.

In recognition of the importance of EGOV, the Ministry of Communications and Information Technology (MCIT) initiated the development and implementation of a comprehensive EGOV strategy to support the economic, social and governance needs of Afghanistan. As part of this initiative, MCIT engaged the United Nations University – International Institute for Software Technology – Center for Electronic Governance (UNU-IIST-EGOV) to jointly implement the Electronic Government Development for Afghanistan (EGOV.AF) project.

This document is an outcome of this project. It presents a strategic planning process and a draft national EGOV Strategy for Afghanistan that resulted from this process.

### STRATEGIC PLANNING PROCESS

The strategic planning process in Afghanistan comprised three main steps:

1. Establish the strengths, weaknesses, opportunities and challenges for EGOV in Afghanistan based on the readiness assessment;
2. Learn from the countries with well-established e-Government practices and countries with certain

- similarities to Afghanistan how EGOV could be implemented based on benchmarking studies; and
3. On the basis of (1) and (2), carry out visioning and strategy development for EGOV in Afghanistan.

General direction and mentoring for the EGOV strategic planning process in Afghanistan was provided by the project staff from UNU-IIST-EGOV while coordination, communication and help-desk support for the stakeholders was executed by MCIT.

### THE STRENGTHS, WEAKNESSES, OPPORTUNITIES AND CHALLENGES FOR EGOV IN AFGHANISTAN

The country development context made e-Government assessment particularly important within strategic planning exercise. It helped to consider the local conditions, opportunities provided by new technologies, current obstacles in governance and enabling environment in government.

Strengths, Weaknesses, Opportunities and Challenges for e-Government in Afghanistan are derived from readiness assessment report (5) as follows:

#### Strengths

- Leadership – strong strategic leadership for e-Government in MCIT and a number of ICT champions in the ministries and agencies
- National Development Policies and Strategies – ANDS, Public Sector Reform, ICT Strategy
- High demand from the public and within government to tackle corruption, increase transparency and administrative efficiency and effectiveness
- Key ICT/e-Gov projects on going to develop strategic and technological foundations for e-Government
- Many agency level ICT projects on going

#### Weaknesses

- Very limited awareness of the strategic role e-Government in public sector
- Weak legal and regulatory environment for e-Government
- On-going e-Government initiatives and projects are isolated
- Lack of information exchange and knowledge sharing organizational culture in public sector
- Lack of capacity and skills in e-Government implementation



- Weak partnership with academia in e-Government research

#### Opportunities

- Rapidly developing mobile and Internet services
- High demand and expectations from the public for increased transparency and deter corruption
- A number external stakeholders willingness to partner with government in e-Government implementation and research
- Basic infrastructure and legal base for e-Government are going to be in place soon

#### Challenges

- Cost of telecommunications
- Delivery of government e-services to citizens in remote area
- Lack of technical and human resources for e-Government coordination and implementation
- Literacy and acceptance of e-Government in public sector and society
- Privacy on Information and Freedom of Information issues

### LESSONS LEARNED FROM BENCHMARKING STUDIES

The international experience from different countries has been considered within benchmarking studies in order to learn lessons and avoid reinventing a wheel (6).

Among them are countries with well-established e-Government practices lead by well-documented and publicly accessible e-Government related strategies such as Korea, Singapore, United Kingdom and Estonia, as well as countries with certain similarities to Afghanistan. Such similarities were considered in terms of geographical location in the same region like India, Pakistan, Nepal and Sri-Lanka in addition to the poverty issues in all of them and political situation affected by civil war and conflict such as Nepal and Sri-Lanka. Such countries like Pakistan and Saudi Arabia have been selected due to their similarities to Afghanistan in terms of social norms and culture defined by Islamic religion.

The key lessons learned from the benchmarking studies can inform the e-Government strategic planning in Afghanistan. They are summarized and organized around five major aspects as follows:

#### 1. Benefits of E-Government Strategic Planning

*Lesson 1* - E-Government strategies aligned with the high level national strategies and programs help with addressing challenges arising from the needs of society.

*Lesson 2* - e-Government strategic planning carried out on regular basis allows meeting new administrative demands faced by the government in changing environment to better serve citizens and businesses.

*Lesson 3* - e-Government strategy facilitates, promotes and helps coordinate government-wide e-Government initiatives and set up organizational conditions for encouraging collaboration across government.

*Lesson 4* - The experiences of some emerging countries with similarities to Afghanistan demonstrate that significant gains can be realized even in such countries where e-Government strategy is in place with clearly identified priorities that are aligned with national development goals.

### 2. Stakeholder Engagement

*Lesson 5* - Consultations and partnership with relevant stakeholders and experts, including administrative agencies, industry representatives, academia, and the general public are essential for e-Government strategic planning and implementation.

### 3. Structure of E-Government Strategy

*Lesson 6* - e-Government strategy provides strategic e-Government framework and guiding principles, sets up the long term or midterm vision for e-Government development, establishes strategic goals and defines implementation strategies.

*Lesson 7* - The structure of e-Government strategy generally include i) e-Government vision; ii) strategic goals integrated under accepted vision; iii) strategic directions/perspectives or focus areas towards achieving strategic goals; iv) strategies and action lines within each focus area; v) necessary governance frameworks and infrastructure.

*Lesson 8* - Key action lines are to be defined within each strategic direction to ensure leadership and governance, portfolio management, development of IT professionalism and skills, strengthening control and support for project delivery, and a systematic focus on innovation.

*Lesson 9* - Prioritization of strategic directions and identification of corresponding action lines within each of them is led by the strategic goals.

*Lesson 10* - E-Government strategy should outline implementation mechanisms including selection of new e-Government projects in line with the priority areas and key action lines defined.

#### 4. E-Government Strategy Focus

*Lesson 11* - The main focus of any e-Government strategy is to transform the government operation and service delivery to better meet people expectations by utilizing more effectively IT-based systems and solutions.

*Lesson 12* - Customized citizen services, IT-enabled innovation in government, safer society and sustainable advancement are among typical e-Government strategic goals.

#### 5. Implementation Strategies

*Lesson 13* - Among key strategies for successful implementation are: a) enhancing public services centered on citizens and businesses through personalization and multi channel delivery, b) well-established governance structure and leadership, c) innovative cross-agency processes, d) establishing shared services culture in public organizations, and e) improving professionalism including planning, delivery, management, skills and regular performance measurement and evaluation.

*Lesson 14* - e-Government strategies put special spotlight on coherent leadership at different levels and coordination to ensure joined up processes and shared services that allow reducing waste and inefficiency by re-using assets and sharing investments with others.

*Lesson 15* - Building awareness on e-Government benefits and creating enabling environment, identification of common business processes, establishing common infrastructure and networks for information and knowledge sharing among government agencies, defining open standards and building integrated systems are among high priority agenda.

*Lesson 16* - Among high priority e-services for countries with similar conditions to Afghanistan are employment, education, social insurance and healthcare services, business registration, agriculture, licensing, tax, customs, etc and prioritization depends on current needs in the country.

*Lesson 17* - Shared services require particular attention on customer oriented service centers, human resources and cultural changes in public organizations, common infrastructure, data sharing, information management, information assurance, identity management and technology standards and architecture.

*Lessons 18* - Among major cross-government applications for common use are usually; a) e-procurement, b) e-document exchange, c) human resource management d) finance management, e) data sharing among government agencies for increasing efficiency and effectiveness of government agencies.

*Lessons 19* - e-Government implementation requires an integrated infrastructure and security standards allowing government agencies to set up a cost-effective network for communication and data exchange. .

*Lessons 20* - e-Government implementation requires setting up a program, preparation of action plans including planning of new e-Government projects and capacity building for implementation and management, development and rollout of integrated systems, and performance enhancement.

#### THE EGOV STRATEGY DRAFT FOR AFGHANISTAN

The draft strategy for EGOV in Afghanistan (AeGS) intends to respond to high demand from the public and within government to tackle corruption in public administration and public service delivery, increase transparency and administrative efficiency and effectiveness which was revealed from the assessment exercise in Afghanistan (4). It supports the national priorities defined by the Afghan National Development Strategy (ANDS) and Governance and Public Administration Reform strategies.

A strategic framework outlines the key aspects of AeGS, explains relations between them and guides its structure. Following the framework AeGS includes a vision for EGOV in Afghanistan, a set of strategic goals, directions/focus areas and action lines defined and agreed among key stakeholders in Afghanistan.

They were elaborated based on the results of EGOV readiness assessment and inputs from more than 150 participants through group discussions during visioning and strategy development workshops organized jointly by MCIT and UNU-IIST-EGOV in Kabul (7), (8). Among EGOV stakeholders were representatives from government and non-government organizations such as key-line government ministries and agencies at the level of Deputy Ministers and ICT Director Generals, Commissions on Civil Service, Anti-Corruption and Human Rights, National Data Centre and MCIT provincial offices, and also from AIMS, Kabul Bank and Kabul University.

The vision and strategic goals for AeGS have been worked out by utilizing strategic planning tools, in particular, result-based planning with focus on the impact of EGOV for Afghan people and benefits from technology enabled public services and governance transformation for key stakeholders such as citizens and busi-

ness, from one hand and government agencies and employees from the other hand.

### Strategic Framework

The proposed strategic framework for e-Government development in Afghanistan composed of five main components:

- 1) Strategic Principles;
- 2) E-Government Vision;
- 3) Strategic Goals;
- 4) Strategic Directions and Action Lines; and
- 5) Strategy Implementation Mechanisms

### Strategic Principles

A set of key principles for the development of EGOV in Afghanistan is defined based on international experience to better address the weaknesses and challenges identified based on the assessment findings. These are:

- *Strategic* – development of e-Government is a strategic choice by the Afghanistan Government in national development
- *Top level leadership* – e-Government development will be spearheaded and coordinated centrally at the top level of the government
- *Whole of government, whole of nation* – e-Government is owned and will be developed by the whole of government and targeted at the whole of the nation, with particular attention to the integration of social groups with special needs like women and children
- *Citizen-centric* – e-Government is developed for all Afghani citizens, around the needs of the people and not along the structures of government, with particular attention to the education, health and agricultural needs of the people
- *Trust in government* – building people, processes, systems and services aimed at creating a secure and trusted relationship between citizen and government is be a key e-Government development priority
- *Participative* – e-Government will focus on enabling the engagement between people and the government in public issues and enhanced participation in policy making
- *Collaborative* – e-Government development will support government organizations working together,

er, integrating their services, sharing information and technology, eliminating duplication and committing to development of cross-agency service delivery

- *One stop, multi channel* – e-Government development will promote one stop access through multiple channels to government information and services
- *Secure and private* – protection of security, privacy and basic rights of citizens will be central to e-Government development

### Afghan EGOV Vision

Both long-term and short-term visions for e-Government in Afghanistan were formulated based on the inputs from various stakeholders collected and summarized during visioning workshop in Kabul.

The long term vision for AeGS is associated with the expected impact for the Afghan society to be produced by implementing e-Government. as follows:

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The long term AeGS vision : *Quality Public Services delivered Equitably by a Trusted Government to an Empowered Citizenry*

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The mid-term AeGS vision is associated with the expected EGOV impact for Afghan people and changes to be produced during five coming years. To better respond to Afghan citizens' expectations that e-Government will bring convenient public services, transparency, accountability and responsiveness and helps to deter corruption the following statement was agreed among key stakeholders:

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The mid-term AeGS vision: *Within 5 years most people of Afghanistan will benefit from the equitable access to quality public information and services of high priority with equal opportunities to men and women in a balanced manner across urban and rural areas, , reduced corruption, and improved security and stability and participation in governance with everyone motivated and enabled to contribute.*

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The mid-term e-Government vision emphasizes the following key aspects: a) **SERVICE** – Quality Public Information and Services of High Priority and **EQUITY** – Balanced and Equitable Public information and services; b) **TRUST** – Open and Trusted Government with increased transparency, reduced corruption and improved security and stability; c) **EMPOWERMENT** – Empowered Citizenry enabled to participate in governance.

## Strategic Goals

In achieving the mid-term vision the strategic goals for e-Government for coming five years were defined by the stakeholders during the strategic planning workshop in Kabul based on the assessment results and benchmarking findings.

As a result of focus group discussions among key stakeholders the strategic goals were defined within three major perspectives: 1) public information and services; 2) modernization of public sector; and 3) public participation in government. In addition, possible measures for each goal have been worked out. Strategic goals within each perspective with corresponding measures are presented below:

### Perspective 1: Public Information and Services

**Goal 1:** Equitable and balanced access to high priority public services, particularly in health, education and agriculture and services for businesses and others.

#### Measures for Goal 1

- a) *Quality of Information and Services:* Accuracy, Timeliness, Accessibility, Convenience, Relevance, Affordability, Reliability, Security and Privacy
- b) *Citizen Centricity, Accessibility and Benefit:* Citizen satisfaction, Accessibility across Urban/Rural, Women/Men, Disabled/Enabled People, Province/Zonal/Regional, Elderly/Youth, Literate/Illiterate, Remote/Accessible areas and Rich/Poor
- c) *Health, Education and Agriculture Information and Services:* Number and sophistication of services, coverage in terms of geography and accessibility, and impact on daily life and socio-economic development at the grass root level

### Perspective 2: Modernizing Public Sector

**Goal 2:** A modern and optimized public sector through innovation, collaboration and technology.

- a) *Service Provision:* Time, Cost, Access, Human Resources, Number of Steps, Number of Agencies of contact, Number of visits, Ease of Use, One-stop-shop
- b) *Decision Making and Administration:* Time, Number of Levels, Number of steps, Less-Paper office – amount of paper used, Streamline Processes – BPR

- c) *Policy Making:* Public consultation, Openness, Drafted policies made available online, Enacted policies including rationale and results, Outputs from public consultation made online

### Perspective 3: Public Participation in Government

**Goal 3:** Improved interaction between the government and public in governance.

- a) *Security and Privacy:* Level of Trust, Training and Awareness
- b) *Public Confidence:* Customer Satisfaction, Take up of e-Government services, Online dispute resolution, Complaints Submissions to Authorities and tracking of these complaints
- c) *Government Openness:* availability of information on Procedures, Rules, Costs and Public Expenditures, through e-channels
- d) *Public Participation:* Number of and take up of e-participation initiatives, Customer Satisfaction, Customer Feedback

### Strategic Directions

In order to achieve the major goals of e-Government in Afghanistan strategic directions for implementation are defined. They intend to address the weaknesses and challenges and to meet citizens' expectations revealed from the assessment. They are organized in five major dimensions that have cross-cutting nature and therefore, will contribute to all strategic goals. These are:

- 1) *Public Information and Services* – this direction responds to the most relevant expectations and challenges such as: a) transparency and accountability, b) responsiveness, c) citizen centered services with high quality, d) the most demanded services in education, health, agriculture, economic development (trade, employment) and social welfare and e) delivery of government e-services to citizens in remote area
- 2) *Capacity Building* – this direction responds to the following weaknesses and challenges: a) lack of capacity and skills in e-Government implementation in Afghanistan, b) lack of human resources for e-Government coordination and implementation and weak partnership with academia in e-Government research, c) low literacy and acceptance of e-Government in public sector and society.
- 3) *Enabling Environment* – this direction responds to the following weaknesses and challenges: a) very limited awareness of the strategic role e-

Government in public sector, b) weak legal and regulatory environment for e-Government in Afghanistan and c) lack of organizational culture in public sector for information exchange and knowledge sharing.

- 4) *Common Infrastructure* – this direction intend to address the following weaknesses and challenges: a) lack of technical resources for e-Government implementation, b) lack of coordination of on-going infrastructure projects, and c) costs of telecommunications.
- 5) *Common and Agency-specific Applications* – this direction responds to the following weaknesses and challenges; a) duplicated efforts in developing similar applications and b) on-going e-Government initiatives and projects in different ministries and agencies are isolated.

### Strategies and Action Lines

The key implementation strategies and corresponding action lines are defined within each strategic direction based on current needs of Afghan people, external stakeholders and government agencies, their expectations from e-Government and priority areas for public services revealed from the assessment, inputs from the stakeholders and high level development and public administration reform strategies. They take into account existing capacity, ongoing initiatives and environment for e-Government implementation. In addition, some elements derived from countries with well-established e-Government practice and also countries with similarities to Afghanistan are adapted to local conditions.

#### Strategy 1

High Priority Public Information and Services, particularly in the areas of health, education and agriculture and also services targeted towards businesses, will be deployed through multiple channels, with particular emphasis on mobile telephony, prioritized based on positive impact on the daily lives in terms of socio-economic benefits and inclusiveness in terms of reaching to minorities and disadvantaged parts of the society.

*Action Line 1.1: Services in Healthcare* - Web and mobile based public health information, warnings, reminder service for registered parents, citizen feedback on health services and facilities, etc

*Action Line 1.2: Services in Education*- education related information and services, library services to students and teachers across the county, mobile technology based services for exams, parental and teacher monitoring, access to expertise through a central educational portal, etc

*Action Line 1.3: Services in Agriculture*- Mobile and web based information on disease, alerts and grazing lands,

e-services for marketing through community centers and portals, etc

*Action Line 1.4: Services for Businesses*- Online and mobile based information about business opportunities, regulations, licensing and tax related services, feedback system for customers, online Reporting, SME loan applications and processing online, connected to banks and government registration systems

*Action Line 1.5: e-Service Promotion and Marketing*- E-Information/e-Services promotion through traditional communication channels and specifically targeted marketing program aimed at businesses, academia and other large scale operators who could immediately take-up e-Government services and benefit from them.

#### Strategy 2:

*Creating Enabling Environment* for developing e-Government, delivering electronic/mobile services, electronic documents, applications, forms and interacting with citizens via electronic/mobile channels by a) ensuring ownership on EGOV strategy and implementation program, b) promoting leadership at all levels (top, middle, operation) and coordination, c) raising awareness among government employees and citizens, d) adopting legislation, rules and regulations and e) establishing sustainable financial mechanisms and f) creating favorable organizational culture.

*Action Line 2.1: Digital Signature Act* – gives electronic signatures the same legal status as written signatures and sets a uniform legal standard for electronic signatures and records

*Action Line 2.2: Electronic Transaction Act* – facilitates electronic communications and promotes public confidence in the integrity and reliability of electronic records, e-commerce and e-Government

*Action Line 2.3: Electronic Documents Act* – facilitate the use of electronic documents

*Action Line 2.4: CIO (Chief Information Officer)* – Program for Government – including defining a central government CIO at central government agencies and at the provincial local authorities.

*Action Line 2.5: PPP (Public Private Partnership)* – Partnership with national and international organizations, academia and industry for e-Government development

*Action Line 2.6: e-Government Directorate* – Responsible for coordination and monitoring the development of e-Government

*Action Line 2.7: Standards* – Architecture and Standards for e-Government to streamline the development and



ensure interoperability and gain efficiencies and ensure quality in operation and IT service provision.

*Action Line 2.8: Security and Privacy* – Policies and Regulations to protect the privacy of citizens and businesses and enforce security of data storage, processing and exchange and IT resources across the government.

*Action Line 2.9: Open Source Software* – To start the culture of using Open Source Software in government agencies.

*Action Line 2.10: Auditing* – IT auditing will be introduced across the government.

*Action Line 2.11: Software Licenses* – enterprise wide licenses will be negotiated with the vendors for government software base.

*Action Line 2.12: EGOV Resource Center* – a common and shared e-Government resource center as the government's think tank in e-Government development.

### Strategy 3:

*Building Capacity* of i) central e-Government coordination agency in implementing, supporting and promoting e-Government; ii) government employees in delivering public information and services and interacting with public via electronic and mobile channels, and iii) citizens in utilizing electronic and mobile services and interacting with Government.

*Action Line 3.1: Leadership Capacity* – EGOV Leadership Program – develop e-champions and nurture government CIOs and garner political support for e-Government development.

*Action Line 3.2: Institutional Capacity* – EGOV Program and Project Management, ICT Governance, Security and Privacy, etc.

*Action Line 3.3: Capacity of Employees* – Awareness/ICT Literacy/Level of innovativeness/ICT Use/Collaborative Work/Information and Knowledge Exchange and Sharing.

*Action Line 3.4: Capacity of Citizens* – Computer literacy and e-Citizen programs to raise the capacity of citizens in using modern technologies to benefit as well as to avoid security and privacy issues.

### STRATEGY 4:

*Building Common Infrastructure* in the Government that can be utilized by many or all ministries and agencies.

*Action Line 2.1: Government Network* - to securely connect the agencies and ministries of the government and

also internal and external resources like shared datacenters and private ISPs.

*Action Line 2.2: National e-ID* - to be used by all agencies and ministries to identify and authenticate citizens in their e-services.

*Action Line 2.3: Data Center* – to provide access to government data across government for delivery of shared public services.

*Action Line 2.4: Data Exchange* – a common gateway and network to provide a platform for data exchange.

*Action Line 2.5: Communication* – Video conference facility to connect local authorities/district level with center.

*Action Line 2.6: Security Services Network* –to connect All police zones and fields with the MoIA through network.

### Strategy 5:

*Developing Common and Sector-specific Applications:* i) common applications to be used by many or all ministries, agencies, local administrations, staff or citizenry in order to reduce administrative burden, increase efficiency and support quality and standard services.

#### *Action Lines for Common Applications*

*Action Line 5.1: Applications for Ministries/Agencies* - e-Procurement, e-Administration or e-Doc Management, Human Resource Management, Planning and Monitoring, Criminal Investigation, Vehicle Registration, etc

*Action Line 5.2: Applications for Local Administrations* - e-Jirga enabling and connecting local Jirgas in different parts of the country for sharing of experiences and lessons learnt through Internet, mobile telephony or digital TV, access to laws and regulations, etc

*Action Line 5.3: Applications for Government Employees* including online competitive recruitment system, Pensions/Salaries/ Subsidies, e-Learning, knowledge sharing, etc.

*Action Line 5.4: Applications for Citizens* – including common mobile application which can be utilized by various government agencies for information and service delivery and by citizens for reporting and feedback; one-stop-shop for public information and services, e-Election, etc

#### *Action Lines for Sector-specific Applications*

*Action Line 5.5: Applications for Services in Healthcare* – Public Health and First Aid Information System, laws and regulations, Standard Treatment Procedures (STP)

for personal through e-channels and health knowledge bases, telemedicine, Emergency Response System, Disease Early Warning System, etc

*Action Line 5.6: Applications for Services in Education-* Mobile platform and e-Help desk for education services, National/Local Resources Management System, Online Education System, e-Library System, online examination/assessment, online courses for self-learning, etc

*Action Line 5.7: Applications for Services in Agriculture-* Agriculture marketing System, Agriculture Community Center and portals, Land Management System – managed by Afghanistan Land Authority (ALA), etc

*Action Line 5.8: Applications for Services to Businesses-* Government to Business Portal, Central Business Registry, Central Taxation Information Management System, SME Loan Processing System connected to banks and registration systems, Company Feedback System

### Strategy Implementation Mechanisms

#### Key Success Factors

Key success factors for e-Government strategy implementation in Afghanistan are led by strategic principles and takes into account experience from countries with well-established e-Government practice. The most critical among them include:

- 1) Focus on National Development – Implementation of e-Government strategy should be a strategic choice of the Afghanistan Government in its national development agenda.
- 2) Whole-of-government Ownership – it is imperative that all ministries and agencies of government take full ownership of e-Government strategy and its implementation.
- 3) Engagement of Stakeholders – it is important that all key stakeholders including various groups benefit from e-Government development and also contribute to the strategy implementation.
- 4) Top-level Sponsorship – to ensure implementation of e-Government in a fair and balanced manner, maintain strategic focus and provide the financial and human resources and to drive the impetuous of change and reform.
- 5) All-round Capacity – capacity to develop, operate and benefit from e-Government is critical to reach its vision and have the developmental impact on the peoples' daily lives.

#### Governance Structure

In response to high demand for general direction and coordination of e-Government initiatives in Afghanistan and taking into account international practice it is recommended to define a governance structure for AeGS implementation. The governance structure could consist of:

- 1) *IT/e-Government Development Council* – provide advisory services to the Government in all matters related to ICTs and to act as a coordinating focal point will take up role of providing leadership and garner political and senior management support, ownership and engagement in developing e-Government in the country.
- 2) *E-Government Directorate*– the central coordinating, monitoring and evaluation agency under MCIT for e-Government development in Afghanistan.
- 3) *Government CIO Forum* – coordinating body composed of Government Chief Information Officers (GCIO) or IT Directors and IT Heads of all the key ministries and agencies of the government.
- 4) *External Partners/Stakeholders* – developing e-Government and providing quality services to the people will require the government to partner with the private sector, NGOs and academia at various stages and in various roles of e-Government development and deployment.

#### Implementation Program

To implement the changes in government and governance expected with AeGS and to ensure delivery of its actual impact and benefit it is required to set up and launch EGOV program (AeGP). This program will define organization structure and set up management processes essential for its implementation such as: a) benefits management, b) stakeholder management, c) risk management and issue resolution, and d) planning and control including change management and monitoring and evaluation. The program will be directed, coordinated and executed by key actors through identification of their roles and responsibilities and involvement of government institutions related to IT and e-Government as well as external partners and stakeholders from different sectors.

#### Potential Risks

Potential risks for successful implementation of e-Government are associated with development issues and challenges in Afghanistan derived from the e-Government assessment exercise. The most critical among them are summarized as follows:

- 1) Political instability and Insecurity – Afghanistan has been in conflict for over 40 years now.

- 2) Lack of Ownership – e-Government is seen as the mandate of the ICT Ministry.
- 3) Weak Institutional Capacity – capacity for e-Government development and operation is extremely limited in the government.
- 4) Low level of literacy – assimilation of ICT into daily lives can be limited by low level literacy.



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## ABBREVIATIONS

E-Government	Electronic Government
EA	Enterprise Architecture
EGOV.AF	Electronic Government in Afghanistan
DCN	District Communications Network
ICT	Information and Communication Technology
IDI	Information technology Development Index
ITU	International Telecommunication Union
G2B	and Government to Business
G2C	Government to Citizen
GCN	The Government Communications Network
HDI	Human Development Index
LSD	Least Developed Countries
MCIT	Ministry of Communications and Information Technology
OIC	Organization of the Islamic Conference
UK	United Kingdom
UN	United Nations
UNDP	United Nations Development Program
UNU	United Nations University
UNU-IIST	UNU International Institute for Software Technology
UNU-IIST-EGOV	Center for Electronic Governance at UNU-IIST
VDN	Village Communications Network
WGI	Worldwide Governance Indicators
DMS	Document Management System
KM	Knowledge Management
EMGKR	Electronic/Mobile Government Knowledge Repository
IM	Information Management
IT	Information Technology
MSARG	Macao Special Administrative Region Government
SAR	Special Administrative Region
UN	United Nations
UNU	United Nations University
UNU-IIST	UNU International Institute for Software Technology
UNU-IIST-EGOV	Center for Electronic Governance at UNU-IIST

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## 1. INTRODUCTION

Afghanistan is a country with a long history of wars and conflicts but has recently set itself the vision of being a peaceful meetingplace of civilizations – the “Asian Roundabout” – a central point of interconnection of goods, ideas, services and people in the fast expanding Asian economy.

Afghanistan’s location at the heart of Asia, its natural wealth and expanding economy positions the country towards this vision. At the same time, Afghanistan’s government recognizes that peace and security can be guaranteed by gaining the confidence of the people in the government’s ability to deliver public services, good governance, human rights protection including gender equality and economic opportunities. Good governance, the rule of law, and human rights is accepted as the foundation strategies for building towards this vision. In addition, consultation and engagement of the citizenry is recognized as imperative in the development process.

As Information and Communication Technologies (ICT), and in particular Electronic Government (e-Government), is an increasingly powerful tool to support and drive public sector reform and modernization, towards enhanced public service delivery, support good governance, enable human rights and empower citizen participation, Ministry of Communications and Information Technology (MCIT) initiated development and implementation of innovative and comprehensive ICT and e-Government strategies which address the economic, social and governance needs of national development.

This document presents the report on Electronic Government Strategy development in Afghanistan, in the

context of and supporting and driving Afghanistan’s national development goals and vision. It was developed through a project called EGOV.AF – Developing Electronic Government in Afghanistan run by MCIT and the Center for Electronic Governance at the United Nations University – International Institute for Software Technology (EGOV-UNU-IIST). The EGOV.AF project aimed at developing local capacity in Afghanistan for e-Government strategic planning which based on the country needs and aligned with the national development priorities and public administration reforms.

In the particular context of Afghanistan, the e-Government vision, strategic goals and action lines were elaborated with participation of over 50 organizations from the government, academia, private sector, international development partners and NGOs and agreed among key stakeholders taking into account lessons on e-Government strategic planning from different countries experiences relevant to Afghanistan.

The structure of this report is organized as follows: Section 2 layouts the EGOV strategic planning process in Afghanistan including underlying methodology and major steps fulfilled within the EGOV.AF project to provide inputs for AeGS. Section 3 presents strategic framework and strategic principles which underpins the EGOV development in Afghanistan and articulates AeGS vision, strategic goals agreed among key stakeholders accompanied with the strategic directions, action lines. In addition, it considers strategy implementation mechanisms including key success factors, governance structure, implementation program and major risks. Finally, visioning and strategic planning templates, summary of visioning and strategy development workshops are included as appendices.

## 2. EGOV STRATEGIC PLANNING IN AFGHANISTAN

This section presents e-Government strategic planning process in Afghanistan implemented within the EGOV.AF project based on the underlying methodology. Guiding by the key principles and major subsequent steps defined by the methodology three were fulfilled. They are: i) e-Government readiness assessment aimed at exploring national and international context, demand, capability and enabling environment for e-Government; ii) benchmarking studies to learn lessons e-Government strategic planning from different countries relevant to Afghanistan; and iii) visioning and strategy development for e-Government in Afghanistan.

General direction and mentoring for the e-Government strategic planning process in Afghanistan was provided by the project staff from UNU-IIST-EGOV while coordination, communication and help-desk support for the stakeholders was executed by MCIT.

Key findings from these steps that inform e-Government strategy are included in this report and presented in this section following the methodology.

### 2.1. METHODOLOGY

The methodology for e-Government strategic planning in Afghanistan adopted within the EGOV.AF project explains aim and objectives, provides a set of key principles, defines major steps and equips with tools for strategic planning.

#### 2.1.1. AIM AND OBJECTIVES

Strategic planning for e-Government in Afghanistan has received the attention of authorities and policy makers and was supported by international organizations. The aim is to develop e-Government strategy, which address the real needs of the country, by taking into account the critical factors which influence the implementation of e-Government and learning lessons from e-Government strategic planning in countries relevant to Afghanistan.

In general, strategic planning is a discipline aimed to produce fundamental decisions and actions that shape and guide what an organization or country is, what it does and why it does it. It provides answers to some basic questions: a) the identity of the organization or country; b) the existing capacity; c) the current situation and the problems to be addressed; d) the critical issues requiring response; e) how resources should be prioritized and allocated

Electronic government (e-Government) strategic planning defines a vision and strategic goals for e-Government and sets out strategic directions and action lines in support of achieving these goals and the e-Government vision. E-Government strategy is important

for defining priorities to support national development and public administration reform. Among objectives of e-Government strategy the following are key:

- 1) Providing direction for EGOV implementation and a roadmap for how this will be achieved at the whole of government level
- 2) Engaging and coordinating agencies implementing e-Government projects.
- 3) Promoting inter-ministerial and inter-agency collaboration.

#### 2.1.2. KEY PRINCIPLES

Many developing countries have adopted their national e-Government strategies but usually these strategies are driven by donors and developed by international consultants. Moreover, the focus in developing such strategies is mostly on the best practices from developed countries without enough emphasis on the ownership of the strategy and local context.

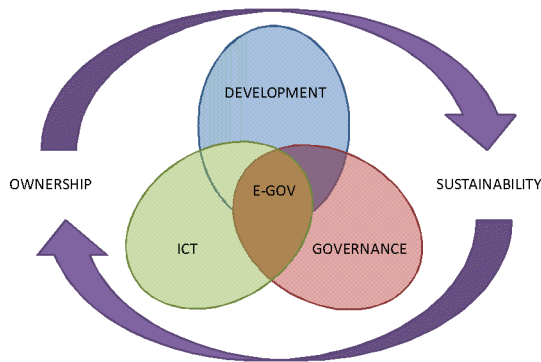
As one can see from the development practice, among the main reasons of failure is lack of national ownership which is fundamental in formulating and implementing programs towards achieving development results. Another concern in development area is engagement of stakeholders. Therefore, planning in developing countries as well monitoring and evaluation of strategic plans and implementation programs require a focus on nationally owned development priorities and results, and should reflect the guiding principles of national ownership, capacity development and human development.

Thus, key principles critical to effective e-Government as part of national development planning, are based on the guiding principles for planning for development results [1] and presented as follows:

- 1) *Ownership* – fundamental in formulating and implementing programs to achieve development results
- 2) *Engagement of Stakeholders* – encourage key stakeholders to organize themselves to achieve what they have agreed to achieve
- 3) *Focus on Development Effectiveness* – ensuring evidence-based impact and contribution to the national development objectives

E-Government strategic planning is conducted in the context of national development, ICT development and governance reform and modernization, as shown in Figure 1 **Error! Reference source not found.**

Figure 1: e-Government Strategic Planning Context



### 2.1.3. MAJOR STEPS

The e-Government strategic planning process defined and fulfilled within EGOV.AF project includes three major subsequent steps:

- 1) *E-Government Readiness Assessment* - to explore national and international context, demand, capability and enabling environment in Afghanistan.
- 2) *Benchmarking Studies* - to learn lessons on e-Government strategic planning from different countries relevant to Afghanistan.
- 3) *Visioning and Strategy Development* – to define and agree on Afghan e-Government vision, strategic goals, strategies and action lines with engagement of key stakeholders.

### 2.1.4. STRATEGIC PLANNING TOOLS

Although a number of tools are available for strategic planning, result-based planning and management (RBPM) tool and Balance Scorecard (BS) are among most frequently used in practice. Taking into account the main focus on results of RBPM it is applied for developing e-Government strategy in Afghanistan along with some elements derived from BS.

#### *Results-Based Planning and Management*

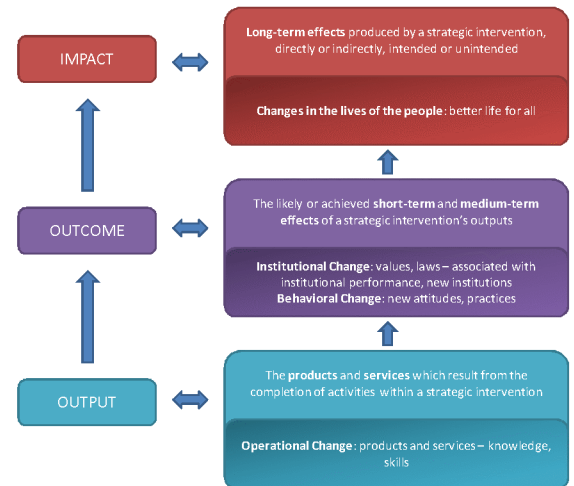
Results-based planning and management provides a coherent framework for strategic planning and public management on learning and accountability [1]. It is a planning, management and performance reporting tool for strategic planning, monitoring and evaluation.

RBPM defines expected results based on analysis and identifies beneficiaries and designs programs to meet their needs. In addition, it analyzes risks and ensures that necessary resources are planned for and important indicators are identified. These indicators are used to monitor the progress of strategy implementation. On the other hand, evaluation is concerned with the analy-

sis comparing actual results achieved against targets and about increasing knowledge by learning lessons and integrating them into decisions.

Results-based planning requires a focus on clearly defined long and short-term results. This focus on results is embodied in clearly defined impacts, outcomes and outputs as shown in Figure 2.

Figure 2: Results-based Planning and Management



The strategic planning results in a vision, mission, strategic goals, strategies, objectives and initiatives as follows:

- The vision is an overarching statement of the way an organization wants to be, an ideal state of being, at a future point in time.
- The mission, on the other hand, is part of a goal or endeavor assigned as a specific responsibility of a particular organizational unit and includes tasks, together with purpose, which clearly indicates the actions to be taken and the reasons.
- Strategic Goals are high-level statements refining the vision statement, particularly in the strategic areas of the organization.
- Whilst, a strategy is a long term plan of action designed to achieve a particular goal or contribute to achieving a number of goals.
- Objectives specify how a strategy can be implemented with measured targets and initiatives, projects and programs are how objectives are implemented.

A vision statement is about impact and explains why the work is important and can inspire people to work. With-

out a clear vision of what the strategy hopes to achieve, it is difficult to clearly define results.

The impact is on the society as a whole and answers the “why?” of the strategy, while, outcomes and outputs defines “what must be changes?” and relates to specific beneficiaries. On the other hand, the “how?” of the strategy defines inputs and activities and is related directly to the stakeholders. The main characteristics of vision/impact statements, in the context of national development, include:

- Impacts are actual or intended changes in human development as measured by people’s well-being.
- Impacts generally capture changes in people’s lives.
- Impacts refer to the “big picture” changes being sought.
- Impacts are normally formulated to communicate substantial and direct changes in these conditions over the long term.
- An impact statement should ideally use a verb expressed in the past tense, such as ‘improved’, ‘strengthened’, ‘increased’, ‘reversed’, or ‘reduced’.

In the process of strategic planning it is important to frame planned interventions or outputs within a context of their desired impact/vision.

Strategic goals, or outcomes, describe the intended changes in development conditions that result from the interventions of governments and other stakeholders.

Main characteristics of goals/outcomes include:

- Outcomes/goals are medium-term development results created through the delivery of outputs and the contributions of various partners and non-partners.
- Outcomes provide a clear picture of what has changed or will change in a particular focus area within a period of time.
- An outcome statement should use a verb expressed in the past tense, such as ‘improved’, ‘strengthened’ or ‘increased’, in relation to a national or local process or institution.
- Outcomes cannot normally be achieved by one agency and are not under the direct control of an agency responsible for strategy and program implementation.

- Outcomes may refer to immediate, intermediate and longer term outcomes, or short, medium and long-term outcomes of higher level development strategies and programs.
- An outcome should not describe how it will be achieved and should avoid phrases such as “improved through” or “supported by means of”.

Outputs, on the other hand, are the most immediate results of program or project activities. It is important to define outputs that are to make significant contribution to achievement of the outcomes.

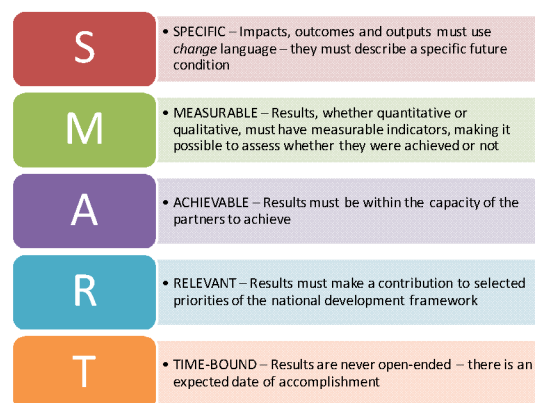
The main characteristics and salient points to keep in mind with respect to outputs include:

- Outputs are usually within the greatest control of the government;
- They are short-term development results produced by projects and initiatives;
- They must be achieved with the resources provided and within the time-frame specified;
- Outputs must be deliverable within the respective programming cycle;
- Typically more than one output is needed to obtain an outcome.

#### Smart Outcomes and Indicators

In defining outcomes and results it is important to ensure that adequately framed to drive and support the strategy. The characteristics of a SMART outcome or results are shown in Figure 3. **Error! Reference source not found..**

Figure 3: SMART Outcomes and Results





In formulating outputs, the following questions should be considered:

- What kind of policies, guidelines, products and services is needed in order to achieve a given outcome?
- Are they attainable and within direct control?
- Do these outputs reflect an appropriate strategy for attaining the outcome?
- Is there a need for additional outputs to mitigate potential risks that may prevent achieving the outcome?
- Is the output SMART – specific, measurable, achievable, relevant and time-bound?

Outputs are achieved through activities. Activities describe the actions that are needed to obtain a stated output. They relate to the processes involved in generating tangible goods and services or outputs, which in turn contribute to outcomes and impacts. Typically, more than one activity is needed to achieve an output. Activity statements generally start with a verb and describe an activity or action.

In formulating activities the following question should be considered:

- What actions are needed in order to obtain the output?
- Will the combined number of actions ensure that the output is produced?
- What resources (inputs) are necessary to undertake these activities?

### Balanced Scorecard

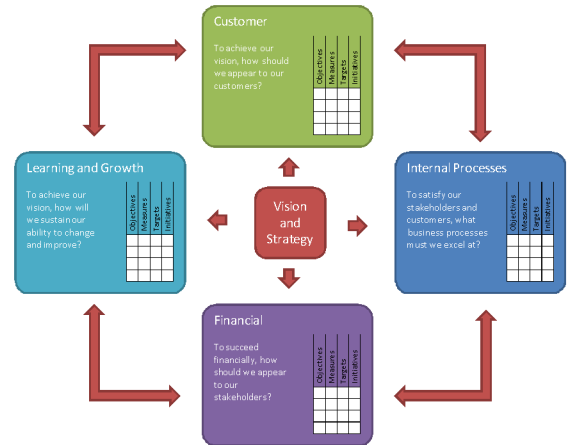
The balanced scorecard is a strategic planning and management system that is used extensively in business and industry, government, and nonprofit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals [17].

The Balanced Scorecard is classically characterized by four distinct but related perspectives of the organization: 1) customer; 2) internal processes; 3) learning and growth; and 4) financial, perspectives.

As shown in Figure 3 the customer perspective focuses on defining the customer and value propositions for them based on operational excellence, product leadership and customer intimacy. The internal process perspective is about identifying the key processes the or-

ganization must excel in order to continue adding value to customer.

Figure 4: Balanced Scorecard



Balanced scorecards are generally developed along the following 6 steps or processes:

- 1) *define the mission* – defining the core purpose of the organization – why the organization exists
- 2) *articulate the values* – deep held belief within the organization and are demonstrated through the day-to-day behavior of all employees
- 3) *develop the vision* – describes what the organization would ultimately like to become – where the organization is going
- 4) *define perspectives* – these are categories of performance measures for the organization
- 5) *develop strategies* – broad priorities adopted by an organization in recognition of its operating environment and in pursuit of its mission
- 6) *define objectives, measures, targets and initiatives* – concise statement describing the specific things the organization must do well in order to execute its strategy

## 2.2. E-GOVERNMENT READINESS ASSESSMENT

The e-Government Readiness Assessment in Afghanistan carried out within EGOV.AF project provides baseline information for developing e-Government strategy that addresses the emerging needs of the Afghan people in existing environment, and to establish sustainable implementation structure [4].

The assessment was multi-layered and used various sources for collecting data including internal and external stakeholders, official government documents, reports and studies from international development insti-

tutions such as UN, World Bank, ITU and USAID. Twenty four key ministries and agencies of the Afghanistan Government took part both in the national and agency surveys and twenty five external stakeholders including NGOs and international organizations working for development and governance, private ICT service providers, banks, universities and representatives from donor community in Afghanistan participated in the national level survey.

In order to ensure proper data gathering and assessment in general, a number of awareness raising and capacity building activities for local project staff from MCIT and also for government agencies were organized within the project. High level managers from MCIT were involved in interpreting these various sources including government and international publications for the assessment exercise. UNU government fellowship programs provided for the MCIT managerial staff and a senior lecturer from Kabul University helped to develop local institutional capacity through learning by doing process where they were involved in joint research and assessment activities.

Data collected from the surveys were consolidated as a spreadsheet of responses. The consolidated data was used for assessing the state of e-Government readiness by applying different methods including statistical and network analysis. The summary of key findings of e-Government readiness is presented below following the Afghanistan e-Government ranking in global benchmarking surveys.

### 2.2.1. AFGHANISTAN E-GOVERNMENT IN GLOBAL RANKING

According to UN e-Government Survey 2010 Afghanistan ranked 168 out of 192 countries and the lowest in South Asia [3]. Over the years e-Government in Afghanistan has developed at a very slow place. E-Government development and e-Participation trends in Afghanistan comparing with the world and different regions during 6 year period from 2004 till 2010 are shown in the Figure 5 and Figure 6.

Web-presence, Human Capital and Infrastructure in Afghanistan that compose e-Government development index in UN survey comparing with the world in Figure 7, Figure 8, and Figure 9 demonstrate the trends in these important areas.

Figure 5: Afghanistan’s e-Government development

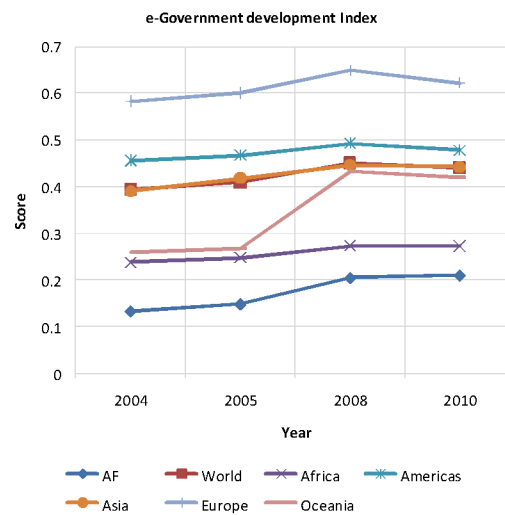


Figure 6: Afghanistan’s e-Participation

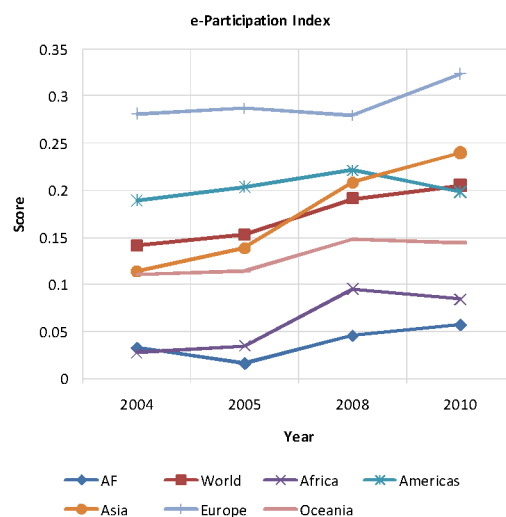


Figure 7: Afghanistan's e-Government: Web Measure Index

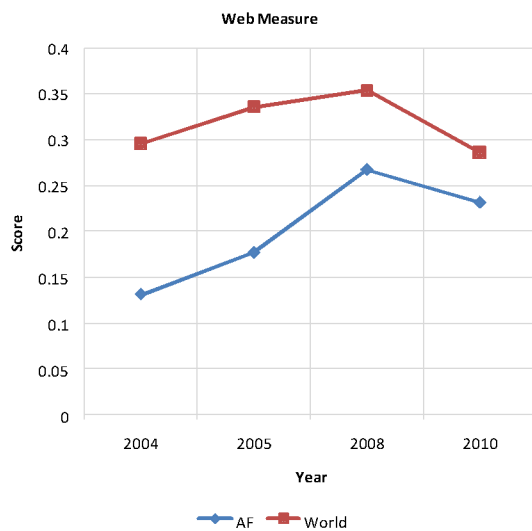


Figure 9: Afghanistan's e-Government: Infrastructure Index

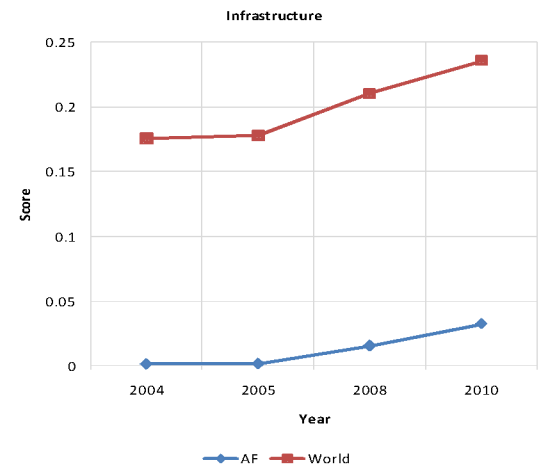
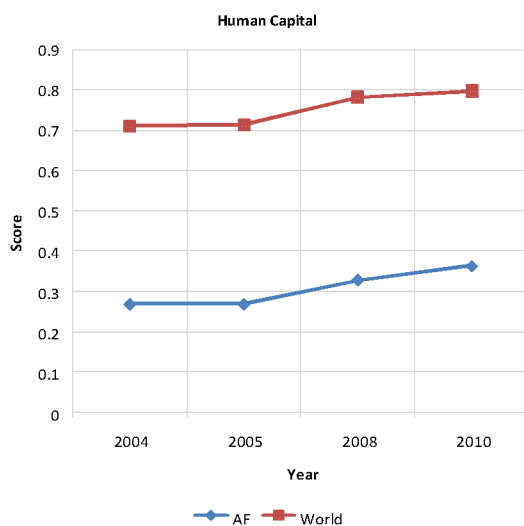


Figure 8: Afghanistan's e-Government: Human Capital Index



## 2.2.2. CONTEXT FOR E-GOVERNMENT

### Country Profile

- Afghanistan is a landlocked country with mountain terrain located in South Asia with high population growth and fertility rates.
- Afghanistan belongs to the least development countries with low income economy, one of the poorest countries in the world that are highly dependent on foreign aid according to the UN and World Bank.
- According to UNDP Human Development Report [3] Afghanistan is among countries with low human development index.
- The social norms, culture, behavior and attitude in Afghanistan are determined by the Islamic religion.
- The most significant challenges of war in Afghanistan include destroying infrastructure, loss of government capacity, the disruption of economies at all levels, destroying the institutional capacity, the collapse of social services, and destroying the human capacity.

### International Perspective

### *Millennium Development Goals*

With respect to the internationally accepted Millennium Development Goals the highest priority for Afghanistan is ending poverty and hunger followed by universal education and maternal and child health.

### *International Development Partners*

Key strategic areas of assistance by international development partners in Afghanistan include; (i) building capacity of state, (ii) increasing accountability to citizens, (iii) combating corruption, (iv), peace and security, (v) private sector development and (vi) rural development and poverty reduction.

### **National Perspective**

#### *Governance Issues*

- Afghanistan ranked the lowest in South Asia in government effectiveness, rule of law, control of corruption, voice and accountability and political stability according to the World Bank Governance Indicators [4].
- A major barrier to economic and social development of the country is the complex governance structures of the state Centralized governance structure in Afghanistan with high level of bureaucracy and corruption reduces the interaction between government and citizens.
- The low level of the independence and effectiveness of the judiciary remains a key challenge to national development.
- According to the majority of the external stakeholders, transparency has not been raised as an issue in the government whilst the central government mostly believed that transparency was raised as an issue and is addressed by the national programs. Discrepancy of opinions on transparency issues among central government and external stakeholders can demonstrate that: (i) transparency issues are needed to be addressed more effectively with the evidence-based impact, (ii) the government should raise awareness of its programs on improving transparency and solving corruption problems.
- The majority of the external stakeholders do not agree that personal information is protected by law but more than half of the central government respondents replied positively. This kind of disagreement can demonstrate two issues: (i) personal information must be more clearly and effectively protected by legislation to better address people concerns, (ii) in cases of existing legislation, it should be accessible and understandable not only

for the government but mostly for ordinary people and be effectively and visibly enforced

- Among the most difficult issues related to introducing law-based, visibly controlled, management of personal information in the e-Government environment are: (i) to realize people's right to access and correct own personal information and also (ii) exchange of information monitored by independent body and logged. The issue of using personal information only for purposes compatible with the purpose of collecting information and also use by government of software capable to track individual visitors are among main concerns of the external stakeholders.
- Breaches of privacy rights and cyber crime in Afghanistan are almost never prosecuted demonstrating that the enforcement of privacy rights and cyber security are to be thoroughly considered while developing e-Government.

#### *Geographic and Demographic Issues*

- Due to the remoteness people in mountain area are excluded from social, political and economic systems and from access to information and services.
- Among the most relevant geographic and demographic issues with respect to governance are: (i) infrastructure (electricity, ICT); (ii) literacy/level of education; (iii) environment/climate change; (iv) living condition/air pollution; and (v) mountains/remote areas.
- External stakeholders expressed the relevance of security issues and war, employment and economic activities in addition to the above mentioned.
- High population growth and fertility rates pose serious challenges in meeting the target of reduction of maternal mortality according to the official national development documents.

#### *Environmental Issues*

Key environmental issues for Afghanistan include: (i) intensive farming; (ii) land degradation; (iii) resource depletion; (iv) energy conservation; and (v) waste problems.

### **2.2.3. ENABLING ENVIRONMENT**

#### **National Development and Governance Strategies**

- The Afghanistan National Development Strategy (ANDS), adopted in 2008 [7] outlines the national development aspirations, outcomes, benchmarks and timelines. The ANDS framework includes Pub-

lic Administration Reform and Governance Sector Strategy, Local Governance Strategy, Private investment law and strategy and other sectoral strategies.

- Major development and public sector goals respond to the major country challenges and include: (i) elimination of extreme poverty and hunger, (ii) promotion of general equality and empowerment of women, (iii) environmental sustainability and (iv) good governance for poverty reduction.
- The Public Sector Reform and Governance (PAR) Strategy [8] refers to e-Government as tool for: (i) reducing and monitoring corruption, (ii) application in different sectors, (iii) ensuring the right to information by providing wide access to information, (iv) improving effectiveness of public functions and enhanced speed of works, (v) transparency, (vi) accountability with timely monitoring and control.
- The PAR strategy highlights the leading role of ICT Council and MCIT as a coordinator of e-Government development.
- Projects such as Mapping, National Identity Cards, Valuable Documents and Census are defined by the PAR strategy as high priority projects with the aim to eliminate the need to repeatedly collect the same information at various government institutions.
- Close cooperation between MCIT with related ministries and institutions is requested by the PAR strategy for implementation of the basic nationwide e-Government projects such National IDs, national information center, the information electronic bank of the country.
- Although the PAR strategy clear indicated the significant role of ICT in general and e-Government in particular, e-Government is yet fully recognized within the government as a tool in achieving the national development and public sector reform goals.

#### National ICT Strategies

- The national ICT Strategy of Afghanistan was adopted as part of the ANDS [9] with the strategic goals to: (i) bring every resident, every home and school, every business and every public sector institution into the digital age and online, (ii) create a digitally literate Afghanistan, supported by an entrepreneurial culture for innovation, (iii) ensure socially inclusiveness, consumer trust and social cohesion.
- Major challenges in implementation the strategy include (i) the perception that the strategy is limited to MCIT, (ii) there is no political understanding

about the capability of ICT as a tool for socio-economic development, (iii) ICT is generally understood as telecom services, (iv) ICT sector is not included in public consultation on reducing poverty, increasing transparency and efficient of government, reducing corruption etc.

- The awareness of the ICT strategy remains limited within the government with much of the government unaware of the National ICT Strategy. The strategic alignment between the national ICT strategy and other public sector reform and governance strategies is low with most government agencies not being aware of the strategic link between e-Government and public sector reform and governance. The prioritization of the ICT strategy was based mostly on the pressure from external groups. Government organizations exhibit low levels of interest and understanding of ICT potential and insufficient awareness of the national ICT strategy and its action plan.

#### Legal and Regulatory Framework

- The prevailing legislative process on ICT or e-Government related issues are slow and inefficient.
- A few basic ICT and e-Government related legislation and regulation have been submitted by the government to the Parliament such as: (i) Copyright, (ii) Data/Metadata Standards.
- Key legal artifacts required for e-Government development remains to be enacted, including: (i) Legality of government online publications and transactions, (ii) E-Filing, (iii) Digital authorizations, (iv) E-Signatures, (v) Cyber crime, (vi) Data protection, (vii) Intellectual Property Rights, (viii) E-contracting, (ix) Public Key Infrastructure.

#### Leadership, Coordination and Promotion

- National ICT Council, chaired by First Vice President of Afghanistan was established to lead and coordinate ICT and e-Government at the highest level.
- The Ministry of Communications and Information Technology (MCIT), specifically the ICT Directorate of MCIT is responsible for: (i) policy formulation, (ii) strategic and short-term planning, (iii) data sharing/exchange, (iv) technical maintenance and development of government's presence online.
- The e-Government Unit of the MCIT ICT Directorate is tasked with the development of e-Government in under the leadership of the Minister and the Director General of ICT. The majority of the central government agencies are aware of an authoritative ICT and e-Government Unit which coordinates ICT and e-Government development.

- A number of e-champions who drive the development and promotion of ICT in Afghanistan are recognized by the central government respondents and among them the high level representatives from MCIT and ICT Directors from MoF, IDLG, MoE.
- E-Government development is somewhat embedded in the public administration and is not so much depended on the political appointees.
- There is an active promotion of e-Government across the government of Afghanistan. However, there is only limited support to e-Government from the key government officials at the highest levels of the government.

### Financing

- On average 50 million USD is spent by the government procuring telecommunication and ICT services and equipment. In addition, 1.3 billion USD is invested by the private sector in ICT development.
- A number of different funding models are employed in ICT development in Afghanistan including: (i) central public budget, (ii) cross-budgeting between government departments of agencies, (iii) "Fee for service" model; and (iv) grants.
- Funding is mostly aligned with the public sector reform and development goals and with the priorities of the ICT Strategy.
- While there were no funds allocated specifically for e-Government in the past, around 50 million USD is earmarked for e-Government development for the coming 5 years.

### Partnership

- While many government agencies in Afghanistan work with or are supported by donor agencies, they do not work in a collaborative manner with external non-government organizations.
- In addition, the capacity and skills necessary for such partnerships is also limited in the government.
- The private sector is mostly engaged as technical consultants, suppliers for PCs and networking equipment, providers of telecommunication, database management and hosting services. The academic institutions in Afghanistan have no culture of research and development in the e-Government area and do not collaborate with the government on ICT or e-Government development.

- NGOs, on the other hand, are involved in mainly in capacity building and training and also collaborate with government agencies in various fields from poverty reduction and community building to public health.

### ICT Literacy and Education

- The overall literacy rate for adults in Afghanistan is 27%. While on the other hand over 56% of the civil service employees have an equivalent of college or higher education degree.
- The young generation of Afghanistan is very much inclined to learning ICT skills as ICT has become tool to employability.
- Universities and private training centers provide ICT literacy training but there is no curriculum in ICT with specific focus on business requirements and needs.
- The Civil Service Commission and MCIT both have ICT training centers and institutes for civil servants, and middle managers in the government.
- 5 senior managers in the government do not have time for ICT training and moreover, policy makers do not conceive ICT as an effective tool for them.

### 2.2.4. DEMAND FOR E-GOVERNMENT

#### Public Expectations

- Among the most relevant public expectations in their dealings with government are: (i) transparency and accountability; (ii) responsiveness; and (iii) high quality citizen centered services.
- The most demanded services expected from the government by general public are in relation to: (i) education; (ii) agriculture; (iii) economic development and opportunities; (iv) health; and (v) social welfare.
- The time factor in dealings between citizens and government offices is a major bottleneck and cause of people's dissatisfaction with government services.
- In addition, the cost factor in public's dealings with government offices is also a major problem due to existence of excessive centralization, corruption and favoritism in service delivery.
- According the most of the non-government respondents there is no initiative of citizen-centered government with a one-stop-shop for services while half of the central government respondents believe that initiatives of citizen-centered govern-



ment are common and widely used by public agencies.

- The most expected and valuable features of e-Government applications in the local context are reliability and accessibility of public services, ease of navigation and interactivity, multi-channel delivery, unique, custom-fitted and targeted content.

#### Government Expectations

- Among the high level pressure points to e-Government in the internal administration mutually agreed among two groups of respondents are: (i) deter corruption, (ii) improving efficiency and effectiveness, (iii) increase public safety, (iv) improving communication between political and administrative processes, (v) inter-departmental coordination and cooperation, (vi) knowledge sharing and information exchange, (vii) government flexibility.
- From the external stakeholders' perspective the highest demand in e-Government with regard to the relations with citizens are: (i) transparency and accountability, (ii) responsiveness to public needs, (iii) government responsibility in community empowerment, education, and economic development, and (iv) improving customer satisfaction.
- The highest demand in e-Government in terms of relations with the society indicated by the central government are: (i) responsibility in education, (ii) economic development, (iii) enhancing ability to collect revenue, (iv) transparency and accountability, (v) environmental regulation, and also (vi) inter-departmental coordination and cooperation, (vi) improving communication between political and administrative processes.

#### Government Services

- Almost all government agencies provide services to citizens and within the government and many of them provide services to business, and others.
- The largest variety of services to citizens according to the survey is provided by MoHE, Kabul Municipality and MoE provide the largest variety of services to business is provided by MoCI, Mol, MoHE and KM
- Only few agencies like MoEC provide variety of services within the government and to others but not to citizens and business.
- The public service delivery network demonstrates complexity of relations within the government and with the different parts of the society such as citizenry, business community, NGOs, inter-national organizations, banks, universities and others in terms of services provided and received.

- Almost all government agencies provide services to citizens and within the government, many of them provide services to business, and others. According to the survey MoHE, Kabul Municipality and MoE provide the largest variety of services to citizens and MoCI, Mol, MoHE and KM the largest variety of services to business while MoEC provides variety of services within the government and to others but not to citizens and business.

#### 2.2.5. CAPABILITY FOR E-GOVERNMENT

##### Awareness, Capacity and Use of ICT

- Policy makers are most aware of the benefits of e-Government and the most active users of ICT in government. However, there is very low of awareness across the public sector.
- ICT is mainly used for word processing, e-mails, information related activities, data analysis and presentations while senior and middle managers who use ICT slightly more for presentation purposes compared to data analysis.
- Government is most proficient in gathering and archiving information while relatively weak in digitizing, producing and analyzing information.

##### Government Websites and e-Services

- A number of government agencies had websites with the main purpose of providing information about the agency. The awareness about these government websites is not very high.
- The most visited websites by external stakeholders include websites of MCIT, MRRD, MAIL, MoF and MoHE which predominantly provide information only and some in some cases provide one way interaction
- Citizens are not able to access online documents related to public policy, legislation and decisions important for the public, to communicate with their democratically elected representatives and government officials and give feedback.
- A small percentage of central government agencies does provide on their websites documents related to issues being decided currently. However, awareness of such online provisions is very low externally.

##### IT Applications and Databases

- There are over 100 IT applications and database systems deployed or being developed in the government agencies. These include HR systems, integrated financial systems, GIS systems etc.

- However, it was observed that a number of agencies are developing systems for the same purposes. E.g. a number of agencies are developing human resource management systems instead of using one common/shared solution.

#### On-going ICT/e-Government Projects

- Over 63 IT and e-Government related projects are currently underway in 14 government agencies was identified in the e-Government readiness assessment. These include projects on IT infrastructure like network building and Internet provision and also include the development of a number of key information systems, for example, for human resource management or financial management
- Most of the on-going projects are focused on building basic infrastructure for e-Government
- A number of single projects are implementing for improving public management while some other isolated initiatives attempt to provide government information and some basic services to citizens and business.
- Communication network building projects specified by the respondent agencies include: (i) National Fiber optic ring, (ii) VCN (Village Communications Network), (iii) National Copper Cable Network, (iv) MoE Network Project, (v) Internet Exchange Points, (vi) OLPC Project.
- Among the projects focused on improving management within the government include: (i) AFMIS, (ii) Aid Management system DAD, (iii) Integrated Financial MIS, (iv) State budgeting planning and reporting system, (v) Accounting Administration Pension, (v) ASYCUDA, (vi) Human Resource MIS, (vii) HE-MIS, (viii) EMIS Teacher Registration, (ix) Attendance System, (x) Web Base Reporting, (xi) EPHS and BPHS reporting system and emergency incidents, (xii) CBS AFTS, (xiii) Geographic information system (GIS).
- On-going initiatives intended to provide government information and services for the society are the following: (i) developing web sites of the ministries and agencies, (ii) electronic forms for employment, (iii) announcing competitive employment results online, (iv) registering online complains, (v) Tele Medicine project, (vi) Safety Net, (vii) Budget department web portal, (viii) Customer Resource Desk, (ix) Distance learning training programs.
- Key on-going projects for enabling information sharing and inter-agency collaboration include: (i) National Data Center, (ii) National ID, (iii) Electronic Document Management system, (iv) Communica-

tion between institutes and sharing training materials.

- Capacity building programs related to IT and EGOV for government employees include: (i) CIO training, (ii) IT trainings.
- There is a duplication of efforts on similar projects such as development of websites by the agencies whilst at the same time MCIT has a project to develop 80 websites due to lack of coordination which leads to wasting of resources. .
- External stakeholders are implementing a number of ICT related capacity building initiatives: a) The American University of Afghanistan has IT-enabled training programs and e-learning system and project on several web-services such as online registrations, centralized data and announcement center and collaboration tools; b) Cooperation Center for Afghanistan (CCA) specified such initiatives as access to justice, promoting democracy and human right training and c) Banke Mille Afghan and Kabul Bank are working on the projects for IT-enabled banking services and others.

#### Technical Resources

- MoF, MoPH, MoE and MCIT are among the agencies with most PCs and biggest networks. Number of PCs range from 2030 (MoF) to 22 (MoRR). Size of PC networks range from 800 PCs (MCIT) to 35 PCs (KM).
- Government agencies Internet bandwidth ranges from 128kbps (CSO) to 4Mbps (MoF, MoPH). Internet bandwidth to number of PCs with Internet access in the government agencies range from 1.5kbps per PC (MCIT) to 29kbps per PC (MoLSAMD).
- Internet bandwidth used by external stakeholders range from 64kbps (CCA) to 30Mbps (Insta Telecom).

#### Human Resources

According to the survey results, number of staff in the government agencies varies from a maximum of 216,000 (MoE) with around 75,000 with higher education to 24 (CSO) with around 8 staff with higher education.

#### Financial Resources

- Largest budget for IT is allocated to MCIT totaling 200 Million Af and next three with similar IT budgets are DAB, MoE, Mol. Whilst CSO, the smallest government agency in terms of staff numbers, has an allocated IT budget of 250,000 Af



- Internet takes most of the IT budget for most of the agencies, followed closely by hardware and networking

#### Technology

- Over the past years, Afghanistan has made major strides in the roll-out of ICT infrastructure, building favorable legal environment and improving affordability and availability of telecommunications.
- The development of mobile technology is considerably fast in Afghanistan whilst the development of fixed line telephony has been stagnant.
- Similarly, number of Internet users clearly shows an upward trend in the recent years following a dip in the years 2006 to 2008 while the pervasiveness of fixed broadband Internet is slow. International Internet bandwidth per Internet user has also grown over the years quite dramatically.
- Households with PCs and Internet also show similar growth patterns albeit a slowing of this pace in the recent years

### 2.2.6. PERCEPTIONS AND CHALLENGES

#### Citizen Perceptions

- Citizens believe that e-Government can help prevent corruption
- Public services could be available from local office, Internet cafes, tele-centers, mobile phone and from home due to e-Government.
- They expect that e-Government will provide them convenient access to public services.

#### Agency Perceptions

Agencies believe that implementing e-Government projects will require:

- New knowledge and skills, special training programs,
- More cooperation with others
- Re-engineering administrative processes.

#### General Challenges

- Cost is highlighted as the most important challenge to ICT/e-Government development – including cost of international/ national telecom, cost of Internet and cost of equipment.

- Availability of technical and human resources is the next most challenge – including technical support for operations, implementation and design.

- Security and privacy issues, Internet bandwidth and reliability also feature as key challenges.

#### Specific Challenges faced by Government Agencies

Among specific challenges faced by government agencies are:

- Lack of skills, capacity and awareness is the number one challenge,
- IT budget constraints
- Senior management attitude towards IT in public sector.

#### External Stakeholders

- A number of external stakeholders are willing to partner with government to support e-Government development and to support delivery of e-services.
- They range from organizations that are ready to provide access to information and services to organizations which are willing to support e-Government through research and consultancy.

### 2.2.7. SWOC ANALYSIS

The summary of the strengths, weaknesses, opportunities and challenges derived from e-Government readiness assessment in Afghanistan are presented as follows:

#### Strengths

- Leadership – strong strategic leadership for e-Government in MCIT and a number of ICT champions in the ministries and agencies
- National Development Policies and Strategies – ANDS, Public Sector Reform, ICT Strategy
- High demand from the public and within government to tackle corruption, increase transparency and administrative efficiency and effectiveness
- Key ICT/e-Gov projects on going to develop strategic and technological foundations for e-Government
- Many agency level ICT projects on going

#### Weaknesses

- Very limited awareness of the strategic role e-Government in public sector
- Weak legal and regulatory environment for e-Government
- On-going e-Government initiatives and projects are isolated
- Lack of information exchange and knowledge sharing organizational culture in public sector
- Lack of capacity and skills in e-Government implementation
- Weak partnership with academia in e-Government research

#### Opportunities

- Rapidly developing mobile and Internet services
- High demand and expectations from the public for increased transparency and deter corruption
- A number external stakeholders willingness to partner with government in e-Government implementation and research
- Basic infrastructure and legal base for e-Government are going to be in place soon

#### Challenges

- Cost of telecommunications
- Delivery of government e-services to citizens in remote area
- Lack of technical and human resources for e-Government coordination and implementation
- Literacy and acceptance of e-Government in public sector and society
- Privacy on Information and Freedom of Information issues

### 2.3. BENCHMARKING STUDIES

Benchmarking studies for e-Government strategic planning presented in the “State of the Art” report [10] can help to avoid reinventing the wheel in Afghanistan although experience of e-Government development and implementation in other countries may not be directly applicable to a given country without careful considerations and adaptation.

Countries for benchmarking studies on e-Government strategic planning relevant to Afghanistan are selected

based on the methodology developed by UNU-IIST Centre for Electronic Governance within the EGOV.AF project [10] and organized in two groups:

#### 1) Countries with well-established e-Government Practice

- They been selected based on their consistent e-Government development progress according to global e-Government rankings.
- Among them are Korea and Singapore both top ranked developing countries, United Kingdom as a top performing country in Europe and Estonia ranked among the world leaders in transactional and connected e-Government according to the UN e-Government Survey 2010.
- They all are among 20 top global ranking in UN e-Government Survey 2010 and awarded by UNDESA as countries that have set high standards for e-Government development.

#### 2) Countries with certain similarities with Afghanistan

- They are selected based on comparing and matching within the key affecting factors for e-Government development and using international classification and/or assessment tools identified by the methodology for benchmarking studies.
- Countries from the same Southern Asia sub-region with the growing population and poor communities like India, Pakistan, Sri Lanka and Nepal.
- Pakistan, Sri Lanka and Nepal have additional similarities in terms of challenging from long-term conflicts.
- Moreover, Nepal has even more similarities as a landlocked country with the mountain terrain, and it is also among least developed countries, with low human development index and Pakistan has strong influence on social norms and culture from Islamic religion.
- Saudi Arabia was selected in terms of similarities in cultural and social norms directed by Islamic religion.

#### 2.3.1. EGOV STRATEGIC PLANNING IN SELECTED COUNTRIES

Altogether nine countries from two different groups were selected for case studies to guide e-Government

strategic planning in Afghanistan. The summary of key findings from benchmarking studies is presented below.

### Republic of Korea

The e-Government development in Republic of Korea carried out over the past two decades improved both efficiency and quality of public services that has placed Korea at the forefront among the e-Governments around the globe.

Korea ranked the first place in Global e-Government Ranking released by Brown University in the United States in 2006 and 2007 and awarded by UNDESA as first country in the Category 1 - Global Rankings among the countries excelled in all facets of the UN e-Government Survey 2010.

The e-Government development of Korea with respect Afghanistan and the rest of the world are shown in the following Figure 10 and Figure 11 (based on the UN e-Government Surveys).

Figure 10: e-Government in Korea – e-Readiness (e-Government) Index

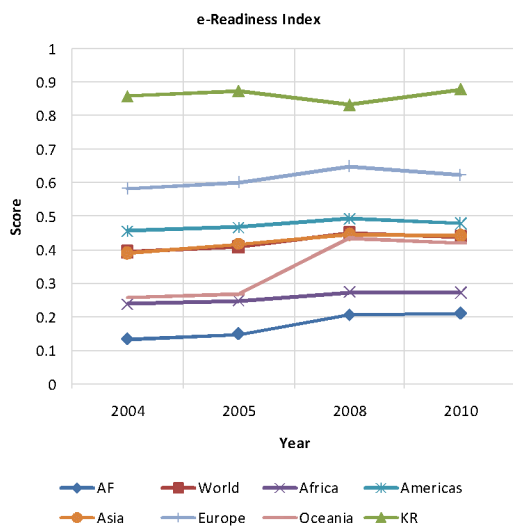
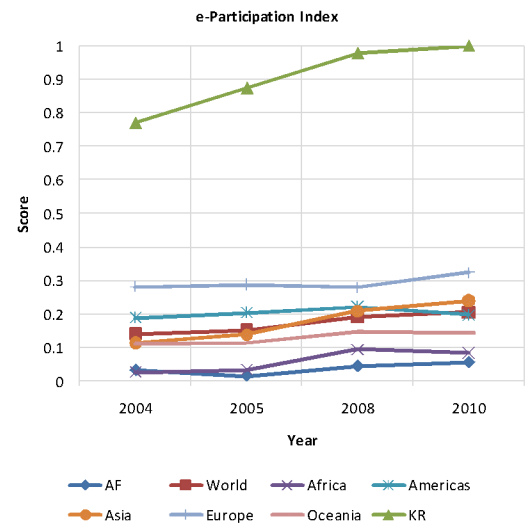


Figure 11: e-Government in Korea – e-Participation (e-Governance) Index



The current e-Government strategy being implemented in Korea is the Master Plan for the Next Generation e-Government in Korea.

The strategy set up the vision for e-Government development and established strategic goals for 5 years to address new changes and implications. It defines implementation strategies based on the key achievements and taking into account lessons from the past.

The master plan is focused on solutions for resolving issues related to changes in the societal, administrative, and IT environment and was prepared through consultations with relevant stakeholders and experts. It is built in support to the "U-Korea Master Plan for 2006-2010" adopted in March 2006 as a framework plan for promoting 'digitalization' across the nation and national strategy "VISION 2030: Hopeful Korea in Harmony" adopted in 2007.

Four strategic goals were identified in the master plan for next generation e-Government and include:

- 1) Offer customer-centric customized citizen service
- 2) Accelerate systems-based government innovation
- 3) Enhance preventative system for safer society
- 4) Lay groundwork for sustainable advancement of e-Government

The strategic framework for the master plan was composed of five key strategies:

- 1) Establish governance structure
- 2) Innovative process and realign systems
- 3) Strengthen performance management system

- 4) Enhance e-Government human resources
- 5) Improve global leadership

This master plan includes a four phased approach to implementation:

- Phase 1: Preparation, 2007 – action plans and principles to realize long term plans for the “Participatory Government”
- Phase 2: Formation for Foundation 2008 – Business Processing Reengineering and Information Strategy Planning on new e-Government projects and capacity building for the implementation and managing
- Phase 3: Establishment of System, 2009 – 2011 – full scale rollout of systems developed
- Phase 4: Integration, 2012 – enhance performance by integrating systems and focus on delivering higher quality services

### Singapore

Singapore is consistently ranked by international organizations as a country with one of the most developed e-Governments around the world. It was among the top three rankings in Asia in UN e-Government Survey 2010 and was ranked 2nd in a Global e-Government Study by Brown University, United States.

Singapore was awarded by UNDESA in Category 2 - Outstanding Progress among the Top 20 countries with outstanding progress in their e-Government development assessed by the UN E-Government Survey 2010.

The e-Government development of Singapore with respect Afghanistan and the rest of the world are shown in the following Figure 12 and Figure 13, based on the UN e-Government Surveys.

Figure 12: e-Government in Singapore – e-Readiness (e-Government) Index

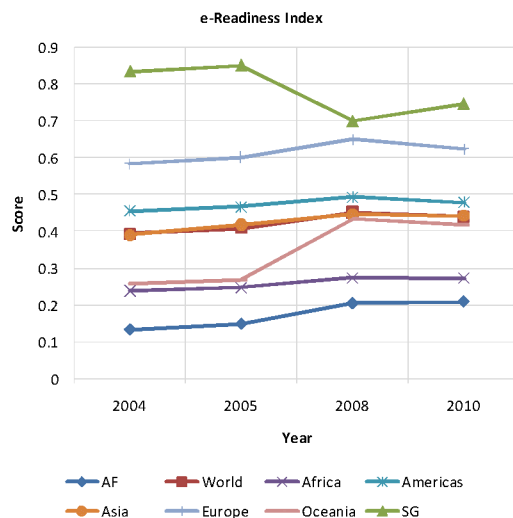
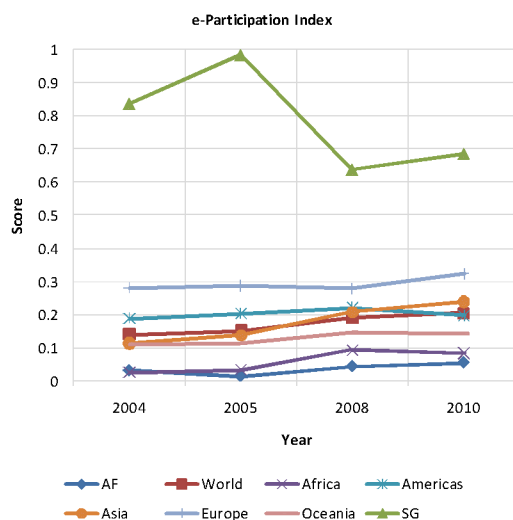


Figure 13: e-Government in Singapore – e-Participation (e-Governance) Index



Singapore’s e-Government journey started in 1980 under its National Computerization Plan and has since been guided by a number of master-plans.

The current iGOV2010 Masterplan lays out a vision of an Integrated Government (iGov) that provides principles and a strategic framework, including four strategic thrust areas, for achieving this vision.

The guiding principles of the iGov2010 are:

- Every service that can be delivered electronically shall be
- The customer shall supply or update personal information only once
- Those without home access shall have access to public delivery network

- Staff must assist those who need special help like the elderly
- All services shall be "customer-centric" and not "agency-centric."
- Physical visits shall be kept as low as possible

The strategic thrusts of iGov2010 include:

- 1) Increasing Reach and Richness of e-Services
- 2) Increasing Citizens' Mindshare in e-Engagement
- 3) Enhancing Capacity and Synergy in Government
- 4) Enhancing National Competitive Advantage

The programs identified in the iGov2010 include:

- 1) Knowledge-Based Workplace – collaborative learning and knowledge sharing as part of a culture of continuous learning
- 2) E-Services Delivery – one-stop of government services through integration
- 3) Technology Experimentation - new capabilities and benefits for the government and its customers
- 4) Operational Efficiency – relevance and usefulness of functions and processes
- 5) Adaptive and Robust Infocomm Infrastructure
- 6) Infocomm Education

In addition, iGov2010 also defines clear targets. These were:

- 8 out of 10 users – are very satisfied with the overall quality of eservices
- 9 out of 10 users – would recommend others to transact with the Government through e-services
- 8 out of 10 users – are very satisfied with the level of clarity and usefulness of information published online on Government policies, programmes and initiatives

Furthermore, iGov details the leadership and management and implementation of the master-plan.

### United Kingdom

United Kingdom (UK) has a long history in e-Government development with consistent strategic planning practice. It was awarded by UNDESA in Category 3 – Regional Rankings United Kingdom as a top performing country in Europe according to UN e-Government Survey 2010.

Between 2004 and 2009, the rate of growth in the percentage of fully online services delivered across the UK has exceeded the European Union (EU) average. Today, 100% of citizen-based services in the UK are fully online,

compared with the EU average of just 71%. In addition, by 2009 the UK had reached 94% sophistication compared with the EU average of 83% ensuring that most citizens and businesses can make use of services online in addition to other routes. Every year, the public sector spends some £16 billion on information and communication technology (ICT) [18].

The e-Government development of UK compared with Afghanistan and the rest of the world, are shown in the following Figure 14 and Figure 15, based on the UN e-Government Surveys.

Figure 14: e-Government in UK – e-Readiness (e-Government) Index

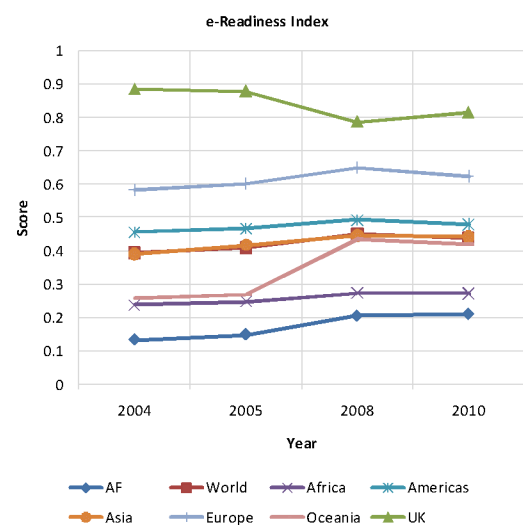
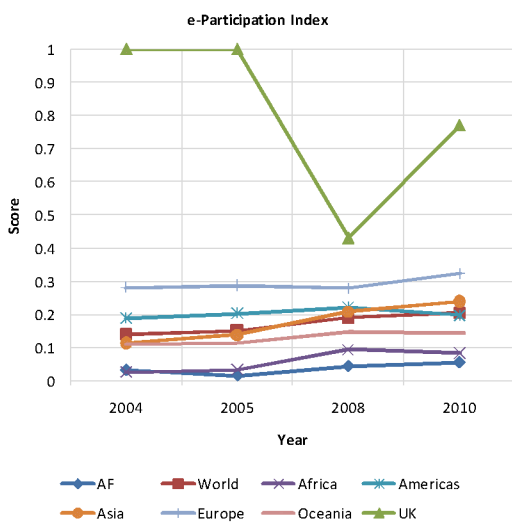


Figure 15: e-Government in UK – e-Participation (e-Governance) Index



In 2004 the UK government introduced the “Transformational Government – Enabled by Technology” strategy with the main goal to use the opportunity provided by technology to transform public sector.

The main features of this strategy are that it:

- presents a strategic view which enables the United Kingdom to use technology decisively and effectively across government to meet its national objectives and respond to the new challenges
- focuses on the core themes which each public sector organization needs to develop into actions for its area of responsibility, and on the supporting actions to be taken across government as a whole

The vision of the transformational strategy is “Citizen and business centered shared services professionally delivered” and outlines three key transformations (or goals) required to achieve this vision:

- 1) The transformation of public services for the benefit of citizens, businesses, taxpayers and front-line staff
- 2) The efficiency of the corporate services and infrastructure of government organizations, thus freeing resources for the frontline
- 3) The steps necessary to achieve the effective delivery of technology for government

A number of obstacles and challenges were faced in the introduction of this strategy. The obstacles include:

- Many systems and processes are still paper based and staff-intensive.
- Many systems are old and use obsolete technologies, which are relatively costly to maintain by modern standards.
- Many systems are structured around the “product” or the underlying legislation and often the customer experience is not joined up, especially across organizational boundaries.
- Many systems were designed as islands, with their own data, infrastructure and security and identity procedures.

The challenges faced by the strategy include:

- New information assurance risks: terrorists, organized criminals and hackers threaten information and services
- Personal data is of increasing concern to individuals and businesses o Government services have yet properly to exploit mobile phone and other mobile technologies.
- Sophisticated, holistic policy solutions rely upon effective and pervasive technology systems across government and beyond to deliver patient choice in the health service.
- People’s expectations of public services rise due to growth of public use of the internet and telephone.

### Estonia

Republic of Estonia is a middle- income country in transition located in the Baltic Region of Northern Europe with very high human development index.

Estonia’s achievements in developing e-Government and information society in general have been recognized in various international surveys, such as the European Commission’s Information Society Benchmarking Report 2005, Global Information Technology Report 2004-2005 published by the World Economic Forum, Top 10 Who are Changing the World of Internet and Politics compiled by the global eDemocracy Forum in 2005.

The UN E-Government Survey 2008 compared Estonia not with the ex-socialist countries with similar levels of per capita Gross Domestic Product (GDP) but with the Nordic countries.

Estonia ranked in UN e-Government Survey among the top 20 countries as the world leaders in transactional and connected e-Government according to UN e-Government Survey 2010.

E-Government development of Estonia with respect to Afghanistan and the rest of the world are shown in the following Figure 16 and Figure 17, based on the UN e-Government Surveys.

Figure 16: e-Government in Estonia – e-Readiness (e-Government) Index

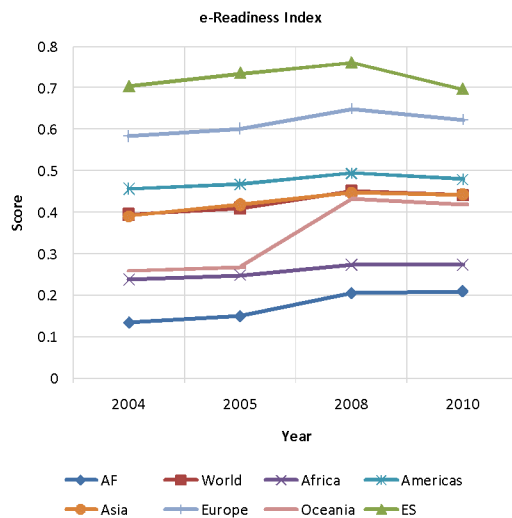
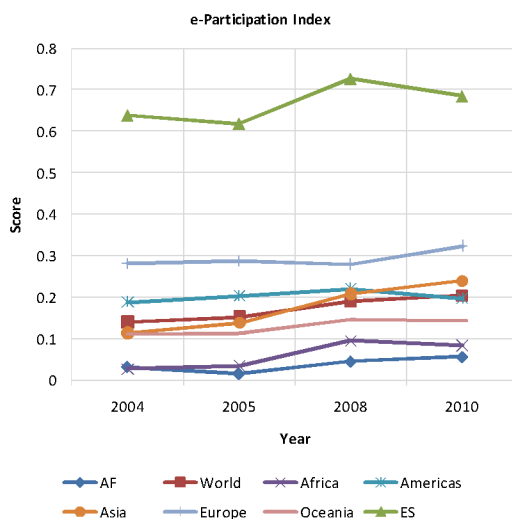


Figure 17: e-Government in Estonia – e-Participation (e-Governance) Index



The strategies for e-Government development in Estonia are embodied in its Information Society Strategies. The developments leading up to the current strategy

can be traced back to the Principles of the Estonian Information Policy, Strategies and Action Plans.

The current strategy which guides and directs the development of e-Government, in the context of the information society, is the Estonian Information Society Strategy 2013. This strategy seeks to contribute to the improvement of the living standard, economy, and public services.

The main features of this strategy include:

- More emphasis on the development of citizen-centred and inclusive society, knowledge-based economy as well as transparent and efficiently functioning public administration
- The strategy responds new challenges and growing demand in modern public services and decision making based on the achievements from the past
- The strategy is closely linked to the previous policy documents: 'Principles of the Estonian Information Policy' and 'Principles of the Estonian Information Policy 2004-2006'.
- Several international and EU-level policy documents, notably the EU i2010 and eGovernment action plans, were taken into consideration
- Estonian Ministry of Economic Affairs and Communications was coordinating the elaboration of the strategy by involving all ministries, the State Chancellery, as well as organizations from the third sector and scientific institutions

## India

Republic of India is developing country located in South Asia with lower-middle income economy and medium human development index. India is one of the fastest growing economies in the world with rapidly developing ICT sector. India is characterized as politically stable and democratic country. India's culture is marked by a cultural pluralism but religions form one of the most defining aspects of Indian culture [14]. However, India is still struggling with poverty which is widespread in India, with the nation estimated to have a third of the world's poor [17]. It is facing various challenges in public service delivery, interaction with citizens particularly those in rural area and collaboration within the government.

Although there are numerous examples of successful e-governance projects in India, the need for e-governance

has not been accepted by many. According to a survey, only 15 percent of e-Governance projects are successful in India; 35 percent fail partially due to political apathy and inefficiency and 50 percent are complete failures [20].

The characteristics of India with respect to Afghanistan are shown in Figure 18. India has some similarities with Afghanistan in terms of geographical location in the same South Asia region, mountainous areas and poor.

Figure 18: India and Afghanistan

Country	LDC	South Asia	OIC	Mountainous	Landlocked	Political Stability & Absence of Violence/Terrorism
Afghanistan	✓	✓	✓	✓	✓	✓
India		✓		✓		

Country	Change in eGov Rank 2003*-2010	Difference in 2010 eGov Rank with AF	Change in eGov Score 2003-2010
Afghanistan	➡ 0	➡ 0	29%
India	⬇ -32	⬆ 49	-12%

Over the years Indian has moved 32 places down on the ranking list of countries by the UN e-Government Survey and is currently ranked 49 places higher than Afghanistan.

The e-Government development of India with respect to Afghanistan and the rest of the world are shown in the following Figure 19 and Figure 20, based on the UN e-Government Surveys.

Figure 19: e-Government in India – e-Readiness (e-Government) Index

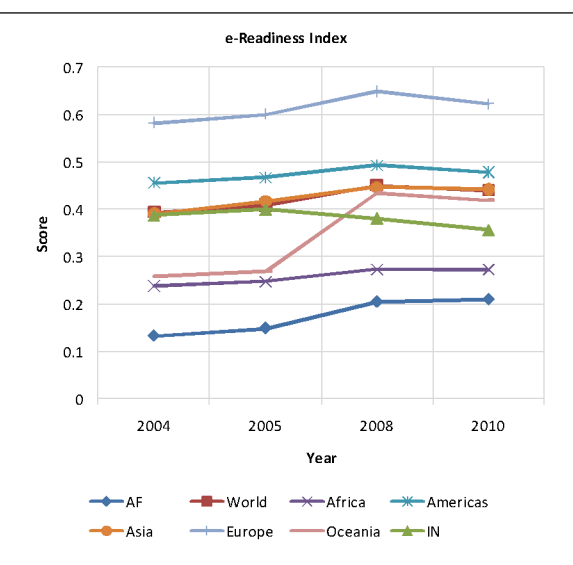
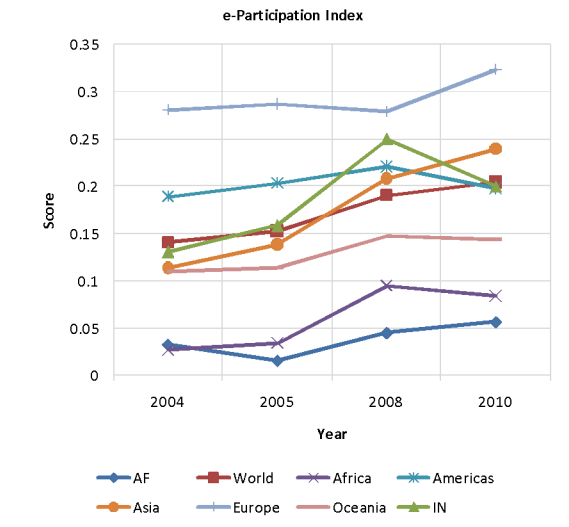


Figure 20: e-Government in India – e-Participation (e-Governance) Index



While India has a considerable history of e-Government and has produced a number of interesting e-Government cases, these have been more or less confined within federal states.

Its first consolidated national level strategy for e-Government development titled "National e-Government Plan (NeGP)" was introduced in 2006 with the mission to "make all government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realize the basic needs of the common man".

This plan was characterized by the following features:

- The ultimate objective is to bring public services closer to citizens
- Holistic view of e-Governance initiatives across the country, integrating into a collective vision
- The 27 Mission Mode Projects and 8 components to be implemented by various Central Ministries, States, and State Departments
- The concerned Ministry/ Department is responsible for all decisions related to their MMPs but decisions impacting NeGP as a whole are taken in consultation with MCIT
- MCIT provides necessary support for project formulation and development for Ministries/



Departments through its Programme Management Unit

- The National Informatics Centre (NIC) of the federal government provides support to Central Ministries, State Government and Districts and to implement national level e-Governance projects
- National Institute for Smart Government provides capacity building support
- Countrywide infrastructure reaching down to the remotest of villages and large-scale digitization of records to enable easy, reliable access over the internet

A number of applications and programs included in the NeGP are:

- National e-Governance Service Delivery Gateway
- The e-Forms Application
- State Wide Area Networks
- State Data Centers
- “Horizontal Transfer of Successful E-Governance Initiatives”
- India Development Gateway
- Common Services Centres
- e-District
- AGMARKNET
- Central Government Health Scheme

### Pakistan

Islamic Republic of Pakistan is developing country in conflict located in South Asia with lower-middle income economy and medium human development index challenged by poverty. Pakistani society is largely hierarchical, with high regard for traditional Islamic values.

The characteristics of Pakistan with respect to Afghanistan are show in Figure 22Figure 21Error! Reference source not found.. Pakistan has similarities with Afghanistan in terms of geographical location in the same South Asia region, poor communities, strong influence of Islamic religion on politics and culture and challenges related to mountainous terrain and ongoing internal conflicts and terrorism.

Figure 21: Pakistan and Afghanistan

Country	LDC	South Asia	OIC	Mountainous	Landlocked	Political Stability & Absence of Violence/Terrorism
Afghanistan	✓	✓	✓	✓	✓	✓
Pakistan		✓	✓	✓		✓

Country	Change in eGov Rank 2003*-2010	Difference in 2010 eGov Rank with AF	Change in eGov Score 2003-2010
Afghanistan	→ 0	→ 0	29%
Pakistan	↑ 27	↑ 22	-3%

Over the years Pakistan has moved 27 places on the ranking list of countries by the UN e-Government Survey and is currently ranked 22 places higher than Afghanistan. The e-Government development of Pakistan with respect Afghanistan and the rest of the world based on the UN e-Government Surveys are shown in the following Figure 22 and Figure 23.

Figure 22: e-Government in Pakistan – e-Readiness (e-Government) Index

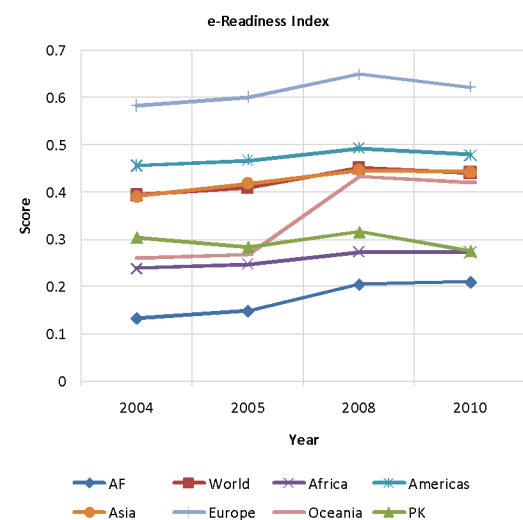
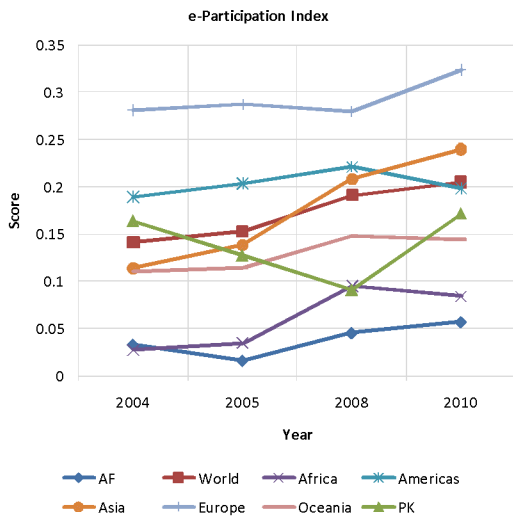


Figure 23: e-Government in Pakistan – e-Participation (e-Governance) Index



The current e-Government strategy for Pakistan was developed in 2005 and proposed for the next 5 years. It prescribes a set of guiding principles for e-Government development:

- Top-level Ownership
- Comprehensive plan instead of piece-meal projects
- Priority on High-Impact Agency-specific application
- Interoperability of Applications
- Outsourcing of project execution
- Ongoing process of learning from best international practices

Although the vision is not clearly defined in the strategy, a number of goals and expected results are presented.

The strategic goals for the strategy are threefold:

- 1) Increase Efficiency and Effectiveness of the Government
- 2) Increase Transparency and Accountability in decision-making
- 3) Enhance delivery of public service to citizens efficiently and cost effectively

The expected impact and outcomes of implementing the strategy were also outlined and include:

- The way the government interacts with its citizens
- Increase the productivity of the Government of Pakistan
- Underpin the capacity and usage of e-business in the private sector

The strategic framework for e-Government development consisted of:

- e-Services for Citizens
- Common Applications
- Agency-specific Applications
- Basic Infrastructure
- Enabling Environment
- Standards

A strategic framework is accompanied by a 5 year implementation plan that gives a high level implementation timeline for the strategy.

In addition, potential risks for e-Government Implementation have been identified and ways to mitigate the respective risks recommended in the strategy.

### Sri-Lanka

The Democratic Socialist Republic of Sri Lanka commonly known as Sri Lanka is a developing post-conflict country located in South Asia with lower-middle income economy and medium human development index.

The characteristics of Sri Lanka with respect to Afghanistan are show in Figure 24. Sri Lanka has some similarities with Afghanistan in terms of their geographical location in the same South Asia region with mountainous areas, both struggling with poverty and affected from civil war and long term conflicts.

Figure 24: Sri Lanka and Afghanistan

Country	LDC	South Asia	OIC	Mountainous	Landlocked	Political Stability & Absence of Violence/Terrorism
Afghanistan	✓	✓	✓	✓	✓	✓
Sri Lanka		✓		✓		✓

Country	Change in eGov Rank 2003*-2010	Difference in 2010 eGov Rank with AF	Change in eGov Score 2003-2010
Afghanistan	→ 0	→ 0	29%
Sri Lanka	↑ 35	↑ 57	1%

Over the years Sri Lanka has advanced 35 places on the ranking list of countries by the UN e-Government Survey and is currently ranked 57 places higher than Afghanistan. The e-Government development of Sri Lanka with respect to Afghanistan and the rest of the world are shown in the following Figure 25 and Figure 26, based on the UN e-Government Surveys.

Figure 25: e-Government in Sri Lanka – e-Readiness (e-Government) Index

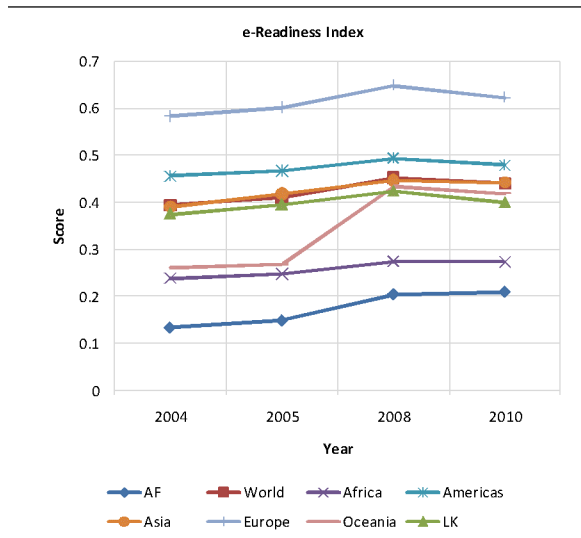
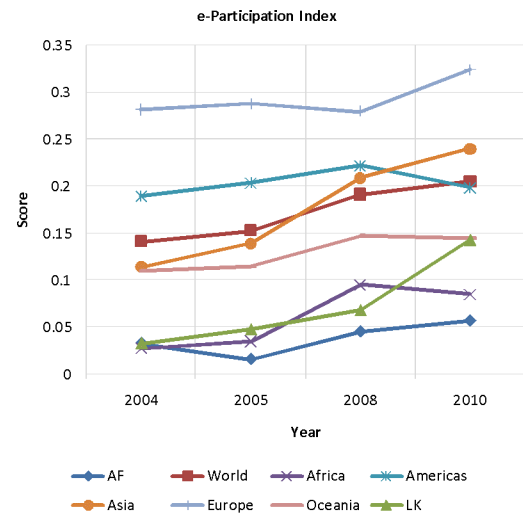


Figure 26: e-Government in Sri Lanka – e-Participation (e-Governance) Index



The Sri Lankan e-Government strategy is embedded in their national e-Sri Lanka strategy and recently e-Government Policy was approved.

The multi-donor funded e-Sri Lanka strategy sets out a national ICT Roadmap and includes the following programs:

#### 1) Re-engineering Government

- Vision: to provide citizen services in the most efficient manner by improving the way government works, by re-engineering and technologically empowering government business processes
- Strategic objectives
  - To facilitate the re-engineering of government business processes from the citizen service perspective to make them more efficient and citizen friendly
  - To use ICT as the tool for efficiently activating the re-engineered business process
  - Key Citizen Service Areas identified for this program included: eMotoring, ePension, eCitizen ID, eForeign Employment, and Ministry of Public Administration and Home Affairs

## 2) Information Infrastructure

- Vision: a user-friendly environment and state-of-the-art technology infrastructure throughout Sri Lanka that enables all citizens to have ready access to information, modern communications, electronic services, and content that realize improvements in the quality of life
- Strategic objectives:
  - Facilitate the installation Rural Telecom Network to provide competitive and affordable telecommunications services and provide channels for delivery of e-citizen services, including e-Government services, e-commerce and e-learning
  - Establishment of a network of 1000 ICT service delivery centres (Nenasalas) to empower the population in the rural areas through affordable access to ICT
  - Create a “single window” for citizens to access services provided by the government through establishing interoperability standards
  - Design and implement Technical Architecture, Security and Standards (TASS) across government and all nationwide activities related to ICT

## 3) ICT Human Resource Development

- Vision: An ICT literate society and an ICT skilled workforce that will be the building blocks for an e-Sri Lanka and leading to an improved quality of life for all its citizens
- Strategic objectives:
  - Equip government employees with the ICT skills and competencies needed to manage and administer e-Government services
  - Increase the opportunities and incentives for basic ICT education through ICTAs growing network of Nenaslas, e-learning network and utilizing the network of existing training institutions

- Create a trained pool of professionals in the government with necessary ‘e-leadership’ skills to champion the e-Government projects

## 4) e- Society

- Vision: Contemporary Sri Lanka whose national economy is significantly contributed to by the rural communities – in other words “taking the economy to the people”
- Strategic objectives:
  - Raise awareness within civil society about the uses and benefits of ICT through a strategic communications campaign
  - Develop multi-stakeholder partnerships in ICT4D among organizations and institutions that are engaged in promoting an e-Society
  - Establish a fund that will adopt a bottom up approach to solicit and develop innovative solutions using ICT to benefit rural poor, women, displaced persons, and those residing in conflict-affected areas o Introduce and mainstream ICT in rural communities to provide increased opportunities for economic growth and an improved quality of life
  - Enhance the capacity of stakeholders by developing & delivering appropriate training programmes

## 5) ICT Investment and Private Sector Development

The vision of current e-Government policy of Sri Lanka developed in 2009 is “to adopt ICT in all its aspects to make government more efficient and effective, improve access to government services, and create a more citizen centric government”. The strategic goals include:

- Improved efficiency and effectiveness of government organizations thereby making each government organization’s budget go further
- Ease and accessibility of government information and services for citizens, and other government organizations
- Promote good governance

- Develop ICT competence among government employees
- Manage ICT resources in sustainable manner

### Nepal

Nepal is a post conflict landlocked and mountainous least developed country located in South Asia with low income economy and low human development index. Mainly due to the decade long civil war the damaging impact can still be felt. Most of the telecom infrastructures were destroyed producing negative impact on the ICT revolution. Government of Nepal has been pushing for holistic e-Government transformation for quite some time. However, the achievement has been less than expected due the considerable challenges faced at the implementation stages.

The characteristics of Nepal with respect to Afghanistan are show in Figure 27. Nepal has a number of similarities with Afghanistan in terms of geographical location in the same South Asia region, low income economy and low human development index. Moreover, they both are struggling with poverty and implications of civil war and conflicts as well as challenges from being landlocked country with the huge mountains along the country.

Figure 27: Nepal and Afghanistan

Country	LDC	South Asia	OIC	Mountainous	Landlocked	Political Stability & Absence of Violence/Terrorism
Afghanistan	✓	✓	✓	✓	✓	✓
Nepal	✓	✓	✓	✓	✓	✓

Country	Change in eGov Rank 2003*-2010	Difference in 2010 eGov Rank with AF	Change in eGov Score 2003-2010
Afghanistan	→ 0	→ 0	29%
Nepal	↓ -142	↑ 15	-18%

Over the years Nepal has moved 142 places down on the ranking list of countries by the UN e-Government Survey and is currently ranked 15 places higher than Afghanistan.

The e-Government development of Nepal with respect to Afghanistan and the rest of the world are shown in the following Figure 28 and Figure 29, based on the UN e-Government Surveys.

Figure 28: e-Government in Nepal – e-Readiness (e-Government) Index

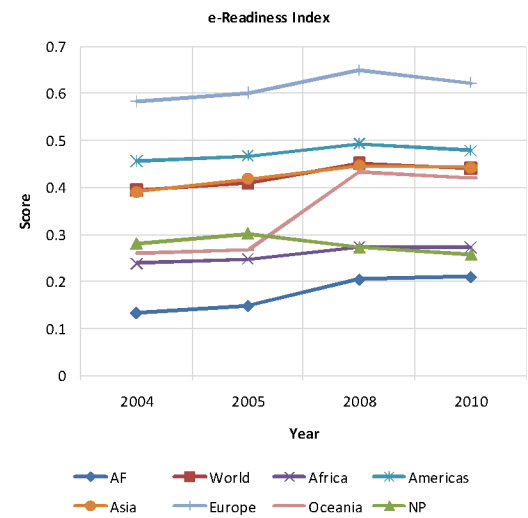
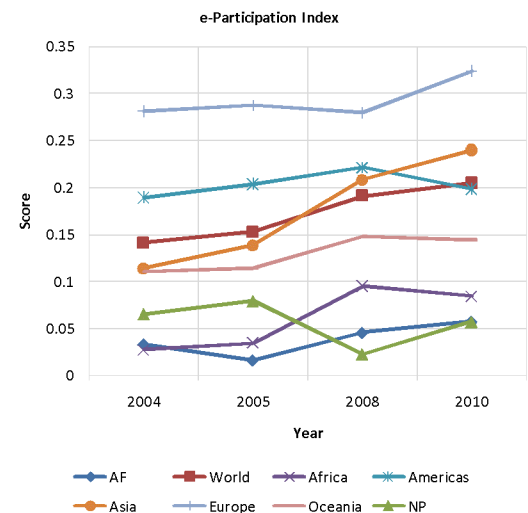


Figure 29: e-Government in Nepal – e-Participation (e-Governance) Index



The e-Government vision in Nepal was formulated with support of South Korea to capture the essence of citizen centered services, transparent services, networked government, and knowledge based society.

A total of 33 projects out of which 8 projects were selected as the priority projects for e-Government transformation: groupware, government portal, national ID, e-Education, infrastructure, and enterprise architecture, Public Key Infrastructure, Integrated Data and Training Center. In addition, laws on national informatization promotion, the laws on ICT industry promotion, the laws on ICT infrastructure development and law on e-Government have been recommended by the consultants.

The IT Policy 2006 provides a broad framework for advancement of ICT and e-Government transformation. The policy seeks to propel Nepal into knowledge society by 2015 so that the country is fully capable of harnessing the benefits of ICT in order to promote good governance, advance socio-economic development and reduce poverty.

The policy is divided into six main themes:

- 1) Strategic Focus and Regulatory Framework
  - Establishing a systematic legal framework to enact laws to secure legitimacy for electronic media, encourage private sector participation, and promote export and investment on IT sector
  - Reforming procurement laws, regulations, establishment of national funds for rural development and poverty alleviation
- 2) Infrastructure
  - Expansion of wireless broadband network, construction of rural tele-centers in remote villages to provide access to the citizens
  - Regulate and legalize VOIP, provide email and Internet connectivity for all government agencies, and operate IT park at the earliest
- 3) Content and Applications
  - Creating a conducive environment for information exchanges between government agencies
  - Digitization of administrative processes
  - Implementation of telecommunication networks Adaptation of Nepalese language computing to the content development and setting standards
  - Development of citizen centered websites and exploring ways of adapting of Open Source Software in the government
- 4) Private Sector Participation
  - Providing incentives including the tax benefits up to five years for domestic software developers and ISPs

- 5) Human Resource Development
  - Providing tax benefits for IT Institutions to promote quality bachelors and masters degree in the field of ICT
- 6) Organization
  - Establishment of National Information Technology Center and National Information Technology Development Council under the chairmanship of Rt. Hon Prime minister
  - The main role of the council was to provide policy level decision as recommended by the National IT Center
  - Establishment of High level Commission for IT by granting roles to plan and execute the government's informatization efforts

While the High level Commission for IT IT commission provides the high level leadership and guidance for e-Government development, the National Information Technology Center (NITC), promotes e-Government transformation.

#### Saudi Arabia

The Kingdom of Saudi Arabia commonly known as Saudi Arabia is the largest Arab country of the Middle East with high income economy. The Saudi Arabian land rises from sea level to a peninsula-long mountain range. Saudi Arabian culture mainly revolves around both Islamic and tribal values [21].

Saudi Arabia is one of the Muslim Nations with progressing e-Government development. It was ranked in UN e-Government Survey among top developing countries.

The characteristics of Saudi Arabia with respect to Afghanistan are show in Figure 30 **Error! Reference source not found.** Saudi Arabia has a similarity with Afghanistan only in terms of strong influence of Islamic religion on people's life, social norms and culture.

Figure 30: Saudi Arabia and Afghanistan

Country	LDC	South Asia	OIC	Mountainous	Landlocked	Political Stability & Absence of Violence/Terrorism
Afghanistan	✓	✓	✓	✓	✓	✓
Saudi Arabia			✓	✓		

Country	Change in eGov Rank 2003*-2010	Difference in 2010 eGov Rank with AF	Change in eGov Score 2003-2010
Afghanistan	→ 0	→ 0	29%
Saudi Arabia	↑ 89	↑ 110	20%

Over the years Saudi Arabia has advanced 89 places on the ranking list of countries by the UN e-Government Survey and is currently ranked 110 places higher than Afghanistan.

The e-Government development of Saudi Arabia with respect Afghanistan and the rest of the world are shown in the following Figure 31 and Figure 32, based on the UN e-Government Surveys.

Figure 31: e-Government in Saudi Arabia – e-Readiness (e-Government) Index

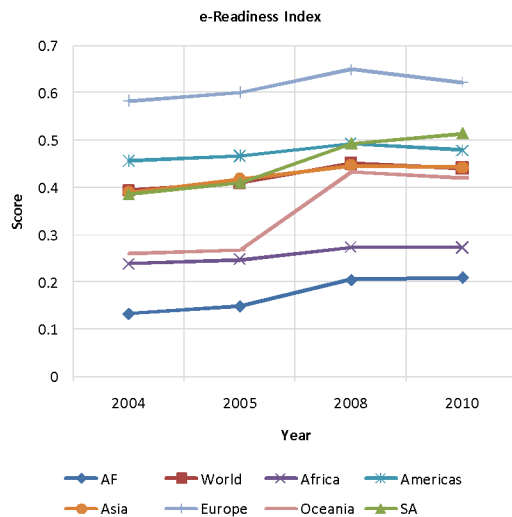
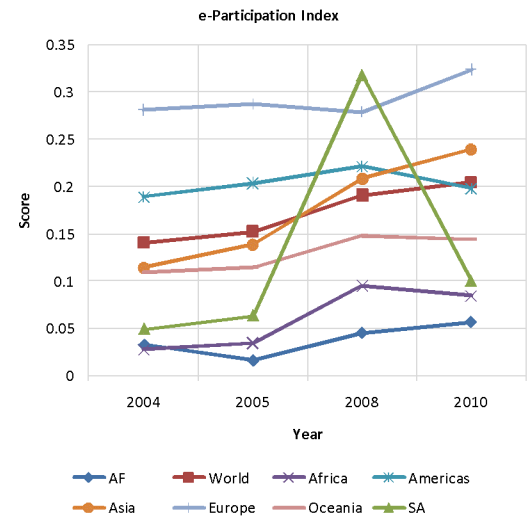


Figure 32: e-Government in Saudi Arabia – e-Participation (e-Governance) Index



The first National e-Government Strategy was developed based on the lessons learned from 20 countries from all over the world including leading e-Government countries, countries from the region and countries in a situation similar to that of Saudi Arabia.

The Saudi e-Government strategic framework consisted of a number of components:

- Vision and Objectives
- e-Services
- National applications
- Infrastructure
- Organization – Governance – Funding – Change Management

The Saudi e-Government model embraced a coordinated-decentralized approach as its guiding principle where government agencies will take the lead in the implementation of their respective e-Government projects. In this model, the government is a service provider for a customer, where:

- Services or groups of services involving more than one government agency are integrated across the agencies
- The user can have a one-stop shop for the service or groups of services in question, instead of having to contact all agencies involved



The vision for Saudi e-Government was “by the end of 2010, everyone in the Kingdom will be able to enjoy – from anywhere and at any time – world-class government services offered in a seamless, user-friendly and secure way by utilizing a variety of electronic means” .

The strategic goals are defined as follows:

- 1) Providing better services by the end of 2010
  - Provide the top-priority services at a world-class level of quality electronically
  - Deliver services in a seamless and user-friendly way and at highest standards of security
  - Make services available to everyone in the Kingdom and allow 24/7 access from cities as well as countryside and even outside the country
  - Achieve a 75% adoption rate with respect to the number of users
  - Ensure an 80% user satisfaction rating for all eservices provided
- 2) Increasing internal efficiency and effectiveness
  - Deliver all possible official intra-governmental communication in a paperless way
  - Ensure accessibility of all information needed across government agencies and storage of information with as little redundancy as possible
  - Purchase all goods and services above a reasonable value threshold through e-procurement
- 3) Contributing to the country’s prosperity
  - Contribute to the establishment of the information society in the Kingdom by spreading information, knowledge and the use of e-services
  - Help improve the use of the country’s assets and resources by increasing society’s productivity in the private, business and public sectors

The implementation of improved e-Government services are to be based on a unified vision, national priori-

ties and shared standards and methodologies. The coordinated decentralized implementation follows the principle of "develop once, use many times" as much as possible.

The strategy contains clear explanation on how the projects of the e-Government framework components will fulfill the objectives. It specifies roles and responsibilities of all stakeholders and government agencies involved, funding mechanisms and estimated budgets.

In addition, the strategy also presents methodology on prioritizing services for e-service development. A prioritization matrix based on impact and readiness as measures was proposed in the strategy, with specific criteria for each of these dimensions.

### 2.3.2. LESSONS LEARNED

The key lessons learned from the countries with well-established EGOV practice and also with certain similarities to Afghanistan inform the e-Government strategic planning in Afghanistan. They are summarized and organized around five major aspects as follows:

#### 1) *Benefits of E-Government Strategic Planning*

*Lesson 1* - E-Government strategies aligned with the high level national strategies and programs help with addressing challenges arising from the needs of society.

*Lesson 2* - e-Government strategic planning carried out on regular base allows meeting new administrative demands faced by the government in changing environment to better serve citizens and businesses.

*Lesson 3* - e-Government strategy facilitates, promotes and helps coordinate government-wide e-Government initiatives and set up organizational conditions for encouraging collaboration across government.

*Lesson 4* - The experiences of some emerging countries with similarities to Afghanistan demonstrate that significant gains can be realized even in such countries where e-Government strategy is in place with clearly identified priorities that are aligned with national development goals.

#### 2) *Stakeholder Engagement*

*Lesson 5* - Consultations and partnership with relevant stakeholders and experts, including administrative agencies, industry representatives, academia, and the general public are essential for e-Government strategic planning and implementation.

### 3) Structure of E-Government Strategy

*Lesson 6* – e-Government strategy provides strategic e-Government framework and guiding principles, sets up the long term or midterm vision for e-Government development, establishes strategic goals and defines implementation strategies.

*Lesson 7* – The structure of e-Government strategy generally include i) e-Government vision; ii) strategic goals integrated under accepted vision; iii) strategic directions/perspectives or focus areas towards achieving strategic goals; iv) strategies and action lines within each focus area; v) necessary governance frameworks and infrastructure.

*Lesson 8* - Key action lines are to be defined within each strategic direction or perspective to ensure leadership and governance, portfolio management, development of IT professionalism and skills, strengthening control and support for project delivery, and a systematic focus on innovation.

*Lesson 9* - Prioritization of strategic directions and identification of corresponding action lines within each of them is led by the strategic goals.

*Lesson 10* - E-Government strategy should outline implementation mechanisms including selection of new e-Government projects in line with the priority areas and key action lines defined.

### 4) E-Government Strategy Focus

*Lesson 11* - The main focus of any e-Government strategy is to transform the government operation and service delivery to better meet people expectations by utilizing more effectively IT-based systems and solutions.

*Lesson 12* - Customized citizen services, IT-enabled innovation in government, safer society and sustainable advancement are among typical e-Government strategic goals.

### 5) Implementation Strategies

*Lesson 13*- Among key strategies for successful implementation are: a) enhancing public services centered on citizens and businesses through personalization and multi channel delivery, b) well-established governance structure and leadership, c) innovative cross-agency processes, d) establishing shared services culture in public organizations, and e) improving professionalism including planning, delivery, management, skills and regular performance measurement and evaluation.

*Lesson 14* – e-Government strategies put special spotlight on coherent leadership at different levels

and coordination to ensure joined up processes and shared services that allow reducing waste and inefficiency by re-using assets and sharing investments with others.

*Lesson 15* – Building awareness on e-Government benefits and creating enabling environment, identification of common business processes, establishing common infrastructure and networks for information and knowledge sharing among government agencies, defining open standards and building integrated systems are among high priority agenda.

*Lesson 16* – Among high priority e-services for countries with similar conditions to Afghanistan are employment, education, social insurance and healthcare services, business registration, agriculture, licensing, tax, customs, etc and prioritization depends on current needs in the country.

*Lesson 17* - Shared services require particular attention on customer oriented service centers, human resources and cultural changes in public organizations, common infrastructure, data sharing, information management, information assurance, identity management and technology standards and architecture.

*Lessons 18* – Among major cross-government applications for common use are usually; a) e-procurement, b) e-document exchange, c) human resource management d) finance management, e) data sharing among government agencies for increasing efficiency and effectiveness of government agencies.

*Lessons 19* - e-Government implementation requires an integrated infrastructure and security standards allowing government agencies to set up a cost-effective network for communication and data exchange. .

*Lessons 20* - e-Government implementation requires setting up a program, preparation of action plans including planning of new e-Government projects and capacity building for implementation and management, development and rollout of integrated systems, and performance enhancement.

## 2.4. VISIONING AND STRATEGY DEVELOPMENT

The visioning and strategy development process in Afghanistan consists of the following steps:

- 1) Identifying major internal and external stakeholders;
- 2) Organizing visioning session/workshop with key stakeholders;

- 3) Encouraging stakeholders to present and explain their own vision;
- 4) Aligning vision with more general national and local development needs and opportunities;
- 5) Consolidating and agreeing on shared vision;
- 6) Defining strategic goals in key perspectives toward achieving shared vision;
- 7) Identifying strategic directions for implementation or critical focus areas;
- 8) Working out strategies and action lines with each strategic direction;
- 9) Considering implementation issues and mechanisms including key success factors, governance structure and major risks.

The e-Government vision for Afghanistan, strategic goals, strategic directions and action lines were developed in a multi-stakeholder visioning and strategic planning workshops spanning over four days. They were organized jointly by MCIT and UNU-IIST-EGOV within the scope of five-day national conference on Afghanistan e-Government development in Kabul, July 2010.

These workshops attended by very senior level as well as operational level managers of most of the government ministries and agencies and also included participation from the private sector, NGOs and international development partners. Participation also came from different levels of governance with attendees from provincial level as well as central government. More than 150 participants from all government ministries and agencies at the level of Deputy Ministers and ICT Director Generals, representatives from Commissions on Civil Service, Anti-Corruption and Human Rights, National Data Centre and MCIT provincial offices, and also from AIMS, Kabul Bank and Kabul University have been contributed to the vision, strategic goals, strategic directions and action lines through group discussions within visioning and strategic planning workshops.

These participatory and multi-stakeholder engaging workshops were designed to first build the capacity of

the participants through interactive presentation on the current trend in e-Governance development, strategic planning for e-Government including presentation of best practices from leading countries and case studies from countries with certain similarities to Afghanistan. In addition, the participants were presented with the findings of the e-Government readiness exercise conducted leading to these workshops and presented with a visioning and strategic planning templates to guide their thinking process during the visioning and goal setting exercises. Presentations were made by UNU project staff as well as staff from the MCIT and a lecturer from Kabul University providing both the international as well the national context, experience, best practices and know-how.

The second half of these workshops was dedicated to the development of a common e-Government vision, shared strategic goals and to identification of key strategic directions and action lines important in the Afghanistan context. For this purpose, the participants were grouped into four different groups and each participant were given a template for visioning which included the national development vision and goals of Afghanistan from the Afghanistan National Development Strategy and also included e-Government visions and goals from leading countries.

Group discussions were geared towards the identification of the most important elements for an e-Government vision and different ambitions and aspirations for e-Government strategic goal formulation. These elements for the vision, ambitions and aspirations for the goal setting and also possible action lines were then presented by each group, discussed and captured on a common document. The whole process was chaired by MCIT with the UNU playing a guiding role and acting as facilitators.

The consolidated ideas, ambitions and aspirations were filled into the visioning and strategic planning templates by the UNU team and sent back to MCIT for additional inputs and comments. Another workshop with all the key ministries were organized by MCIT to discuss the updated strategic planning template and provide additional thoughts and ideas based on the refined and consolidated output of the visioning and strategic planning workshops.

### 3. EGOV STRATEGY DRAFT FOR AFGHANISTAN

This section presents the final compilation of the outputs from visioning and strategy development workshops. They are summarized and formulated in the context of Afghanistan’s national development vision and goals and intend to respond to perceived expectations of the government agencies and the citizens and address weaknesses and challenges revealed from EGOV readiness while taking advantage from strengths and opportunities.

#### 3.1. STRATEGIC FRAMEWORK

The strategic framework for e-Government development in Afghanistan is composed of five main components:

- 1) Strategic Principles;
- 2) e-Government Vision;
- 3) Strategic Goals;
- 4) Strategic Directions and Action Lines; and
- 5) Strategy Implementation.

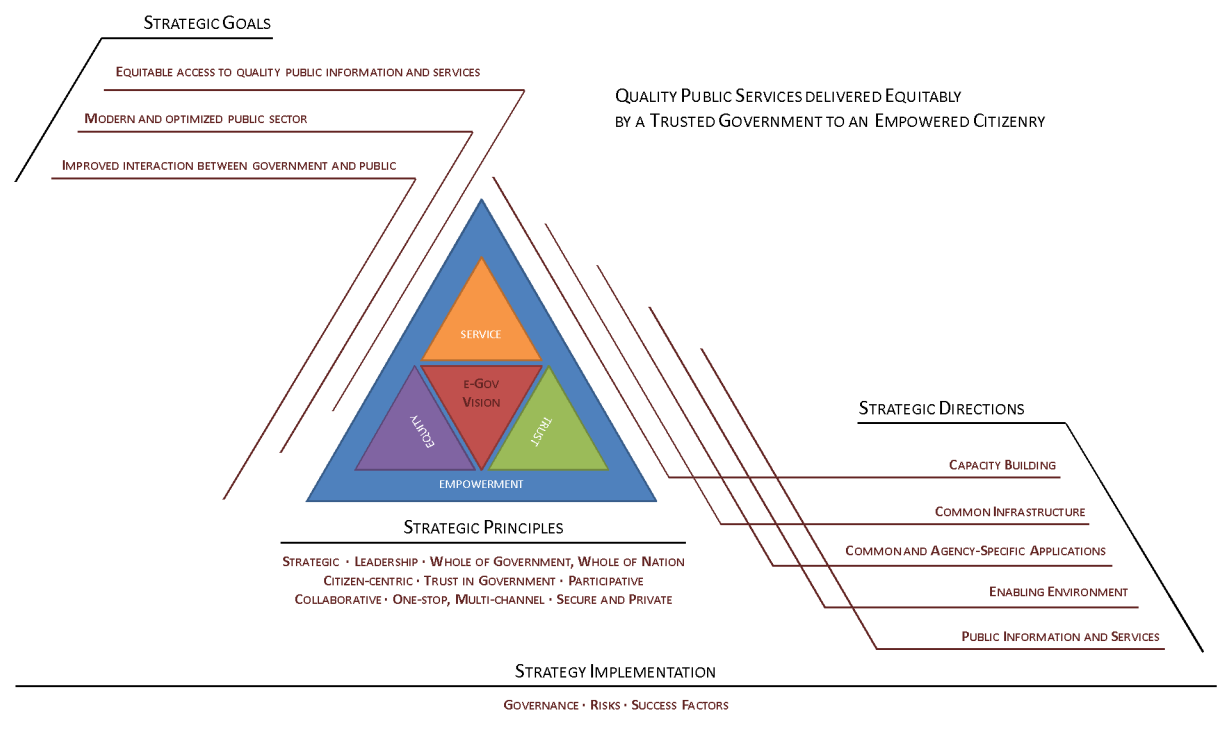
Figure 33 shows the strategic framework for e-Government development in Afghanistan.

The strategic principles for e-Government development lays out a number of general principles which are considered crucial in planning and implementation of all e-Government initiatives, programs and projects under this strategy and is geared to minimize risk and maximize benefit. They provide a foundation for the strategic framework for e-Government implementation and operation in Afghanistan.

The vision and strategic goals helps set the expected impact and outcomes whilst the strategic directions define the strategies to be adopted and action lines to be followed in producing these impacts and outcomes towards achieving the strategic goals and e-Government vision of Afghanistan.

Strategy implementation, which outlines governance structures for implementation of this strategy and includes leadership, coordination and monitoring and evaluation of implementation progress. It also highlights important risks and success factors to be considered in implementing this strategy.

Figure 33: Strategic Framework for e-Government Development in Afghanistan



### 3.2. STRATEGIC PRINCIPLES

The AeGS defines a set of key principles for the development of e-Government in Afghanistan based on international experience. These principles intend to address the weaknesses and challenges identified based on the assessment findings and will ensure cohesive whole of government, citizen centric development and modernizing of the Afghanistan Government.

The principles to be followed in the development of the e-Government in Afghanistan are the following:

- **Strategic** – development of e-Government is a strategic choice by the Afghanistan Government in national development

e-Government is a strategic choice Afghanistan Government makes in there holistic approach to public sector reform and modernization ultimately supporting and accelerating national development and enhancing stability and security for its people.

- **Top Level Leadership** – e-Government development will be spearheaded and coordinated centrally at the top level of the government

e-Government is spearheaded and led from the very top levels of Afghanistan Government. This top level leadership provides vision and ensures political and financial support crucial to e-Government development.

A central agency with the mandate to coordinate, monitor and support e-Government development will work directly under the top level leadership to ensure that vision of the e-Government is achieved in a holistic and balanced manner across the whole nation for all Afghani citizens.

- **Whole Of Government, Whole Of Nation** – e-Government is owned and will be developed by the whole of government and targeted at the whole of the nation, with particular attention to the integration of social groups with special needs like women and children

e-Government is not owned by one agency or ministry of the government, it is owned by all agencies and organs of governance. While e-Government development is coordinated by a central agency, with top-level leadership and broad participative and collaborative structures which ensure that all key stakeholders including government, private sector, NGOs and academia have the opportunity to participate and contribute in the coordination and strategic direction setting processes, the ownership, implementation and operational

responsibilities lie directly with every ministry, agency and organ of government.

e-Government development will carefully take into consideration the issues of digital divide and ensure that all initiatives, programs and projects are designed to reduce exiting divides in the society. Special consideration will be given to ensure that access to and the ability to benefit from e-Government is provided in a balanced manner to women, children, people with special needs and people in the rural and mountainous parts of the country.

- **Citizen-Centric** – e-Government is developed for all Afghani citizens, around the needs of the people and not along the structures of government, with particular attention to the education, health and agricultural needs of the people

e-Government should be developed based on the needs of the citizen and information and services provided from the perspective of the life of the Afghani citizen. Instead of the organizational structures of government ministries and agencies, e-Government will be organized and targeted by the needs of the people in various stages of their life, e.g. children, youth, elderly, etc. and according to the various roles and responsibilities they undertake in the daily lives, e.g. student, parent, entrepreneur, etc.

In addition, special attention will be paid to the health and educational needs of the citizen, especially, needs of children, women, elderly and those in the rural parts of the country and also the needs of the farmers across the country in developing e-Government in Afghanistan.

- **Trust In Government** – building people, processes, systems and services aimed at creating a secure and trusted relationship between citizen and government is be a key e-Government development priority

e-Government development in Afghanistan will take special consideration in measures aimed at building trust and confidence in Government. Measures to increase transparency, accountability and effectiveness of the government will be prioritized in the e-Government development programs and will be based around the grievances of the citizen.

- **Participative** – e-Government will focus on enabling the engagement between people

and the government in public issues and enhanced participation in policy making

Citizen is at the center of e-Government and their participation in government and governance at local and national levels will be a key focus of e-Government development. This will include providing various e-channels for citizen participation in different governance processes but also capacity and awareness building of the general public.

- **Collaborative** – e-Government development will support government organizations working together, integrating their services, sharing information and technology, eliminating duplication and committing to development of cross-agency service delivery

A whole of government, whole of state approach will be ensued in e-Government in Afghanistan. Leadership support including policies and strategies will be provided by the top levels of government to build collaborative structures and mechanisms across the government. These structures and mechanisms will be enabled by e-Government (government to government) and work across organizational boundaries in order to delivery cross-agency, one-stop services to the people (government to citizen).

- **One Stop, Multi Channel** – e-Government development will promote one stop access through multiple channels to government information and services

e-Government will not replace government service counters nor will only be available on the World Wide Web and will require a Personal Computer to access and benefit from it. Instead, e-Government will strive to enhance the exiting channels of service delivery by enabling the front office counters with technology and applications designed to minimize citizen having to go to multiple agencies. In addition, rapidly growing technologies such as mobile phone technologies will be considered in e-Government service delivery. Information and service delivery will designed to use a multitude of channels in order to increase convenience, reach and ability to benefit for all parts the country.

- **Secure And Private** – protection of security, privacy and basic rights of citizens will be central to e-Government development

Providing e-Government services require agencies of the government to store and share information including citizen and busi-

ness information. In instituting data storage and exchange infrastructure, systems and processes, due consideration will be given to the protection of the basic rights of security and privacy of the individual. These include, but are not limited to, security and privacy policies, technical security apparatus and transparency and accountability mechanisms in storing, exchange and using citizen information.

### 3.3. VISION AND STRATEGIC GOALS

The AeGS vision and strategic goals intend to respond to high demand from the public and within government to tackle corruption in public administration and public service delivery, increase transparency and administrative efficiency and effectiveness which was revealed from the assessment exercise in Afghanistan. They support the national priorities defined by the Afghan National Development Strategy (ANDS) and Governance and Public Administration Reform strategies.

The vision and strategic goals for e-Government in Afghanistan were formulated based on the inputs from various stakeholders collected, summarized and agreed during visioning and strategic planning workshops in Kabul.

#### 3.3.1. VISION

The long term vision for e-Government in Afghanistan is associated with the expected impact for the Afghan society to be produced by implementing e-Government. as follows:

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Quality Public Services delivered Equitably by a Trusted Government to an Empowered Citizenry

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The mid-term vision is associated with the expected e-Government impact for Afghan people and changes to be produced during five coming years. To better respond to Afghan citizens' expectations that e-Government will bring convenient public services, transparency, accountability and responsiveness and helps to deter corruption the following statement was agreed among key stakeholders:

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Within 5 years most people of Afghanistan will benefit from the equitable access to quality public information and services of high priority with equal opportunities to men and women in a balanced manner across urban and rural areas, reduced corruption, and improved security and stability and participation in governance with everyone motivated and enabled to contribute.

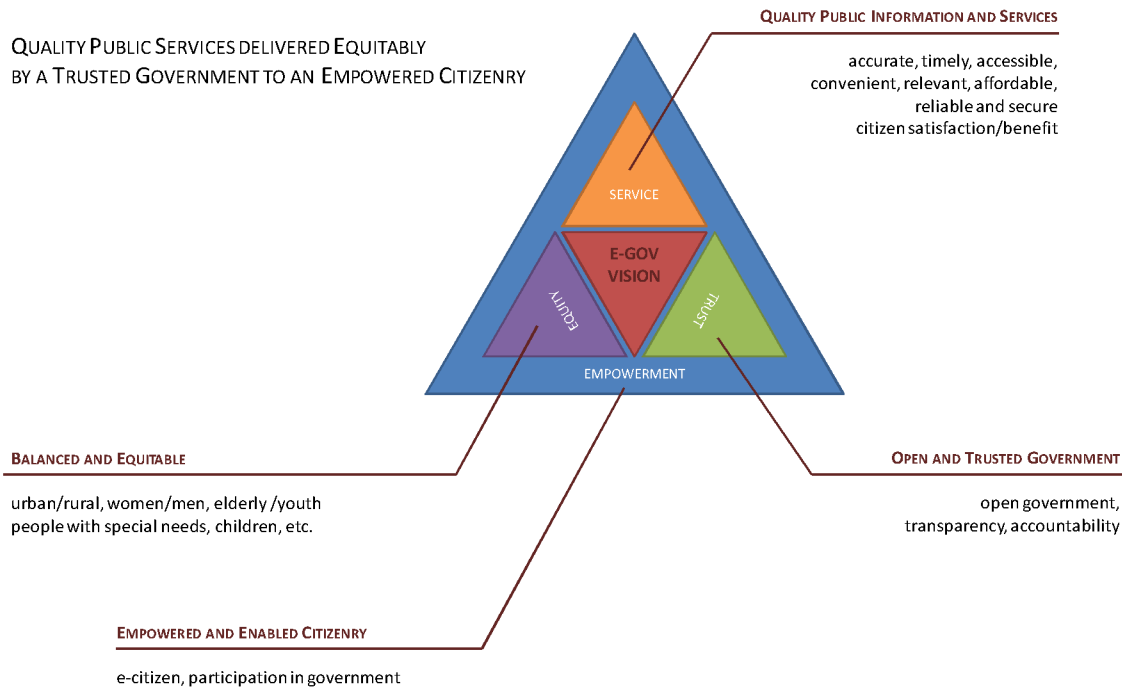
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This vision for e-Government in Afghanistan comprises of four distinct elements, which elucidates the development hopes and aspirations of Afghanistan. They are based on the imperatives of service, equity, trust and

empowerment, as being at the heart of e-Government development in Afghanistan. These elements are shown in Figure 34: Elements of Afghanistan e-Government Vision and presented below.

Figure 34: Elements of Afghanistan e-Government Vision



- 1) **Service – Quality Public Information and Services:** of High Priority Afghanis are able to benefit from equal access to quality (accurate, timely and accessible public information and (convenient, relevant, affordable, reliable and secure) services) of high priority.
- 2) **Equity – Balanced and Equitable:** Public information and services available equitably and in a balanced manner across urban and rural parts of Afghanistan and equal access to public information, services and opportunities for women and men across the nation.
- 3) **Trust – Open and Trusted Government:** Afghan Government embraces and practices principles of Open Government with increased transparency and reduced corruption, leading to increased confidence and trust of its citizens and improved stability and human security across the nation.
- 4) **Empowerment – Empowered and Enabled Citizenry:** The Afghan citizen is increasingly empowered to actively participate in public life and enabled to

contribute to the development of Afghanistan towards a knowledge based economy and society.

### 3.3.2. STRATEGIC GOALS

The AeGS is expected to play a key role in the reform, development and modernizing of the whole of Afghanistan government. In achieving the mid-term vision the EGOV strategic goals for coming five years were defined by the stakeholders during the strategic planning workshop in Kabul based on the assessment results and benchmarking findings.

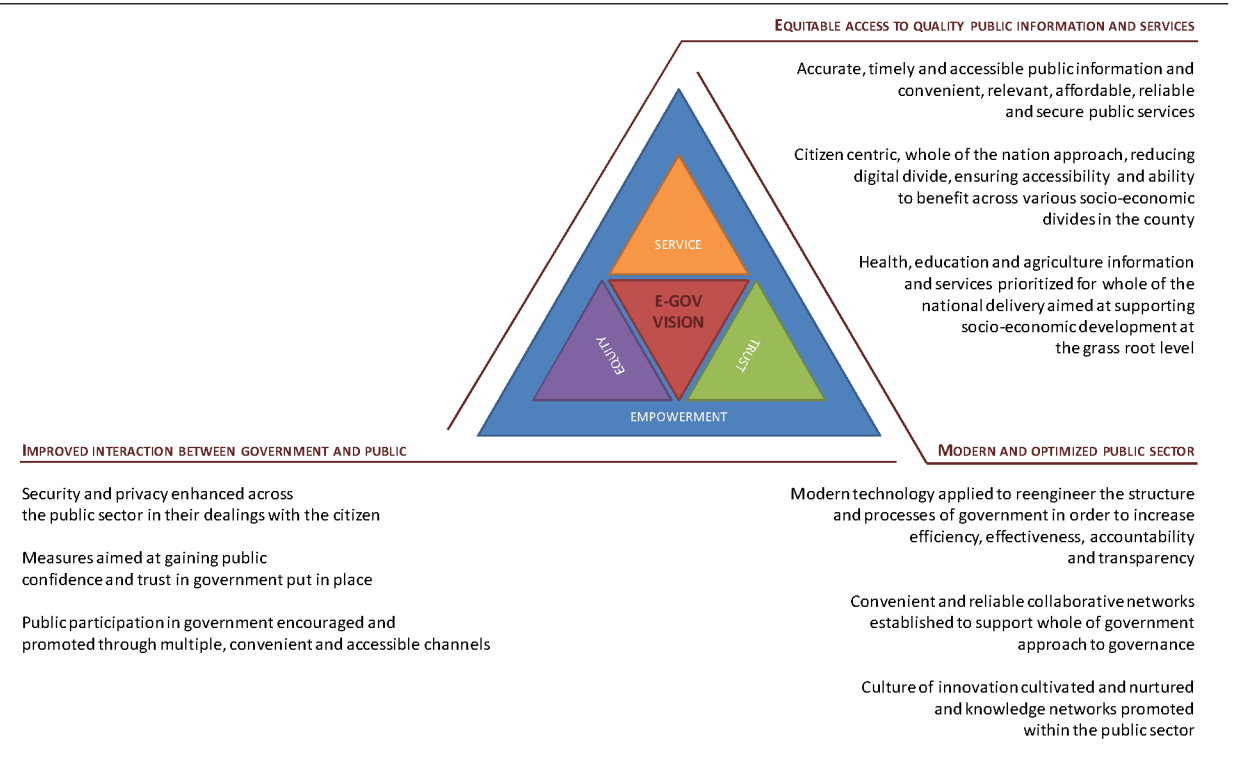
Following the key aspects of the vision they were considered in three major perspectives: 1) public information and services; 2) modernization of public sector; and 3) public participation in government. As a result of focus group discussions among key stakeholders’ three strategic goals were formulated within these perspectives.

They are depicted in Figure 35 and described below in the perspectives of public information and services, modernizing the public sector and public participation in government. Each of these perspectives have an associ-



ated goal and each goal is further expounded as multiple elements.

Figure 35: AeGS Strategic Goals



**Perspective 1: Public Information and Services**

**Goal 1:** Equitable and balanced access to quality public services, particularly in health, education and agriculture and services for businesses and others.

- 1.1 Accurate, timely and accessible public information and convenient, relevant, affordable, reliable and secure public services
- 1.2 Citizen centric, whole of the nation approach, reducing digital divide, ensuring accessibility and ability to benefit across various socio-economic divides in the county
- 1.3 Health, education and agriculture information and services prioritized for whole of the national delivery aimed at supporting socio-economic development at the grass root level

**Measures for Goal 1**

- *Quality of Information and Services:*

Accuracy, Timeliness, Accessibility, Convenience, Relevance, Affordability, Reliability, Security and Privacy

- *Citizen Centricity, Accessibility and Benefit:*  
Citizen satisfaction, Accessibility across Urban/Rural, Women/Men, Disabled/Enabled People, Province/Zonal/Regional, Elderly/Youth, Literate/Illiterate, Remote/Accessible areas and Rich/Poor
- *Health, Education and Agriculture Information and Services:*  
Number and sophistication of services, coverage in terms of geography and accessibility, and impact on daily life and socio-economic development at the grass root level

**Perspective 2: Modernizing Public Sector**

**Goal 2:** A modern and optimized public sector through innovation, collaboration and technology.

- 2.1 Modern technology applied to reengineer the structure and processes of government in order to increase efficiency, effectiveness, accountability and transparency
- 2.2 Convenient and reliable collaborative networks established to support whole of government approach to governance
- 2.3 Culture of innovation cultivated and nurtured and knowledge networks promoted within the public sector

Customer Satisfaction, Take up of e-Government services, Online dispute resolution, Complaints Submissions to Authorities and tracking of these complaints

- *Government Openness:*

Availability of information on Procedures, Rules, Costs and Public Expenditures, through e-channels

- *Public Participation:*

Number of and take up of e-participation initiatives, Customer Satisfaction, Customer Feedback

**Measures for Goal 2**

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- *Service Provision:*

Time, Cost, Access, Human Resources, Number of Steps, Number of Agencies of contact, Number of visits, Ease of Use, One-stop-shop

- *Decision Making and Administration:*

Time, Number of Levels, Number of steps, Less-Paper office – amount of paper used, Streamline Processes – BPR

- *Policy Making:*

Public consultation, Openness, Drafted policies made available online, Enacted policies including rationale and results, Outputs from public consultation made online

**3.4. STRATEGIC DIRECTIONS**

In order to achieve the goals of e-Government in Afghanistan strategic directions for implementation are defined to better address the weaknesses and challenges and meet citizens' expectations revealed from the assessment. They are organized in five major dimensions that have cross-cutting nature and therefore, will contribute to all strategic goals. These are:

- 1) **Public Information and Services** – this direction responds to the most relevant expectations and challenges such as: a) transparency and accountability, b) responsiveness, c) citizen centered services with high quality, d) the most demanded services in education, health, agriculture, economic development (trade, employment) and social welfare and e) delivery of government e-services to citizens in remote area
- 2) **Enabling Environment** – this direction responds to the following weaknesses and challenges: a) very limited awareness of the strategic role e-Government in public sector, b) weak legal and regulatory environment for e-Government in Afghanistan, c) lack of organizational culture in public sector for information exchange and knowledge sharing, and d) weak partnership with academic institutions, NGOs and private sector.
- 3) **Capacity Building** – this direction responds to the following weaknesses and challenges: a) lack of capacity and skills in e-Government implementation in Afghanistan, b) lack of human resources for e-Government coordination and implementation and weak partnership with academia, c) low literacy and acceptance of e-Government in public sector and society.
- 4) **Common Infrastructure** – this direction intend to address the following weaknesses and challenges: a) lack of technical resources for e-Government im-

**Perspective 3: Public Participation in Government**

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**Goal 3:** Improved interaction between the government and public in governance.

- 3.1 Security and privacy enhanced across the public sector in their dealings with the citizen
- 3.2 Measures aimed at gaining public confidence and trust in government put in place
- 3.3 Public participation in government encouraged and promoted through multiple, convenient and accessible channels

**Measures for Goal 3**

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- *Security and Privacy:*

Level of Trust, Training and Awareness

- *Public Confidence:*

plementation, b) lack of coordination of on-going infrastructure projects, and c) costs of telecommunications.

- 5) **Common and Sector-specific Applications** – this direction responds to the following weaknesses and challenges; a) duplicated efforts in developing similar applications and b) on-going e-Government initiatives and projects in different ministries and agencies are isolated.

### 3.5. STRATEGIES AND ACTION LINES

The key implementation strategies and corresponding action lines are defined within each strategic direction based on current needs of Afghan people, external stakeholders and government agencies, their expectations from e-Government and priority areas for public services revealed from the assessment and inputs from the stakeholders. They take into account existing capacity, ongoing initiatives and environment for e-Government implementation. In addition, some elements derived from countries with well-established e-Government practice and also countries with similarities to Afghanistan are adapted to local conditions.

#### 3.5.1. PUBLIC INFORMATION AND SERVICES

The strategy and corresponding action lines within the focus area for public information and services intends to meet the most critical citizens' expectations in their dealing with the government institutions revealed from the assessment such as:

- e-Government will help prevent corruption and provide them convenient and quick access to public information and services at low cost.
- The most expected and valuable features are reliability and accessibility of public services, ease of navigation and interactivity, multi-channel delivery, unique, custom-fitted and targeted content.
- The most demanded services are related to education, health and social welfare, agriculture, opportunities for economic development.

**STRATEGY 1:** Quality public information and services, particularly in the areas of health, education and agriculture and also services targeted towards businesses, will be delivered through multiple channels, with particular emphasis on mobile telephony, prioritized based on positive impact on the daily lives in terms of socio-economic benefits and their positive impact on inclusiveness in terms of reaching to minorities and disadvantaged parts of the society.

#### ACTION LINES FOR STRATEGY 1:

#### Action Line 1.1: Services in Healthcare

- 1) Web and mobile based public health information and warnings
- 2) Web and mobile based children's vaccination information and reminder service for registered parents
- 3) Citizen feedback system on health services and facilities via mobile and web
- 4) Public health call center – one telephone number for all public health and health service related information

#### Action Line 1.2: Services in Education

- 1) E-Help Desk – one help desk for all education related information and services – for example for lost certificates renewal/re-issuing, information about school enrollment, etc.
- 2) E-Library – one online library giving access to local and international publications to all school and university students and staff across the country
- 3) Mobile technology based education services – Exam Results – Dummy Test Questions for revision – Parental Monitoring – Teacher Monitoring – Reminder of changes in Schedule – Alerts on class tests and chapters to read for classes
- 4) Access to Expertise – through a central educational portal – information about professors and their contact details – providing access to expertise

#### Action Line 1.3: Services in Agriculture

- 1) Agriculture produce marketing service – over ICT channels for the farmers and wholesalers
- 2) Agriculture information and support services – Agriculture Community Center (ICT Centers) – and Portals with Agriculture details
- 3) Mobile and web based agriculture disease information and alerts
- 4) Services specifically for Nomads – RFID, GIS, etc. used for the provision of specifically tailored information on quality of grazing lands through mobiles

#### Action Line 1.4: Services for Businesses

- 1) Business Portal – information about business opportunities and regulations and licensing
- 2) Online and mobile tax related services – may initially include services like SMS/Email tax reminders,

- SMS/Email acknowledgements of tax payments and eventually e-payment and filing of taxes
- 3) Feedback system for customers to comment/report on the progress of projects and successes/failures of companies
- 4) Online Reporting for Companies – annual reports/financial statements/others such reports to various governments agencies can be sent via a single service
- 5) SME loan applications and processing online – connected to banks and government registration systems

**Action Line 1.5: e-Service Promotion and Marketing**

- 1) e-Government Awareness – traditional media and local information dissemination channels, like local schools, etc. used to raise awareness of the benefits of adopting modern technologies and e-Government
- 2) e-Information/e-Services Promotion – radio, television and other popular traditional communication channels like local newspapers and newsletters used for promotion of government portal, e-information and e-services
- 3) e-Information/e-Services Marketing – specifically targeted marketing program aimed at businesses, academia and other large scale operators who could immediately take-up e-Government services and benefit from it.

**3.5.2. ENABLING ENVIRONMENT**

The strategy and actions lines for an enabling environment that is critical in developing and promoting e-Government in Afghanistan respond the major challenges revealed from to the assessment exercise, depicted below:

- E-Government is yet fully recognized within the government as a tool in achieving the national development and public sector reform goals.
- The prevailing legislative process on ICT or e-Government related issues are slow and inefficient.
- Government organizations exhibit low interest and understanding of ICT potential.
- There is only limited support to e-Government from the key government officials at the highest levels of the government

- While government agencies work with or are supported by donor agencies, they do not work in a collaborative manner with external non-government organizations.
- The capacity and skills necessary for such partnerships is limited in the government.

**STRATEGY 2:** Creating Enabling Environment for developing EGOV, delivering electronic/mobile services, electronic documents, applications, forms and interacting with citizens via electronic/mobile channels by ensuring ownership on EGOV strategy and implementation program, leadership at all levels (top, middle, operation) and coordination, raising awareness among government employees and citizens, adopting legislation, rules and regulations and establishing sustainable financial mechanisms and organizational culture.

**ACTION LINES FOR STRATEGY 2:**

**Action Line 2.1: Digital Signature Act** – gives electronic signatures the same legal status as written signatures and sets a uniform legal standard for electronic signatures and records

**Action Line 2.2: Electronic Transaction Act** – facilitates electronic communications by means of reliable electronic records and promotes public confidence in the integrity and reliability of electronic records, e-commerce and e-Government

**Action Line 2.3: Electronic Documents Act** – facilitate the use of electronic documents

**Action Line 2.4: CIO (Chief Information Officer) – Program for Government** – including defining a central government CIO and innovation and IT managers at central government agencies and at the provincial local authorities.

**Action Line 2.5: PPP – Partnership with national and international organizations, academia and industry for e-Government development**

**Action Line 2.6: e-Government Directorate** – Responsible for coordination and monitoring the development of e-Government

**Action Line 2.7: Standards** – Architecture and Standards for e-Government to streamline the development and ensure interoperability and gain efficiencies and ensure quality in operation and IT service provision.

**Action Line 2.8: Security and Privacy** – Policies and Regulations to protect the privacy of citizens and businesses and enforce security of data storage, processing and exchange and IT resources across the government.

**Action Line 2.9: Open Source Software** – To start the culture of using Open Source Software in government agencies.

**Action Line 2.10: Auditing** – IT auditing will be introduced across the government.

**Action Line 2.11: Software Licenses** – enterprise wide licenses will be negotiated with the vendors for government software base.

**Action Line 2.12: EGOV Resource Center** – a common and shared e-Government resource center will be established under the auspices of MCIT to act as the government's think tank and primary consultant in e-Government development.

### 3.5.3. CAPACITY BUILDING

The strategy and action lines within this direction are defined in response to the key challenges identified during the e-Government readiness assessment of Afghanistan:

- The lack of human resources and skills for implementing e-Government initiatives and projects.
- Insufficient institutional capacity in the central coordinating agency and especially in other government agencies for e-Government coordination and implementation
- General low literacy of Afghan citizens and in particular their capacity to adopt and use electronic channels .

**STRATEGY 3:** Building Capacity of i) central e-Government coordination agency in implementing, supporting and promoting e-Government; ii) government employees in delivering public information and services and interacting with public via electronic and mobile channels, and iii) citizens in utilizing electronic and mobile services and interacting with Government .

#### ACTION LINES FOR STRATEGY 3:

**Action Line 3.1: Leadership Capacity** – EGOV Leadership Program – develop e-champions and nurture government CIOs and garner political support for e-Government development.

**Action Line 3.2: Institutional Capacity** – EGOV Program and Project Management, ICT Governance, Security and Privacy, etc.

**Action Line 3.3: Capacity of Employees** – Awareness/ICT Literacy/Level of innovativeness/ICT Use/Collaborative Work/Information and Knowledge Exchange and Sharing.

**Action Line 3.4: Capacity of Citizens** – Computer literacy in the curriculum: incrementally introduced – MoE is currently working on the new curriculum which includes ICT Literacy, lack of ICT Teachers is the main challenge, e-Learning for ICT Literacy, PPP and OLPC. E-Citizen Program to raise the capacity and awareness of citizens in using modern technologies in their daily lives including awareness of benefits and capacity to benefit as well as awareness and capacity to avoid security and privacy issues with the use of modern technology.

### 3.5.4. COMMON INFRASTRUCTURE

The strategy and supporting action lines within this focus area intend to meet the current needs of government agencies in improving efficiency and effectiveness, communication between political and administrative processes, inter-departmental coordination and cooperation, data exchange, sharing information and knowledge. They are defined in response to the challenges identified from the assessment:

- Lack of technical resources supported e-Government coordination and implementation
- High cost of telecommunications
- Delivery of government e-services to citizens in remote area

Common e-Government infrastructure across the government, like central datacenters, government network and common monitoring and security hardware and software, allows maximizing availability, reliability, security and reducing cost.

**STRATEGY 4:** Building Common Infrastructure in the Government that can be utilized by many or all ministries and agencies such as National Data Center, National ID system, etc.

#### ACTION LINES FOR STRATEGY 4:

**Action Line 4.1: Government Network** – private and secure network that connects the agencies and ministries of the government and securely connects internal and external resources like shared datacenters and private ISPs.

**Action Line 4.2: National e-ID** – provides citizens with a unique identifier and government agencies with a central citizen identification and authentication system which can be used by all agencies and ministries to identify and authenticate citizens in their e-services.

**Action Line 4.3: Data Center** – a central repository of government data which can be accessed by all authorized and relevant agencies in electronic processing of various public services including sharing of data collect-

ed by one agency by many within the boundaries of comprehensive security and privacy policies.

**Action Line 4.4: Data Exchange** – Common gateway and network.

**Action Line 4.5: Communication** – Video conference facility to connect local authorities/district level with center (agencies in Kabul)

**Action Line 4.6: Security Services Network** – All police zones and fields soon will be connected with the MoIA through network. Sharepoint portal is already activated in MoIA.

### 3.5.5. COMMON AND AGENCY-SPECIFIC APPLICATIONS

According to the assessment findings there are number projects underway in various ministries of the Afghanistan government to develop software applications in order to automate routine processes, such as human resource and financial management, as well as agency specific applications, such as company registration. But it was revealed that these developments are happening in an uncoordinated manner, which results in duplication, waste of resources and increases risk of failure. Therefore, there is a need to refocus and realign these efforts and coordinate them such that applications for common processes and tasks can be developed once and used by many and agencies can concentrate their efforts on developing agency specific applications in the domains of their ministries.

**STRATEGY 5:** Developing Common and Sector -specific Applications such that a) common applications can be used by many or all ministries and agencies, local administrations and citizenry at large and b) sectoral or agency-specific applications such as healthcare, agriculture, education, social welfare, etc.

#### Action Lines for Common Applications

##### Action Line 5.1: Applications for Ministries/Agencies

- 1) E-Procurement – electronic procurement for government can be a key driver of e-Government and e-society development
- 2) E-Administration – e-Doc Management has the potential to support innovative processes re-engineering leading to efficiency gains and increased transparency
- 3) Human Resource Management – shared HRM system can potentially reduce administrative burden, increase efficiency and support quality and standard services to the government employees
- 4) Planning and Monitoring – is a key component for successful development program execution and

have the potential to reduce risks and ensure targets, milestones and impact is achieved

- 5) e-CID – Criminal Investigation Database for registering criminal records of all residents in Afghanistan – can ensure coherent proactive security measures
- 6) Vehicle Registration Database – information on the vehicle plate numbers shared across security, roads and traffic related agencies

##### Action Line 5.2: Applications for Local Administrations

- 1) e-Jirga – enabling the Jirga processes as a whole and connecting local Jirgas in different parts of the country through modern technologies including Internet and mobile telephony – sharing of experiences and lessons learnt
- 2) Portal for Public Finance Laws and Regulations – Awareness and capacity building on public finance

##### Action Line 5.3: Applications for Government Employees

- 1) Recruitment – Online Competitive Recruitment System
- 2) Government to Employee – Pensions/Salaries/Subsidies
- 3) e-Learning on Public Finance and Public Procurement, etc.
- 4) Central Project Portal – Information about project information across the country

##### Action Line 5.4: Applications for Citizens

- 1) Mobile applications – a common mobile application infrastructure and system which can be utilized by all government agencies for information dissemination and by citizens for reporting and feedback
- 2) CRM – Collecting needs of people/ Listening to people, One telephone number for all government information/reports/complaints
- 3) One point of access – one-stop-shop for public information and services
- 4) Citizens Reporting/Feedback System/Tracking System/ Financial Reporting - Accountability and Transparency
- 5) e-Election – Identify and plan for the foundations/enablers required for the introduction of electronic elections in the future.



*Action Lines for Sector-specific Applications*

*Action Line 5.5: Applications in Healthcare*

- 1) Vaccination Information Management System – manage all vaccine related information including patient, clinical staff like doctors and nurses and vaccine stock related data
- 2) Public Health and First Aid Information System – which can provide information required on the spot – on the spot information for first aid/initial information/first response system – Rules and Regulations, Locations of hospitals and treatments available in these hospitals made available on e-channels, Expiration and quality of imported medicines
- 3) STP System – Standard Treatment Procedures (STP) through e-channels and health knowledge bases and Treatment Protocol System
- 4) Emergency Response System and Public health call center to provide emergency offline help
- 5) Disease Early Warning System
- 6) Public Health e-Learning (for doctors/health professionals)
- 7) Health awareness and Public Health Knowledge Repository
- 8) Telemedicine – doctors in provinces refer to and discuss with doctors in urban areas/experts
- 9) Centralized patient records
- 10) Disease and health information sharing mechanism –guidance on what to do next including preventative measures etc. e.g. outbreak of SARS or Hand and Mouth season etc. – early warning system – privacy of personal information is very important - HMIS

*Action Line 5.6: Applications for in Education*

- 1) e-Help desk system for all education services – this will provide services like for lost certificates renewal/re-issuing
- 2) e-Library System – will provide library services to students and teachers across the county
- 3) National/Local Resources Management System – partnerships with Local Authorities and Universities to digitize and make available – digitize resources from libraries in provinces and bring them online in a central e-library

- 4) Online Education System – online examination/assessment – Interactive delivery of courses (teacher based/self-learning) – all national universities and colleges to develop and deliver online courses without the need to develop their own e-learning infrastructure
- 5) Mobile platform for the delivery of education services – this can part of the government mobile service application infrastructure – to provide education related services over the mobile phones without the need for every school or university investing in developing and maintaining mobile service delivery infrastructure
- 6) Educational Resource Centers (ERC) available through mobile to both women and men: (other e-channels)
- 7) Educational Video Conferencing Facility – which can be shared by many educational institutes – to provide lectures through Video Conferencing – leading universities to rural provinces
- 8) Central educational portal – with information about professors and their contact details – access to expertise

*Action Line 5.7: Applications in Agriculture*

- 1) Agriculture marketing System – web and mobile system which will allow services to be developed for farmers in support of their marketing and pricing needs
- 2) Agriculture Community Center (ICT Centers) – and Portals with Agriculture details – supported by the portals and e-channels and provide data to the portal – e-channels like social networks – community development centers for men/women (integrated across agriculture/education/etc) – economic models for suitability
- 3) Portal with disease information – public health
- 4) Agriculture Labs in provinces: quality of products – quarantine services in provinces supported centrally with disease information etc.
- 5) RFID and Sensor Technologies – Research the application of these technologies and their benefits to the farmers of Afghanistan – propose roadmap to develop the use of these technologies
- 6) Land Management System – managed by Afghanistan Land Authority (ALA)

*Action Line 5.8: Applications in Business*



- 1) Government to Business Portal – which can provide, amongst other services, information about business opportunities, employment opportunities – job matching – across the provinces, and regulations and licensing
- 2) ACBR – Afghanistan Central Business Registry – company registration and tracking System – allow the automation of the process of registration
- 3) Central Taxation Information Management System – manage tax information and allow services like online declaration to be deployed
- 4) SME Loan Processing System – connect to banks and registration systems – allow loan related services including application, notification, etc. to be built on it
- 5) Company Feedback System – allowing the management of customer/public comment/reports about companies operating in Afghanistan

### 3.6. IMPLEMENTATION MECHANISMS

This section highlights key success factors for implementation of e-Government strategy, defines a governance structure and identifies major risks associated with e-Government development in the Afghanistan's context.

#### 3.6.1. KEY SUCCESS FACTORS

Key success factors for e-Government strategy implementation in Afghanistan are lead by strategic principles and takes into account experience from countries with well-established e-Government practice. The most critical among them include:

- 1) Focus on National Development
- 2) Whole-of-government Ownership
- 3) Engagement of Stakeholders
- 4) Top-level Sponsorship
- 5) All-round Capacity

##### *Focus on National Development*

The vision of e-Government is about the impact it will have on the lives of ordinary Afghans. Therefore, e-Government should be a strategic choice of the Afghanistan Government in its national development agenda. Evidence-based impact and contribution to the national development objectives ensure that e-Government benefits and is accepted by the people. In addition, it ensures continued support from all levels including top-level leadership of the country, international development partners, civil service, NGOs and the public. A co-

herent policy and strategic framework for e-Government in the context of national development is therefore a critical success factor.

##### *Whole-of-government Ownership*

All too often e-Government development is seen as the responsibility and mandate of one ministry or agency, often with technology development in their mandate. For effective and progressive e-Government development it is imperative that all ministries and agencies of government take full ownership of e-Government development and operation and understand that the central e-Government directorate's role is primarily to bring together all these agencies and support them through coordination and provision of key shared services.

##### *Engagement of Stakeholders*

e-Government development should be placed in the context of national development, governance reform and modernization and national ICT development. In this respect, e-Government development crosses many boundaries and touches many people. Therefore, it is important that all these various groups are part of e-Government development. These include international development partners, local NGOs, academia and the private sector. Forging strong working relationships with the non-governmental and private sectors, and bringing them onboard as partners in e-Government development, is a key success factor.

##### *Top-level Sponsorship*

To ensure e-Government is development in a fair and balanced manner, keeps the strategic focus and has the financial and human resources and to drive the impetus of change and reform there is critical need for leadership from the very top of the government.

##### *All-round Capacity*

The capacity to develop, operate and benefit from e-Government is critical for e-Government to reach its vision and have the developmental impact on the peoples' daily lives. Capacity in the government for deployment of e-Government, change management and e-Government project management, along with awareness raising and raising of the capacity of the public to benefit from e-information and e-services needs to be carefully planned and implemented for success for e-Government development in Afghanistan.

#### 3.6.2. GOVERNANCE STRUCTURE

The proposed governance structure for implementation of e-Government Strategy in Afghanistan intends to respond to high demand for general direction and coordination of e-Government initiatives. Guiding by international experience it is recommended to establish E-Government Directorate under MCIT and Government

CIO structure and Forum along with existing government institutions responsible for IT and e-Government development, external partners and stakeholders from different sectors that are willing to contribute and has sufficient capacity for that. The governance structure consists of:

- 1) *IT/e-Government Development Council*
- 2) *E-Government Directorate*
- 3) *Government CIO Forum*
- 4) *External Partners/Stakeholders*

#### It/E-Government Development Council

Top level leadership from the political and very senior levels of government is essential for the development and operation of e-Government. Therefore, the National Information and Communications Technology Council of Afghanistan (NICTCA) which has the mandate of provide advisory services to the Government in all matters related to ICTs. As a coordinating focal point it will take up role of providing leadership and garner political and senior management support, ownership and engagement in developing e-Government in the country.

NICTCA will actively promote e-Government as a key strategic choice by the Government of Afghanistan and will be supported by the e-Government Directorate of MCIT. They will take on the mandate of determining standards and technical policies for e-Government development and will have the authority to issue such policies, standards, guidelines and best practices to the whole government.

#### E-Government Directorate

The e-Government Directorate (eGD) will operate under MCIT and will be the central coordinating, monitoring and evaluation office for e-Government development in Afghanistan.

While it will report directly to the Minister for Communications and Information Technology, it will be empowered by the NICTCA and will work in accordance with the policies, strategies and guidelines set down by the NICTCA. It will also chair the government CIO Council and will take on the roles of Government CIO and CTO, advising and supporting Government on all matters related to ICT in Government through the NICTCA.

The organizational structure of the eGD will take into consideration that their main task is coordination, program management, strategy development and project implementation. Therefore, special care will be taken in building capacity in the management and IT governance skill sets. In addition, capacity will be required in the

skills of outsourcing and public private partnership management as well as contract management.

#### Government CIO

The Government Chief Information Officer's (GCIO) is an e-Government coordinating body composed of Chief Information Officers (CIO) or IT Directors and IT Heads of all the key ministries and agencies of the government.

Their main mandate is to ensure that e-Government development across the ministries and agencies is progressing harmoniously in line with the Afghanistan e-Government Strategy. They act as focal points for the eGD and support eGD in carrying out its responsibilities in e-Government development including providing support and guidance on drafting technical standards and policies and ensure that these standards and policies are adhered to in their respective ministries and agencies.

Members of the GCIO Forum also act as e-Government champions, raising awareness about the benefits of e-Government and building managerial and grass root level support for e-Government. This Forum will be chaired, coordinated and managed by the eGD of MCIT as a whole-of government CIO.

#### External Stakeholders

Developing e-Government and providing quality services to the people will require the government to partner with the private sector, NGOs and academia at various stages and in various roles of e-Government development and deployment.

Therefore, creating and maintaining partnerships with external partners as key stakeholders in e-Government development is deemed critical. eGD will create and build a network of external partners who are willing and able to support the government's e-Government development agenda. Other ministries and agencies will have access to this network through the GCIO Forum.

#### 3.6.3. IMPLEMENTATION PROGRAM

To implement the changes in government and governance expected from AeGS and to ensure delivery of its actual impact and benefit it is required to set up and launch EGOV program (AeGP).

This program will define organization structure and set up management processes essential for its implementation such as: a) benefits management, b) stakeholder management, c) risk management and issue resolution, and d) planning and control including change management and monitoring and evaluation.

The program will be directed, coordinated and executed by key actors though identification of their roles and responsibilities and involvement of government institu-

tions related to IT and e-Government as well as external partners and stakeholders from different sectors.

### 3.6.4. POTENCIAL RISKS

Potential risks for successful implementation of e-Government initiative in Afghanistan are associated with Afghanistan development issues and challenges derived from the e-Government assessment exercise. The most critical among them are summarized as follows:

- 1) Political instability and Insecurity
- 2) Lack of Ownership
- 3) Weak Institutional Capacity
- 4) Low Literacy

#### *Instability and Insecurity*

The on-going conflict in the nation and the various associated stability and security related incidents across the country makes service delivery and government modernization extremely challenging, but at the same these very conditions demand the development of an e-Government geared towards building trust with citizens and making public services accessible equitably to all citizens regardless of gender, age or geographical location in the country.

In order to minimize and mitigate this risk, e-Government implementation and development will be done in a bottom-up manner with managerial and operational leadership embedded deep in the civil service. In addition, partnerships with NGOs and private sector can be established for e-service development, promotion and delivery.

#### *Lack of Ownership*

Currently e-Government is viewed the responsibility and a project of the Ministry of Communications and Information Technology and there is little or no ownership for e-Government across the government as a whole.

To minimize and mitigate for this risk, a CIO system shall be established with participation from all key stakeholders. In addition, role of the central coordinating, moni-

toring and evaluation office must be clearly setup with clear demarcation of ownership and responsibilities. Furthermore, capacity and awareness building shall be conducted across the government agencies and ministries.

#### *Weak Institutional Capacity*

Institutional capacity for developing and operating e-Government is extremely limited in the government. This is the case at the central e-Government coordinating office, as well as all other ministries and agencies and includes capacities ranging from strategic and project management to ICT governance and ICT service delivery. This can lead to implementation failure, resulting in financial losses as well as loss of confidence and trust in e-Government by the political leadership and by the citizens.

To minimize and mitigate this risk the central e-Government coordinating office with the CIO council will explore various mechanisms to attract and retain high quality IT project managers and IT technical staff. In addition, programs under the capacity building strategic direction of this strategy will specifically take this issue into consideration in developing associated projects.

#### *Low Literacy*

The level of IT literacy across the nation as a whole is considered very low in Afghanistan. Whilst at the same time, there is currently an increasing number of youth in the urban parts of the country who are more IT literate and have access to mobile telephony. On the other hand, many years of conflict has meant that there is extremely limited penetration of modern technology into the daily lives of the people and hence no culture of IT exists in large parts of the country. This risk could lead to low up-take of e-Government and even rejection.

In order to minimize and mitigate for this risk large scale awareness and capacity building programs will be implemented. In addition, grass root support and ownership will be garnered through partnerships with local NGOs, local elders and leaders in promoting e-Government.

## 4. CONCLUSION

This document has presented the EGOV strategy draft for Afghanistan elaborated by UNU-IIST Center for Electronic Governance jointly with Afghan Ministry of Communications and IT. It was developed within EGOV.AF project following the underlying methodology for e-Government strategic planning through a multi-level and multi-stakeholder approach based on the readiness assessment and contribution of over 50 organizations from the government, academia, private sector and the international development partners. Lessons learned within benchmark studies on e-Government strategic planning from nine different countries that are relevant to Afghanistan w have guided and informed the e-Government strategy development process.

The draft of a coherent and whole of government strategy for e-Government development in Afghanistan supports ANDS and public administration strategies in response to current needs of Afghan people. It intends to meet citizens and government agencies expectations and can help ensure that the benefits of e-Government is maximized whilst minimizing the risks associated with large ICT projects and projects involving change and innovation.

The draft AeGS presents a strategic framework for e-Government in Afghanistan, group of key principles which underpins all e-Government planning and execution in the context of Afghanistan. It includes the AeGS vision, strategic goals, directions and action lines developed with active participation of key stakeholders based on the research and assessment findings, best practices and case studies from other countries.

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## APPENDICES

### A. TEMPLATE FOR E-GOVERNMENT VISIONING

# EGOV Visioning and Goal Setting in Afghanistan

## 3.1. Background

The overall direction of the Electronic Government (EGOV) is guided by its vision and strategic goals. Since EGOV intends to support national objectives and government mission, strategies and goals, the EGOV Strategy is expected to be aligned with the National Development (ND) strategies and Public Administration Reform (PAR) strategies. Therefore, the process for establishing EGOV vision and goals relies on the knowledge of national development objectives and government mission and strategic goals.

The EGOV visioning and goal-setting exercise include the following major steps:

- Outlining national development objectives
- Expounding government mission and PAR strategic goals
- Reviewing examples from other countries
- Setting the EGOV vision
- Elaborating the EGOV vision into strategic goals

The visioning and goal setting exercise is usually carried out in workshop-style sessions involving stakeholders from government, development partners, representatives from private sector, NGOs and academia who have an interest and capability to support and contribute to e-government development. Invited stakeholders are to be organized into groups to make contributions, integrate views and agree on the resulting EGOV vision and goals.

The form is designed to help capture the information generated from an EGOV visioning and goal-setting session/workshop.

## 3.2. National Development Strategy - Vision and Goals

**ANDS Vision:** To consolidate peace and stability through just, democratic processes and institutions, and to reduce poverty and achieve prosperity through broad based and equitable economic growth.

**ANDS Strategic Goals**

Perspective 1 – Security

G1	To create a peaceful and just society, where the state has a legitimate monopoly on the use of force and uses it to protect the rights of all Afghans.
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Perspective 2 – Governance

G2	To nurture a stable constitutional, democratic unitary state where Government is accountable to the people and the public sector at both the national and sub-national levels has the capacity to deliver services to the people.
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Perspective 3 – Economic and Social

G3	To create prosperity and reduce poverty while eliminating narcotics from Afghanistan by creating an enabling environment for legal and equitable, private sector led growth and prioritizing investments in infrastructure, education, health, private sector promotion, agriculture and rural development and social protection.
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**3.3 Governance and Public Administrative Reform Strategy**

It is imperative to review the mission of the governance and public sector to check for clarity, adequacy and common understanding of the mission statements with respect to the major EGOV needs and strategic directions.

**Mission:** To consolidate peace and stability through just, democratic processes and institutions of good governance, and to reduce poverty and gender inequities, and achieve prosperity through broad based and equitable economic growth.

**Vision:** To develop a stable and mature Islamic constitutional democracy where the three branches of government (executive, parliamentary and judicial) provide the necessary checks and balances on each other.

E1	The Government of Afghanistan will act as a policy maker, regulator, and enabler of the private sector, not its competitor.
E2	The Government of Afghanistan and its sub national governing units will be fully committed to provide open and transparent, accountable, participative, effective, coherent, gender sensitive and inclusive governance based on consensus and rule of law, at national and sub national level.



E3	The justice system will equally protect the rights of all Afghans.
E4	Afghanistan's women will enjoy greater equity in education, employment, political participation and justice.

### **Strategic Goals**

#### Perspective 1 – Governance

G1	To establish and strengthen government institutions at the central and subnational levels in order to ensure people's participation in governance and to achieve measurable improvements in the delivery of services and the protection of rights of all Afghans.
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#### Perspective 2 – Administration and Service Delivery

G2	To establish a modern, responsive, democratic, gender sensitive, transparent and accountable public administration enabled to manage public resources efficiently and effectively for improved service delivery in fair and equitable manner.
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#### Perspective 3 – Gender Equality

G3	To eliminate discrimination against women, develop their human capital and promote their participation and leadership in order to guarantee their full and equal participation in all aspects of life in Afghanistan.
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#### Perspective 4 – Anti-Corruption

G4	To eliminate corruption in the public and private sector in order to improve the effectiveness, transparency, and accountability of government, and to create an environment conducive to investment.
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#### Perspective 5 – Social Inclusion

G5	To create an inclusive Afghan society, in which the human rights of all citizens are realized, protected, respected and extended.
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### 3.4. EGOV Vision in Local Context

The EGOV Vision should be discussed in view of the national development vision and objectives, government mission, and goals of public sector reform.

The EGOV vision guided by some general principles such as moving the EGOV from being a supportive tool to a strategic enabler for development and good governance, increasing customer orientation, increasing innovation to meet emerging challenges and respond to the needs of citizens, business and whole society in general.

EGOV Strategic Goals elaborate on the EGOV vision specifying expected results in strategic areas of EGOV contribution to the government mission and national programs; providing citizen and business centered government services, IT-enabled-optimization of public administration, IT-enabled innovation, professionalism and optimal use of IT resources.

**Afghanistan EGOV Vision:**

Element 1	
Element 2	
Element ...	
Element N	

**Strategic Goals**

*Perspective 1*

*Goal 1:*

*Measures/Baseline/Targets:*

Element 1	
Element 2	
Element ...	
Element N	

*Perspective 2 –*

*Goal 2:*

*Measures/Baseline/Targets:*

Element 1	
Element 2	
Element ...	
Element N	

*Goal ..*

*Measures/Baseline/Targets:*

Element 1	
Element 2	
Element ...	
Element N	

*Goal N*

*Measures/Baseline/Targets:*

Element 1	
Element 2	
Element ...	
Element N	

**3.5. Strengths, Weaknesses, Challenges and Opportunities in EGOV Development**

This section identifies the major issues facing the development of EGOV in Afghanistan and strengths and opportunities for IT-enabled improvement in governance and innovation in the delivery of services.

*Strengths*

- Strong leadership for e-government in MCIT and a number of ICT champions in the ministries and agencies
- National Development Policies and Strategies – ANDS, Public Sector Reform, ICT Strategy
- High demand from the public and within government to tackle corruption, increase transparency and administrative efficiency and effectiveness
- Key ICT/e-Gov projects on going to develop strategic and technological foundations for e-Government
- Many agency level ICT projects on going

*Weaknesses*

- Very limited awareness of the strategic role e-Government in public sector
- Complicated and time-consuming service delivery
- Weak legal and regulatory environment
- On-going e-Government initiatives and projects are isolated
- Lack of information exchange and knowledge sharing organizational culture in public sector
- Lack of capacity and skills in e-Government implementation
- Weak partnership with academia in e-Government research

**Opportunities**

- Rapidly developing mobile and Internet services
- High demand and expectations from the public for increased transparency and deter corruption
- A number external stakeholders willingness to partner with government in e-Government implementation and research
- Basic infrastructure and legal base for e-Government are going to be in place soon

**Challenges**

- Cost of telecommunications
- Delivery of government e-services to citizens in remote area
- Lack of technical and human resources for e-Government coordination and implementation
- Limited support from high level government management
- Literacy and acceptance of e-Government in the society
- Privacy on Information and Freedom of Information issues

**3.6. Examples of EGOV Vision and Goals**

**1) United Kingdom EGOV Strategy - "Transformational Government - Enabled by Technology" (2006-2010)**

<b>Vision:</b> CITIZEN and BUSINESS CENTRED SHARED SERVICES PROFESSIONALLY DELIVERED	
E1	Better using technology to deliver public services and policy outcomes that have an impact on citizens' daily lives: through greater choice and personalization, delivering better public services, such as health, education and pensions; benefiting communities by reducing burdens on front line staff and giving them the tools to help break cycles of crime and deprivation; and improving the economy through better regulation and leaner government.
E2	Making government transformational through the use of technology - creating and retaining the capacity and capability to innovate and use technology effectively.
<b>Strategic Goals</b>	
Perspective 1 – Citizen and Business Centered Services	
G1	Services enabled by IT must be designed around the need of the citizens or businesses, and must be provided through modern, co-ordinated delivery channels. This will improve the customer experience, achieve better policy outcomes, reduce paperwork burdens and improve efficiency by reducing duplication and routine processing, leveraging delivery capacity and streamlining processes.
Perspective 2 – Shared Services	
G2	Government must move to a shared services culture - in the front-office, in the back-office, in information and infrastructure - and release efficiencies by standardization, simplification and sharing.
Perspective 3 – Professionalism	
	There must be broadening and deepening of government's professionalism in terms of the planning, delivery,

G3	management, skills and governance of IT enabled change. Outcomes; fewer costly delivery failures; and increased confidence by citizens and politicians in the delivery of change by the public services.
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## 2) Estonian EGOV Strategy – “Estonian Information Society Strategy 2013”

**Vision:** The vision of the strategy include the following elements:

E1	A constantly developing, inclusive society with raising the living standard of everybody
E2	Wide take-up of ICT by citizens in all fields of life and enterprises for increasing their productivity and competitiveness,
E3	Sufficiently qualified IT professionals and ICT solutions are known worldwide
E4	ICT sector is successful in exporting its products and services
E5	Rational use of ICT enables the public administration to function efficiently and be inclusive for all
E6	Public services for citizens and enterprises are secure, optimized and accessible via one service space
E7	In the governance of the state, needs and expectations of citizens in their different roles are considered
E8	Individualized and citizen-centered IT-enabled solutions

### Strategic Goals

Perspective 1 – Development of a citizen-centric and inclusive society

G1	Each member of the society leads a full life, using the opportunities of the information society in every possible way and actively participating in public life (“nobody will stay or will be left behind”)
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Perspective 2 – Development of a knowledge-based economy

G2	Estonia’s economic growth is based on the wide use of ICT solution
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Perspective 3 – Development of a citizen-centric, transparent and efficient Public Administration

G3	Public sector is citizen-centered, transparent and efficient
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**3) Republic of Korea - Master Plan for the Next Generation e-Government for the period 2008 – 2012**

**Vision:** To build the “World’s Best Digital Government inside the People” which intends to contribute to Vision 2030 by offering responsive, efficient, and customer-friendly services to the public.

**Strategic Goals**

Perspective 1 – Citizen Services

G1	Offer Customer-Centric Customized Citizen Services by integrating services with focus on citizens and businesses
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Perspective 2 – System-based Government Innovation

G2	Accelerate System-Based Government Innovation by building intelligent administration service system
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Perspective 3 – Preventative System for a Safer Society

G3	Enhance Preventative System for a Safer Society by delivering real-time information network for public security
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Perspective 4 – Sustainable advancement of e-government

G4	Lay Groundwork for Sustainable Advancement of e-Government by enhancing infrastructure for e-Government
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**4) Singapore - IGOV2010 Strategy**

**Vision:** To be an integrated government that delights customers and connects citizens through Infocomm

**Strategic Goals**

Perspective 1 – Citizen Services

G1	Increasing Reach and Richness of e-Services
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Perspective 2 – System-based Government Innovation

G2	Increasing Citizens’ Mindshare in e-Engagement
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Perspective 3 – Preventative System for a Safer Society

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G3	Enhancing Capacity and Synergy in Government
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Perspective 4 – Sustainable advancement of e-government

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G4	Enhancing National Competitive Advantage
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## B. TEMPLATE FOR E-GOVERNMENT STRATEGIC PLANNING IN AFGHANISTAN

# EGOV Strategic Planning in Afghanistan

### Background

The overall direction of the Electronic Government (EGOV) is guided by its vision and strategic goals. Since EGOV intends to support national objectives and government mission, strategies and goals, the EGOV Strategy is expected to be aligned with the National Development (ND) strategies and Public Administration Reform (PAR) strategies.

Therefore, the process for establishing EGOV vision and goals relies on the knowledge of national development objectives and government mission and strategic goals.

1) The EGOV visioning and goal-setting exercise include the following major steps:

- Outlining national development objectives
- Expounding government mission and PAR strategic goals
- Reviewing examples from other countries
- Setting the EGOV vision that support national development and PAR goals
- Elaborating the EGOV vision into strategic goals

2) Defining strategic actions on how to achieve the goals

- Outlining the vision and strategic goals defined at the previous stage
- Reviewing examples from other countries
- Identifying key focus areas (perspectives) for each strategic direction defined by a particular goal
- Defining key actions to be taken within each focus area (perspective) related to a particular goal

The visioning and goal setting exercise as well as defining strategies are usually carried out in workshop-style sessions involving stakeholders from government, development partners, representatives from private sector, NGOs and academia who have an interest and capability to support and contribute to e-government development. Invited stakeholders are to be organized into groups to make contributions, integrate views and agree on the resulting EGOV vision and goals.

The form is designed to help capture the information generated from an EGOV visioning and goal-setting session/workshop and define proper strategies (activities) on how to achieve the strategic goals that support the shared vision.

**Afghan National Development Strategy - Vision and Goals**

**ANDS Vision:** To consolidate peace and stability through just, democratic processes and institutions, and to reduce poverty and achieve prosperity through broad based and equitable economic growth.

**ANDS Strategic Goals**

Perspective 1 – Security

Goal 1	To create a peaceful and just society, where the state has a legitimate monopoly on the use of force and uses it to protect the rights of all Afghans
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Perspective 2 – Governance

Goal 2	To nurture a stable constitutional, democratic unitary state where Government is accountable to the people and the public sector at both the national and sub-national levels has the capacity to deliver services to the people
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Perspective 3 – Economic and Social

Goal 3	To create prosperity and reduce poverty while eliminating narcotics from Afghanistan by creating an enabling environment for legal and equitable, private sector led growth and prioritizing investments in infrastructure, education, health, private sector promotion, agriculture and rural development and social protection
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**Governance and Public Administrative Reform Strategy**

It is imperative to review the mission of the governance and public sector to check for clarity, adequacy and common understanding of the mission statements with respect to the major EGOV needs and strategic directions.

**Mission:** To consolidate peace and stability through just, democratic processes and institutions of good governance, and to reduce poverty and gender inequities, and achieve prosperity through broad based and equitable economic growth.

**Vision:** To develop a stable and mature Islamic constitutional democracy where the three branches of government (executive, parliamentary and judicial) provide the necessary checks and balances on each other.

Element 1	The Government of Afghanistan will act as a policy maker, regulator, and enabler of the private sector, not its competitor.
Element 2	The Government of Afghanistan and its sub national governing units will be fully committed to provide open and transparent, accountable, participative, effective, coherent, gender sensitive and inclusive governance based on consensus and rule of law, at national and sub national level.
Element 3	The justice system will equally protect the rights of all Afghans.
Element 4	Afghanistan’s women will enjoy greater equity in education, employment, political participation and justice.

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### **Strategic Goals**

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#### Perspective 1 – Governance

Goal 1	To establish and strengthen government institutions at the central and subnational levels in order to ensure people’s participation in governance and to achieve measurable improvements in the delivery of services and the protection of rights of all Afghans.
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#### Perspective 2 – Administration and Service Delivery

Goal 2	To establish a modern, responsive, democratic, gender sensitive, transparent and accountable public administration enabled to manage public resources efficiently and effectively for improved service delivery in fair and equitable manner.
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#### Perspective 3 – Gender Equality

Goal 3	To eliminate discrimination against women, develop their human capital and promote their participation and leadership in order to guarantee their full and equal participation in all aspects of life in Afghanistan.
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#### Perspective 4 – Anti-Corruption

Goal 4	To eliminate corruption in the public and private sector in order to improve the effectiveness, transparency, and accountability of government, and to create an environment conducive to investment.
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#### Perspective 5 – Social Inclusion

Goal 5	To create an inclusive Afghan society, in which the human rights of all citizens are realized, protected, respected and extended.
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### EGOV Development in Afghanistan - Strengths, Weaknesses, Challenges and Opportunities

This section specifies the major issues facing the development of EGOV in Afghanistan and strengths and opportunities for IT-enabled improvement in governance and innovation in the delivery of services which have been identified by e-government readiness assessment.

#### **Strengths**

- Strong leadership for e-government in MCIT and a number of ICT champions in the ministries and agencies
- National Development Policies and Strategies – ANDS, Public Sector Reform, ICT Strategy
- High demand from the public and within government to tackle corruption, increase transparency and administrative efficiency and effectiveness
- Key ICT/e-Gov projects on going to develop strategic and technological foundations for e-Government
- Many agency level ICT projects on going

#### **Weaknesses**

- Very limited awareness of the strategic role e-Government in public sector
- Complicated and time-consuming service delivery
- Weak legal and regulatory environment
- On-going e-Government initiatives and projects are isolated
- Lack of information exchange and knowledge sharing organizational culture in public sector
- Lack of capacity and skills in e-Government implementation
- Weak partnership with academia in e-Government research

### **Opportunities**

- Rapidly developing mobile and Internet services
- High demand and expectations from the public for increased transparency and deter corruption
- A number external stakeholders willingness to partner with government in e-Government implementation and research
- Basic infrastructure and legal base for e-Government are going to be in place soon

### **Challenges**

- Cost of telecommunications
- Delivery of government e-services to citizens in remote area
- Lack of technical and human resources for e-Government coordination and implementation
- Limited support from high level government management
- Literacy and acceptance of e-Government in the society
- Privacy on Information and Freedom of Information issues

## Electronic Government Vision of Afghanistan in Local Context

The EGOV Vision of Afghanistan has been discussed during visioning workshop with participation of key stakeholders from government, academia, NGOs and international organizations in view of the national development vision and objectives, government mission, and goals of public sector reform.

The EGOV vision of Afghanistan is guided by some general principles such as moving the EGOV from being a supportive tool to a strategic enabler for development and good governance, increasing customer orientation, increasing innovation to meet emerging challenges and respond to the needs of citizens, business and whole society in general.

EGOV Strategic Goals of Afghanistan was elaborated on the EGOV vision specifying expected results in strategic areas of EGOV contribution to the government mission and national programs; providing citizen and business centered government services, IT-enabled-optimization of public administration, IT- enabled innovation, professionalism and optimal use of IT resources.

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**Afghanistan EGOV Vision :** *Within 5 years most people of Afghanistan will benefit from the equal access to high quality public information and critical government services, equal opportunities to men and women in urban and rural areas for active participation in governance with everyone motivated and enabled to contribute, corruption reduced, security*

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*and stability improved*

Element 1	<b>Public Information and Services</b> - Ability to benefit from the equal access to high quality (accurate, timely, accessible) public information and services - Convenient, relevant, affordable, reliable and secure government services
Element 2	<b>Equity and Justice</b> - Balanced manner - Equitable services to Urban and Rural people/communities - equal access to opportunities to men and women
Element 3	<b>Open Government -Trust</b> - Building trust between government and public through Transparency, Reduced corruption, improved stability and human security
Element 4	<b>Empowerment</b> - Empowering and enabling Citizen contribution and active participation in public life and establishment of Knowledge based Economy and Society

### **Strategic Goals**

#### *Perspective 1 – Public Services*

**Goal 1:** Equal access to quality public services, particularly in health, education and agriculture and services for businesses and others

*Measures/Baseline/Targets:*

- 1) Urban/Rural ->
- 2) Women/Men ->
- 3) Disabled/Enabled People ->
- 4) Province/Zonal/Regional Based ->
- 5) Elderly/Youth ->
- 6) Literate/Illiterate ->
- 7) Remote/Accessible areas ->
- 8) Rich/Poor ->

Element 1	Public information will be accurate, timely and accessible and public services will be convenient, relevant, affordable, reliable and secure
Element 2	Public information and services will be delivered in a citizen centric manner aimed at the whole of the nation, designed specifically to reduce the digital divide, ensure accessibility and ability to benefit across various social and economic divides in the county
Element 3	Health, education and agriculture information and services will be prioritized for whole of the national delivery aimed at supporting social and economic development at the grass root level

*Perspective 2 – Government Modernization*

**Goal 2:** Modern and optimized public sector through innovation, collaboration and technology

*Measures/Baseline/Targets:*

- 1) *Service Provision* – Time/Cost/Access/Human Resources/Number of Steps/Number of Agencies of contact/Number of visits/Ease of Use/One-stop-shop
- 2) *Decision Making and Administration* – Time/Number of Levels/number of steps/Less-Paper office – amount of paper used/ Streamline Processes – BPR
- 3) *Policy Making* – public consultation/openness/drafted policies made available online/enacted policies including rationale and results/outputs from public consultation made online

Element 1	Modern technology will be applied to reengineer the structure and processes of government in order to increase efficiency, effectiveness, accountability and transparency
Element 2	Convenient and reliable collaborative networks will be established to support whole of government approach to governance
Element 3	Culture of innovation will be cultivated and nurtured and knowledge networks will be promoted within the public sector

*Perspective 3 – Interaction between Government and Public*

**Goal 3:** Improve interaction between government and public

*Measures/Baseline/Targets:*

- 1) Level of Trust
- 2) Customer Satisfaction
- 3) Government Openness – information on procedures/rules/costs through e-channels
- 4) Online dispute resolution/Complaints Submissions to Authorities and tracking of these complaints
- 5) Customer Feedback

Element 1	Security and privacy will be enhanced across the public sector in their dealings with the citizen
Element 2	Measures aimed at gaining public confidence and trust in government will be put in place
Element 3	Public participation in government will be encouraged and promoted through multiple, convenient and accessible channels

**General Principles**

Principle 1	
Principle 2	
Principle 3	

Principle 4	
Principle 5	
Principle ...	
Principle N	

***Strategic Directions***

Strategy 1	
Strategy 2	
Strategy 3	
Strategy 4	

***Strategic Action Lines***

*Strategy 1 –*

Action Line 1	
Action Line 2	
Action Line 3	
Action Line 4	
Action Line 5	
Action Line 6	
Action Line N	

*Strategy 2 –*

Action Line 1	
Action Line 2	



Action Line 3	
Action Line ...	
Action Line N	

*Strategy... –*

Action Line 1	
Action Line 2	
Action Line 3	
Action Line ...	
Action Line N	

*Strategy N –*

Action Line 1	
Action Line 2	
Action Line 3	
Action Line ...	
Action Line N..	

**Examples of EGOV Vision and Goals**

**1) United Kingdom EGOV Strategy - “Transformational Government - Enabled by Technology’ (2006-2010)**

**Vision:** CITIZEN and BUSINESS CENTRED SHARED SERVICES PROFESSIONALLY DELIVERED

Element 1	Better using technology to deliver public services and policy outcomes that have an impact on citizens' daily lives: through greater choice and personalization, delivering better public services, such as health, education and pensions; benefiting communities by reducing burdens on front line staff and giving them the tools to help break cycles of crime and deprivation; and improving the economy through better regulation and leaner government.
Element 2	Making government transformational through the use of technology - creating and retaining the capacity and capability to innovate and use technology effectively.

**Strategic Goals**

Perspective 1 – Citizen and Business Centered Services

Goal 1	Services enabled by IT must be designed around the need of the citizens or businesses, and must be provided through modern, co-ordinated delivery channels. This will improve the customer experience, achieve better policy outcomes, reduce paperwork burdens and improve efficiency by reducing duplication and routine processing, leveraging delivery capacity and streamlining processes.
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Perspective 2 – Shared Services

Goal 2	Government must move to a shared services culture - in the front-office, in the back-office, in information and in infrastructure - and release efficiencies by standardization, simplification and sharing.
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Perspective 3 – Professionalism

Goal 3	There must be broadening and deepening of government's professionalism in terms of the planning, delivery, management, skills and governance of IT enabled change. Outcomes; fewer costly delivery failures; and increased confidence by citizens and politicians in the delivery of change by the public services.
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**2) Estonian EGOV Strategy – “Estonian Information Society Strategy 2013”**

**Vision:** The vision of the strategy include the following elements:

Element 1	A constantly developing, inclusive society with raising the living standard of everybody
Element 2	Wide take-up of ICT by citizens in all fields of life and enterprises for increasing their productivity and competitiveness,
Element 3	Sufficiently qualified IT professionals and ICT solutions are known worldwide

Element 4	ICT sector is successful in exporting its products and services
Element 5	Rational use of ICT enables the public administration to function efficiently and be inclusive for all
Element 6	Public services for citizens and enterprises are secure, optimized and accessible via one service space
Element 7	In the governance of the state, needs and expectations of citizens in their different roles are considered
Element 8	Individualized and citizen-centered IT-enabled solutions

### **Strategic Goals**

Perspective 1 – Development of a citizen-centric and inclusive society

Goal 1	Each member of the society leads a full life, using the opportunities of the information society in every possible way and actively participating in public life (“nobody will stay or will be left behind”)
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Perspective 2 – Development of a knowledge-based economy

Goal 2	Estonia’s economic growth is based on the wide use of ICT solution
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Perspective 3 – Development of a citizen-centric, transparent and efficient Public Administration

Goal 3	Public sector is citizen-centered, transparent and efficient
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### **3) Republic of Korea - Master Plan for the Next Generation e-Government for the period 2008 – 2012**

**Vision:** To build the “World’s Best Digital Government inside the People” which intends to contribute to Vision 2030 by offering responsive, efficient, and customer-friendly services to the public.

### **Strategic Goals**

Perspective 1 – Citizen Services

Goal 1	Offer Customer-Centric Customized Citizen Services by integrating services with focus on citizens and businesses
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Perspective 2 – System-based Government Innovation

Goal 2	Accelerate System-Based Government Innovation by building intelligent administration service system
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Perspective 3 – Preventative System for a Safer Society

Goal 3	Enhance Preventative System for a Safer Society by delivering real-time information network for public security
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Perspective 4 – Sustainable advancement of e-government

Goal 4	Lay Groundwork for Sustainable Advancement of e-Government by enhancing infrastructure for e-Government
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**4) Singapore - IGOV2010 Strategy**

**Vision:** To be an integrated government that delights customers and connects citizens through Infocomm

**Strategic Goals**

Perspective 1 – Citizen Services

G1	Increasing Reach and Richness of e-Services
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Perspective 2 – System-based Government Innovation

G2	Increasing Citizens’ Mindshare in e-Engagement
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Perspective 3 – Preventative System for a Safer Society

G3	Enhancing Capacity and Synergy in Government
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Perspective 4 – Sustainable advancement of e-government

G4	Enhancing National Competitive Advantage
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Examples of Key Actions for achieving EGOV Vision and Goals

**1) United Kingdom EGOV Strategy - “Transformational Government - Enabled by Technology’ (2006-2010)**

**Vision Statement:** CITIZEN and BUSINESS CENTRED SHARED SERVICES PROFESSIONALLY DELIVERED

**Strategic Goal:** Services enabled by IT must be designed around the need of the citizens or businesses, and must be provided through modern, co-ordinated delivery channels. This will improve the customer experience, achieve better policy outcomes, reduce paperwork burdens and improve efficiency by reducing duplication and routine processing, leveraging delivery capacity and streamlining processes.

**Focus Area/Perspective - CITIZEN and BUSINESS CENTRED SERVICES**

Action 1	To increase understanding of customer needs and behaviors - new processes to engage with citizens, businesses and public servants
Action 2	To define customer groups and appoint directors to lead the overall development of services to make them responsive to different groups at different times depending on their need

Action 3	To create a Service Transformation Board - officials from the public sector who run major services to define and enforce common service design principles
Action 4	To develop modern channels for citizen and business access to services and manage the migration to them
Action 5	Information Assurance - risk management model to provide guidance on this, approved by the Central Sponsor for Information Assurance
Action 6	Identity Management - provide cost-effective services trusted by customers and stakeholders which will converge towards biometric identity cards and the National Identity Register
Action 7	Technology standards and architecture across government- open standards, commercial off-the-shelf products and asset re-use

## 2) Estonian EGOV Strategy – “Estonian Information Society Strategy 2013”

**Vision Element:** Public services for citizens and enterprises are secure, optimized and accessible via one service space

**Strategic Goal:** Public sector is citizen-centered, transparent and efficient

### Targets

Target 1	by 2013, the strategy sets the objective of 80 % of citizen satisfaction
Target 2	by 2013 95 % of business satisfaction with regard to the use of public sector eServices

### Focus Area/Perspective 3.1 - Improving the Efficiency of the Public Sector

Action 1	Transforming public sector business processes to make better use of advantages and possibilities enabled by the ICT
Action 2	Increasing the efficiency of policy formulation through better use of data and increased research about the IS impact and challenges
Action 3	Modernization of state information systems to ensure their integration into a single interoperable whole functioning on the basis of user needs, not institutional structures
Action 4	Development of e- authentication and authorization mechanisms, including participation in cross-border eID projects
Action 5	Ensuring the functioning and development of support systems for the maintenance of the state information system
Action 6	Development of systems for increasing the efficiency of state and local government
Action 7	Transforming public sector business processes to make better use of advantages and possibilities enabled by the ICT

**3) Republic of Korea - Master Plan for the Next Generation e-Government for the period 2008 – 2012**

**Vision:** To build the “World’s Best Digital Government inside the People” which intends to contribute to Vision 2030 by offering responsive, efficient, and customer-friendly services to the public

**General Strategies**

Strategy 1	Establish Governance Structure
Strategy 2	Innovate Process and Realign Systems
Strategy 3	Strengthen Performance Management System
Strategy 4	Enhance e-Government Human Resources
Strategy 5	Improve Global Leadership

**Strategic Goal 1:** Offer Customer-Centric Customized Citizen Services by integrating services with focus on citizens and businesses

**Focus Area/Perspective 1.1 - Integration of Government Service Channels for Enhanced Public Convenience**

Action 1	Integrated Information System for Civil Life Support will aggregate citizens’ life related services provided from central, local governments and other private and civil organizations and link the standard administrative information systems of local governments with a resident service support portal
Action 2	“My e-Gov” will provide services tailored to the needs of individual citizens based on the government service map. Services provided by various portals that were previously designed with a specific task or purpose will be rebuilt based on demands from citizens by improving cross-ministry business processes
Action 3	Intelligent System for Delivery of Medical Information to the Public by standardizing electronic medical records, developing core common modules, and strengthening security, etc.
Action 4	Integrated System for the 4 Major Social Insurance Services will provide a one-stop service the people on a real-time basis by integrating the different applications and collecting schemes of the 4 Social Insurances Programs
Action 5	Eligibility Verification System for Social Services to certify those receiving social services such as unemployment check, long-term care for the elderly, earned income tax credit, etc.
Action 6	Online Social Consensus System for Building an Integrated Society to ensure active e-Democracy by providing venues for cyber discussion, real-time public opinion gathering, etc., allowing stakeholders to resolve their disagreements in a democratic process
Action 7	E-Voting and e-Election using Ubiquitous Technology will create the basis for people to vote from anywhere across the nation by consolidating all voter registration databases

Action 8	Open Management of National Borders and Integrated Information System for Foreigners to improve all procedures for foreigners from visa issuance to departure through enhanced cooperation among relevant agencies and real-time linkages with overseas diplomatic offices
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#### 4) Singapore - IGOV2010 Strategy

**Vision:** To be an integrated government that delights customers and connects citizens through Infocomm

##### Targets

Target 1	8 out of 10 users - are very satisfied with the overall quality of e-services
Target 2	9 out of 10 users - would recommend others to transact with the Government through e-services
Target 3	8 out of 10 users - are very satisfied with the level of clarity and usefulness of information published online on Government policies, programmes and initiatives

##### Strategic Goal 3: Enhancing Capacity and Synergy in Government

Action 1	Singapore Government Enterprise Architecture (SGEA) - to identify potential areas for inter-agency collaboration and set data and application standards for sharing of information and systems across agencies
Action 2	Consolidation of common Finance and Human Resource services to public agencies under Centre for Shared Services
Action 3	Unique Establishment Identifier (UEI) for companies, businesses, societies and NGO to share non-confidential information to deliver better and more personalized services
Action 4	New infocomm technologies to enhance public officers' work - knowledge discovery and collaborative tools, mobile technologies
Action 5	Standard ICT Operating Environment (SOE) - to reduce the time and costs across agencies

#### 5) India National E-Governance Plan

**Vision Statement:** Make all Government services accessible to the common man in his locality, through common service delivery outlets, and ensure efficiency, transparency, and reliability of such services at affordable costs to realize the basic needs of the common man

**Strategic Goal:** To bring public services closer home to citizens

##### Focus Area/Perspective - Horizontal Transfer of Successful E-Governance Initiatives

Action 1	Spread the benefits of e-Governance across the country  Other
Action 2	Identify and replicate major successes that have been achieved (Land Records, Property Registration, Transport System at RTOs)



**Focus Area/Perspective - Common Services Centres**

Action 1	100,000 Common Services Centres in 600,000 villages
Action 2	Front-end delivery points for Government, private and social sector services to rural citizens in an integrated manner
Action 3	60,837 CSCs rolled out in 27 states by January 2010
Action 4	CSCs will be suitably repositioned to be a network to provide Government services to the citizens in rural areas

**Focus Area/Perspective - India Development Gateway**

Action 1	Provide information, products and services in local languages for rural communities
Action 2	Establish multilingual platform for knowledge sharing
Action 3	Provide information and services on Agriculture, Health, Primary Education, e-Governance, Rural energy and Social Welfare
Action 4	Ensure offline and online content management
Action 5	Build network of partners for content sharing and outreach activities and capacity building for village knowledge centre operators

**6) Pakistan National E-Government Strategy**

**Expected Impact (Vision):** To change the way the government interacts with its citizens, increase the productivity of the Government of Pakistan, underpin the capacity and usage of e-business in the private sector

**Strategic Goal 2: Increase Transparency and Accountability in decision-making**

**General Principles**

Principle 1	Top-level Ownership
Principle 2	Comprehensive plan instead of piece-meal projects
Principle 3	Priority on High-Impact Agency-specific application
Principle 4	Interoperability of Applications
Principle 5	Outsourcing of project execution

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**Focus Area/Perspective - Common Applications**

Action 1	Identify a portfolio of applications that are common to many or all Divisions such as Internal Communication, Human Resource, Budget, Project Management, Document/File Management, Collaboration
Action 2	Ministry of IT will implement, stabilize and then roll out to all other Divisions

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**Focus Area/Perspective - Agency-Specific Applications & e-Services for Citizens**

Action 1	Every Division will identify high impact processes for the agency to provide services to citizens electronically
Action 2	Services to be implemented through the support of Electronic Government Directorate (EGD but with the ownership lying with the respective agency.
Action 3	Front-end delivery points for Government, private and social sector services to rural citizens in an integrated manner

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**Focus Area/Perspective - Enabling Environment**

Action 1	Federal Government – Top level leadership is to be provided by the recently notified National Electronic Government Council (NEGC) under the chairmanship of the Prime Minister. NEGC will meet quarterly to review the progress of the implementation of E-Government. Necessary changes in Legislation, Rules and Regulations need to be identified and made
Action 2	Agency – Will take on ownership and implement their E-Government program with the support of EGD. Training will be made mandatory for all employees of and above Grade BPS-5. An Awareness campaign will be started for all employees and citizens
Action 3	EGD – should be made an attached department of the Ministry of IT to grant it organizational and financial autonomy to remove unnecessary procedural delays

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**7) Saudi Arabia National E-Government Strategy**

**Vision:** By the end of 2010, everyone in the Kingdom will be able to enjoy – from anywhere and at any time – world-class government services offered in a seamless, user-friendly and secure way by utilizing a variety of electronic means

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**Strategic Goal 2: Increasing Internal Efficiency and Effectiveness**


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**General Principles:**

Principle 1	Deliver all possible official intra-governmental communication in a paperless way
Principle 2	Ensure accessibility of all information needed across government agencies and storage of information with as little redundancy as possible
Principle 3	Purchase all goods and services above a reasonable value threshold through e-procurement

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**Focus Area/Perspective - National Applications**

Action 1	<i>E-Procurement</i> : Development of a government-wide electronic platform for government procurement of goods and services
Action 2	<i>Government correspondence</i> : Development of a government-wide electronic platform to prepare, exchange, store, track and retrieve messages and documents
Action 3	<i>Government databases</i> : Development of a government-wide electronic platform to make available to all government agencies (and, possibly, the public and the private sector) information already stored in databases of various government agencies

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**Focus Area/Perspective - Infrastructure**

Action 1	<i>E-Government network project</i> : This project should develop the network infrastructure and set up communication and security standards. As part of the project, an infrastructure for a virtual private network (VPN) connecting government agencies will be established
Action 2	<p><i>Integration infrastructure project</i>: This project should provide infrastructure necessary for implementation of the e-services projects. Infrastructure will consist of the following elements:</p> <ul style="list-style-type: none"> <li>○ <i>Integration bus</i>: This element will allow government agencies to exchange data through middle-ware</li> <li>○ <i>Authentication/authorization and payment gateway</i>: These components will allow government agencies to authenticate and authorize users of e-services and will provide payment processing functionalities</li> <li>○ <i>User interaction toolkit</i>: This component will enable rapid deployment of e-services (user interaction functionalities)</li> </ul>
Action 3	<i>E-Government portal project</i> : This project will develop a central e-government portal playing two roles: (a) single (but not exclusive) point of access to information about G2C and G2B government services; (b) single (but not exclusive) point of access to government e-services transactions
Action 4	<i>Intranet portal project</i> : This project will develop a government Intranet portal as a single point of access to G2G information and services: government-internal data and supporting applications for government agencies. The project will share most of its infrastructure with the e-government portal
Action 5	<i>E-services shared data project</i> : This project will ensure accessibility to the basic required shared data, needed across government agencies for the delivery of the majority of e-services (e.g., data on citizens, companies). The goal will be to enable and automate access to this information, available at the government agencies. The project is a critical enabler for the implementation of e-services
Action 6	<i>Interoperability framework project</i> : This project will establish common standards and definitions to be used in the exchange of information between government agencies. The project will focus on the development of data schemas and metadata standards and on the set-up of technical standards

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**8) E-Sri-Lanka Strategy**

**Vision for Re-engineering Government:** To provide citizen services in the most efficient manner by improving the way government works, by re-engineering and technologically empowering government business processes

**Strategic Goals:** To facilitate the re-engineering of government business processes from the citizen service perspective to make them more efficient and citizen friendly and to use ICT as the tool for efficiently activating the re-engineered

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business process

**Focus Area/Perspective - Citizen Services**

Action 1	eMotoring
Action 2	ePension
Action 3	eCitizen ID
Action 4	eForeign Employment

**Focus Area/Perspective - ICT Human Resource Development**

Action 1	Equip government employees with the ICT skills and competencies needed to manage and administer e-government services
Action 2	Increase the opportunities and incentives for basic ICT education through ICTAs growing network of Ne-naslas, e-learning network and utilizing the network of existing training institutions
Action 3	Create a trained pool of professionals in the government with necessary 'e-leadership' skills to champion the e-Government projects

**9) Nepal IT Policy**

**Vision:** To propel Nepal into knowledge society by 2015 so that the country is fully capable of harnessing the benefits of ICT in order to promote good governance, advance socio-economic development and reduce poverty

**Strategic Goals:** To promote economic development and develop/strengthen democratic norms and values through the use of ICT

**General Strategies:**

Strategy 1	Making ICT accessible to the general public
Strategy 2	Increasing employment through ICT
Strategy 3	Building knowledge-based industries and knowledge based society

**Focus Area/Perspective - Strategic Focus and Regulatory Framework**

Action 1	Establishing a systematic legal framework to enact laws to secure legitimacy for electronic media, encourage private sector participation, and promote export and investment on IT sector
Action 2	Reforming procurement laws, regulations, establishment of national funds for rural development and poverty alleviation

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***Focus Area/Perspective - Content and Applications***

Action 1	Creating a conducive environment for information exchanges between government agencies
Action 2	Digitization of administrative processes
Action 3	Implementation of telecommunication networks
Action 4	Adaptation of Nepalese language computing to the content development and setting standards
Action 5	Development of citizen centered websites and exploring ways of adapting of Open Source Software in the government

## B. VISIONING WORKSHOP SUMMARY

Kabul, Afghanistan, 19-21 - July, 2010

### GROUP 1

#### *Vision*

A country where people have equal access and ability to benefit from social and governmental services such as health, education and agriculture services

#### *Goals*

1. Re-engineering of the existing government processes and procedures to modernize government and increase efficiency
2. Building trust through transparency
3. secure and sustainable ICT Infrastructure
4. Develop and implement ICT Culture and Education
5. Availability of secure e-services equally to all Afghans

#### *Comments:*

What is ICT Culture? – ICT becomes part of life.

Capacity building is required across all sectors/levels – and include also awareness raising – which is something different

How we can achieve e-government goals in 5 years? – These are preliminary steps towards long term goals

What about the negative aspects of ICT Culture?

### GROUP 2

#### *Vision*

e-Government to reduce the administrative hierarchies, reform the modes of government affairs, improve security, optimize government business processes, improve quality of services, management and leadership, enhance collaboration of the internal departments and interaction between the government and public, construct honest diligent transparent and efficient government using technology as means of transformation

#### *Goals*

- 1) Better Services – more convenient and reliable, with lower compliance cost, higher quality and value
- 2) Cheaper better information and services for customers and better value for Afghanistan –

- 3) Building an image of Afghanistan as a modern nation, an attractive location for people and businesses –
- 4) Making it easier for those who wish to contribute –
- 5) Supporting the Knowledge Society through public sector innovation –

#### *Comments*

What is cheaper information? – may be just better information – maybe more accessible information and services – easy accessible and secure information and services

Better image of AF? – too general?

More education is needed – literacy is very low – need local security

Is this vision realizable in 5 years?

### GROUP 3

#### *Vision*

To establish (good) better governance in order to adopt (by utilizing) latest e-government trends to promote ICT and e-government services all across the country and create awareness among citizen and stakeholders

#### *Goals*

- 1) Re-engineering existing government processes
- 2) Re-defining government organizational structures
- 3) E-Readiness (governmental, in all country)
- 4) Government communication (and Knowledge) network
- 5) Capacity building and education
- 6) Establishment of research (and innovation) bodies
- 7) Internet and Telephonic communication diffusion, scale these services
- 8) Stable electricity
- 9) Awareness mechanisms

#### *Comments:*

What kind of impact/benefits can result from this vision?

Good governance is defined term – better governance: better than now

Design e-government to survive in energy (resource) constraint environments

Why research bodies when MCIT has research on-going?  
– partnerships with Academia

#### GROUP 4

##### *Vision*

Within 5 years most people of Afghanistan will benefit from the effective and balanced social and governmental services, where, the integrated (governance) system (government) in place, corruption reduced, security stability improved and everyone will (empower) be motivated to practice the changes and development

##### *Goals*

- 1) Administrative reform – development
- 2) ICT infrastructure – support systems and resources
- 3) System development and replacement – fragmented to very integrated
- 4) Decentralization system in place
- 5) Capacity building
- 6) Community awareness enhancement
- 7) Counter narcotics reduction
- 8) Rural e-government development – capacity in rural areas

##### *Comments:*

More active participation – in shaping the changes and development?

#### SUMMARY

##### *Vision level Points*

- 1) Public Information and Services - Ability to benefit from the equal access to high quality (accurate, timely, accessible) public information and services - Convenient, relevant, affordable, reliable and secure government services -
- 2) Equity and Justice - Balanced manner - Equitable services to Urban and Rural people/communities - equal access to opportunities to men and women
- 3) Open Government -Trust - Building trust between government and public through Transparency, Reduced corruption, improved stability and human security
- 4) Empowerment - Empowering and enabling Citizen contribution and active participation in public life and establishment of Knowledge based Economy and Society

##### *Goal level Points*

- 1) Equal access to quality public services in health, education and agriculture and services for businesses and others

##### Measures/Baseline/Targets for Equal Access:

- 1) Urban/Rural ->
- 2) Women/Men ->
- 3) Disabled/Enabled People ->
- 4) Province/Zonal/Regional Based ->
- 5) Elderly/Youth ->
- 6) Literate/Illiterate ->
- 7) Remote/Accessible areas ->
- 8) Rich/Poor ->

##### Services: Health / Targets

- 1) Vaccines: Vaccination Information Management System – alerts and dissemination through e-channels (mobile/regional resource centers) – by Information required on the spot – on the spot information – first aid/initial information/first response systems – Rules and Regulations  
Treatment Protocol System –  
Emergency Response System –  
Disease Early Warning System –  
Public Health e-Learning (for doctors/health professionals) –  
Public Health Knowledge Repository –
- 2) Expiration and quality of imported medicines
- 3) Telemedicine – doctors in provinces refer to and discuss with doctors in urban areas/experts
- 4) Centralized patient records
- 5) Locations of hospitals and treatments available in these hospitals made available on e-channels
- 6) Standard Treatment Procedures through e-channels and health knowledge bases
- 7) Health awareness
- 8) Disease and health information sharing mechanism –guidance on what to do next including preventative measures etc. e.g. outbreak of SARS or Hand and Mouth season etc. – early



- warning system – privacy of personal information is very important - HMIS
- 9) Feedback facility on the quality of health services
  - 10) Public health call center to provide emergency offline help

#### Services: Education: Targets

- 1) Computer literacy in the curriculum: incrementally introduced – MoE is currently working on the new curriculum which includes ICT Literacy – lack of ICT Teachers is the main challenge – e-Learning for ICT Literacy – PPP – OLPC -
- 2) E-help desk for education services – like for lost certificates renewal/re-issuing: Credit based classes during holidays in Universities – similar courses for schools – Offline CD based lectures during the summer/winter holidays for self-learning – making course material available through e-channels online/offline
- 3) E-library: Global – make available National/Local resources – partnerships with Local Authorities and Universities to digitize and make available – MoE already started building an e-Library for primary/secondary schools by digitizing school texts – National Research and Education Networks – digitize (all) resources from libraries in provinces and bring them online in a central e-library –
- 4) Online courses: online examination/assessment – Interactive ICT Literacy courses (teacher based/self-learning) – ICT courses leading to diplomas – accreditation of online courses by Authorities
- 5) Awareness in schools on e-government/e-services: series for workshops/seminars for teachers (students) – demonstrate -
- 6) Common education standard across the country – same level of teachers across the country – online training and knowledge bases
- 7) ICT Centers
- 8) Mobile technology based education services: (priority area): Exam Results – Dummy Test Questions for revision – Parental Monitoring – Teacher Monitoring – Reminder of changes in Schedule – Alerts on class tests and chapters to read for classes – enrolment invitation for private sector unis.
- 9) Educational Resource Centers (ERC) available through mobile to both women and men: (other e-channels) -
- 10) Distance Learning Facilities:

- 11) Dedicated Schools/Higher Education Institutions for Ladies:
- 12) Lectures through Video Conferencing – leading universities to rural provinces:
- 13) Price for education should be the same across the country:
- 14) Resources should be affordable and equally distributed:
- 15) Central educational portal – with information about professors and their contact details – access to expertise

#### Services: Agriculture: Targets

- 1) Use ICT to advertise/market Afghan Agriculture Products: Developing websites (one portal) other e-channels (SMS-based) (e.g. e-chopal) – farmers/investors/traders/land owners/exporters
- 2) Agriculture Community Center (ICT Centers) – and Portals with Agriculture details: could be physical – supported by the portals and e-channels and provide data to the portal – e-channels like social networks – community development centers for men/women (integrated across agriculture/education/etc) – economic models for sustainability
- 3) Portal with disease information:
- 4) Agriculture Labs in provinces: quality of products – quarantine services in provinces supported centrally with disease information etc.
- 5) Mobile applications: information dissemination –
- 6) RFID and Sensor Technologies – Agri Labs – tracking imports/exports (quality assurance) – rainfall/water quality (sensors technologies) – Live Stock tracking
- 7) Land Management: ALA – Afghanistan Land Authority
- 8) Services specifically for Nomads: 8% responsible for over 70% of the live stock – RFID, GIS, information on quality of grazing lands through mobiles -

#### Services: Businesses

- 1) Information about business opportunities and regulations and licensing
- 2) Company registration and tracking the process of registration: ACBR – Afghanistan Central Business Registry
- 3) License Issuance Service:
- 4) Paying taxes: Online/mobile – tax declaration - payment
- 5) SME loan applications and processing online: connect to banks and registration systems

- 6) Filtering Black Listed Companies: Portal connected with Mastofiat (unit with MoF) and AISA and ACBR – later on be used by e-Procurement
  - 7) Feedback system for customers to comment/report on the progress of projects and successes/failures of companies
  - 8) Information about employment opportunities – job matching – across the provinces
  - 9) Online Reporting for Companies – annual reports/financial statements/others
  - 10) Social Welfare and Insurance Contributions made to government
- 2) Modernizing and optimizing the working of the public sector through innovation, collaboration and technology

Measures/Baseline/Targets:

- 1) Service Provision – Time/Cost/Access/Human Resources/Number of Steps/Number of Agencies of contact/Number of visits/Ease of Use/One-stop-shop
- 2) Decision Making and Administration – Time/Number of Levels/number of steps/Less-Paper office – amount of paper used/ Streamline Processes – BPR
- 3) Policy Making – public consultation/openness/drafted policies made available online/enacted policies including rationale and results/outputs from public consultation made online
- 4) Recruitment – Competitive Recruitment System
- 5) Government to Employee – Pensions/Salaries/
- 6) Capacity of Employees – Awareness/ICT Literacy/Level of innovativeness/ICT Use/Collaborative Work/Information and Knowledge Exchange and Sharing

- 7) Accountability and Transparency – Reporting/Feedback System/Tracking System/
- 8) Financial Reporting/Tracking System
- 9) Portal for Public Finance Laws and Regulations – Awareness and capacity building on public finance – maybe e-Learning on Public Finance and Public Procurement for government employees
- 10) E-Procurement – Outsourcing
- 11) Central Project Portal – Information about project information across the country
- 12) Network of Government Agencies – Information Sharing/Collaboration/Shared Services/Shared Applications
- 13) E-Administration: e-Doc Management

- 3) Improve interaction between government and public

Measures/Baseline/Targets

- 6) Level of Trust
  - 7) Customer Satisfaction
  - 8) Government Openness – information on procedures/rules/costs through e-channels
  - 9) Online dispute resolution/Complaints Submissions to Authorities and tracking of these complaints
  - 10) Customer Feedback
  - 11) One telephone number for all government information/reports/complaints
  - 12) Collecting needs of people/ Listening to people
  - 13) One point of access – one-stop-shop
  - 14) E-Jirga
- 4) Development of Knowledge society and economy

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## D. SUMMARY OF E-GOVERNMENT STRATEGIC PLANNING WORKSHOP IN AFGHANISTAN

### Background

The overall direction of the Electronic Government (EGOV) is guided by its vision and strategic goals. Since EGOV intends to support national objectives and government mission, strategies and goals, the EGOV Strategy is expected to be aligned with the National Development (ND) strategies and Public Administration Reform (PAR) strategies.

Therefore, the process for establishing EGOV vision and goals relies on the knowledge of national development objectives and government mission and strategic goals.

1) The EGOV visioning and goal-setting exercise include the following major steps:

- Outlining national development objectives
- Expounding government mission and PAR strategic goals
- Reviewing examples from other countries
- Setting the EGOV vision that support national development and PAR goals
- Elaborating the EGOV vision into strategic goals

2) Defining strategic actions on how to achieve the goals

- Outlining the vision and strategic goals defined at the previous stage
- Reviewing examples from other countries
- Identifying key focus areas (perspectives) for each strategic direction defined by a particular goal
- Defining key actions to be taken within each focus area (perspective) related to a particular goal

### Afghan National Development Strategy - Vision and Goals

**ANDS Vision:** To consolidate peace and stability through just, democratic processes and institutions, and to reduce poverty and achieve prosperity through broad based and equitable economic growth.

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#### ANDS Strategic Goals

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##### Perspective 1 – Security

Goal 1	To create a peaceful and just society, where the state has a legitimate monopoly on the use of force and uses it to protect the rights of all Afghans
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##### Perspective 2 – Governance

Goal 2	To nurture a stable constitutional, democratic unitary state where Government is accountable to the people and the public sector at both the national and sub-national levels has the capacity to deliver services to the people
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##### Perspective 3 – Economic and Social

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Goal 3	To create prosperity and reduce poverty while eliminating narcotics from Afghanistan by creating an enabling environment for legal and equitable, private sector led growth and prioritizing investments in infrastructure, education, health, private sector promotion, agriculture and rural development and social protection
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**Governance and Public Administrative Reform Strategy**

It is imperative to review the mission of the governance and public sector to check for clarity, adequacy and common understanding of the mission statements with respect to the major EGOV needs and strategic directions.

**Mission:** To consolidate peace and stability through just, democratic processes and institutions of good governance, and to reduce poverty and gender inequities, and achieve prosperity through broad based and equitable economic growth.

**Vision:** To develop a stable and mature Islamic constitutional democracy where the three branches of government (executive, parliamentary and judicial) provide the necessary checks and balances on each other.

Element 1	The Government of Afghanistan will act as a policy maker, regulator, and enabler of the private sector, not its competitor.
Element 2	The Government of Afghanistan and its sub national governing units will be fully committed to provide open and transparent, accountable, participative, effective, coherent, gender sensitive and inclusive governance based on consensus and rule of law, at national and sub national level.
Element 3	The justice system will equally protect the rights of all Afghans.
Element 4	Afghanistan’s women will enjoy greater equity in education, employment, political participation and justice.

**Strategic Goals**

Perspective 1 – Governance

Goal 1	To establish and strengthen government institutions at the central and subnational levels in order to ensure people’s participation in governance and to achieve measurable improvements in the delivery of services and the protection of rights of all Afghans.
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Perspective 2 – Administration and Service Delivery

Goal 2	To establish a modern, responsive, democratic, gender sensitive, transparent and accountable public administration enabled to manage public resources efficiently and effectively for improved service delivery in fair and equitable manner.
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Perspective 3 – Gender Equality

Goal 3	To eliminate discrimination against women, develop their human capital and promote their participation and leadership in order to guarantee their full and equal participation in all aspects of life in Afghanistan.
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Perspective 4 – Anti-Corruption

<b>Goal 4</b>	To eliminate corruption in the public and private sector in order to improve the effectiveness, transparency, and accountability of government, and to create an environment conducive to investment.
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Perspective 5 – Social Inclusion

<b>Goal 5</b>	To create an inclusive Afghan society, in which the human rights of all citizens are realized, protected, respected and extended.
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## EGOV Development in Afghanistan - Strengths, Weaknesses, Challenges and Opportunities

This section specifies the major issues facing the development of EGOV in Afghanistan and strengths and opportunities for IT-enabled improvement in governance and innovation in the delivery of services which have been identified by e-government readiness assessment.

### **Strengths**

- Strong leadership for e-government in MCIT and a number of ICT champions in the ministries and agencies
- National Development Policies and Strategies – ANDS, Public Sector Reform, ICT Strategy
- High demand from the public and within government to tackle corruption, increase transparency and administrative efficiency and effectiveness
- Key ICT/e-Gov projects on going to develop strategic and technological foundations for e-Government
- Many agency level ICT projects on going

### **Weaknesses**

- Very limited awareness of the strategic role e-Government in public sector
- Complicated and time-consuming service delivery
- Weak legal and regulatory environment
- On-going e-Government initiatives and projects are isolated
- Lack of information exchange and knowledge sharing organizational culture in public sector
- Lack of capacity and skills in e-Government implementation
- Weak partnership with academia in e-Government research

### **Opportunities**

- Rapidly developing mobile and Internet services
- High demand and expectations from the public for increased transparency and deter corruption
- A number external stakeholders willingness to partner with government in e-Government implementation and research
- Basic infrastructure and legal base for e-Government are going to be in place soon

### **Challenges**

- Cost of telecommunications
- Delivery of government e-services to citizens in remote area
- Lack of technical and human resources for e-Government coordination and implementation
- Limited support from high level government management

- Literacy and acceptance of e-Government in the society
- Privacy on Information and Freedom of Information issues

### 3.4 Electronic Government Vision of Afghanistan and Strategic Goals in Local Context

The EGOV Vision of Afghanistan and strategic goals have been discussed during visioning workshop within 4 focus groups organized from 140 representatives from 50 stakeholders from ministries, government agencies, banks, NGOs and Universities in view of the national development vision and objectives, government mission, and goals of public sector reform.

The EGOV vision of Afghanistan and strategic goals agreed among key stakeholders were formulated based on the inputs from the visioning workshop (Attachment). It is guided by some general principles and lessons from international experience such as moving the EGOV from being a supportive tool to a strategic enabler for development and good governance, increasing customer orientation, increasing innovation to meet emerging challenges and respond to the needs of citizens, business and whole society in general.

EGOV Strategic Goals of Afghanistan was elaborated on the EGOV vision specifying expected results in strategic areas of EGOV contribution to the government mission and national programs; providing citizen and business centered government services, IT-enabled-optimization of public administration, IT-enabled innovation, professionalism and optimal use of IT resources.

**Afghanistan EGOV Vision:** *Within 5 years most people of Afghanistan will benefit from the equal access to high quality public information and government services, equal opportunities to men and women in urban and rural areas for active participation in governance with everyone motivated and enabled to contribute, corruption reduced, security and stability improved*

Element 1	<i>Public Information and Services</i> - Ability to benefit from the equal access to high quality (accurate, timely accessible) public information and services - Convenient, relevant, affordable, reliable and secure government services
Element 2	<i>Equity and Justice</i> - Balanced manner - Equitable services to Urban and Rural people/communities - equal access to opportunities to men and women
Element 3	<i>Open Government -Trust</i> - Building trust between government and public through Transparency, Reduced corruption, improved stability and human security
Element 4	<i>Empowerment</i> - Empowering and enabling Citizen contribution and active participation in public life and establishment of Knowledge based Economy and Society

#### **Strategic Goals**

##### *Perspective 1 – Public Services*

**Goal 1:** Equal access to quality public services, particularly in health, education and agriculture and services for businesses and others

*Measures/Baseline/Targets:*

1) Urban/Rural ->

2) Women/Men ->

- 3) Disabled/Enabled People ->
- 4) Province/Zonal/Regional Based ->
- 5) Elderly/Youth ->
- 6) Literate/Illiterate ->
- 7) Remote/Accessible areas ->
- 8) Rich/Poor ->

Element 1	Public information will be accurate, timely and accessible and public services will be convenient, relevant, affordable, reliable and secure
Element 2	Public information and services will be delivered in a citizen centric manner aimed at the whole of the nation, designed specifically to reduce the digital divide, ensure accessibility and ability to benefit across various social and economic divides in the county
Element 3	Health, education and agriculture information and services will be prioritized for whole of the national delivery aimed at supporting social and economic development at the grass root level

*Perspective 2 – Government Modernization*

*Goal 2:* Modern and optimized public sector through innovation, collaboration and technology

*Measures/Baseline/Targets:*

- 4) *Service Provision* – Time/Cost/Access/Human Resources/Number of Steps/Number of Agencies of contact/Number of visits/Ease of Use/One-stop-shop
- 5) *Decision Making and Administration* – Time/Number of Levels/number of steps/Less-Paper office – amount of paper used/ Streamline Processes – BPR
- 6) *Policy Making* – public consultation/openness/drafted policies made available online/enacted policies including rationale and results/outputs from public consultation made online

Element 1	Modern technology will be applied to reengineer the structure and processes of government in order to increase efficiency, effectiveness, accountability and transparency
Element 2	Convenient and reliable collaborative networks will be established to support whole of government approach to governance
Element 3	Culture of innovation will be cultivated and nurtured and knowledge networks will be promoted within the public sector

*Perspective 3 – Interaction between Government and Public*

*Goal 3:* Improve interaction between government and public

*Measures/Baseline/Targets:*

- 15) Level of Trust
- 16) Customer Satisfaction
- 17) Government Openness – information on procedures/rules/costs through e-channels

- 18) Online dispute resolution/Complaints Submissions to Authorities and tracking of these complaints  
 19) Customer Feedback

Element 1	Security and privacy will be enhanced across the public sector in their dealings with the citizen
Element 2	Measures aimed at gaining public confidence and trust in government will be put in place
Element 3	Public participation in government will be encouraged and promoted through multiple, convenient and accessible channels

### 3.5 Guiding Principles for Electronic Government of Afghanistan

Principle 1	<i>Strategic</i> – development of e-government is a strategic choice by the Afghanistan Government in national development
Principle 2	<i>Top level leadership</i> – e-government development will be spearheaded and coordinated centrally at the top level of the government
Principle 3	<i>Whole of government, whole of the nation</i> – e-government is owned and will be developed by the whole of government and targeted at the whole of the nation
Principle 4	<i>Citizen centric</i> – e-government is developed for all Afghani citizens, with particular attention to the integration of social groups with special needs like women and children
Principle 5	<i>Trust in government</i> – building people, processes, systems and services aimed at creating a secure and trusted relationship between citizen and government is be a key e-government development priority
Principle 6	<i>Participative</i> – e-government will focus on enabling the engagement between people and the government in public issues and enhanced participation in policy making
Principle 7	<i>Collaborative</i> – e-government development will support government organizations working together, integrating their services, sharing information and technology, eliminating duplication and committing to development of cross-agency service delivery
Principle 8	<i>One stop, multi channel</i> – e-government development will promote one stop access through multiple channels to government information and services
Principle 9	<i>Secure and private</i> – protection of security, privacy and basic rights of citizens will be central to e-government development

### 3.6 Strategic Directions for Electronic Government of Afghanistan



Strategy 1	<i>Building Common Infrastructure</i> in the Government that can be utilized by many or all ministries and agencies such as National Data Center, National ID system, Geographical Information System (GIS), etc
Strategy 2	<i>Creating Enabling Environment</i> for developing EGOV, delivering electronic/mobile services, electronic documents, applications, forms and interacting with citizens via electronic/mobile channels by ensuring ownership on EGOV strategy and implementation program, leadership at all levels (top, middle, operation) and coordination, raising awareness among government employees and citizens, adopting legislation, rules and regulations and establishing sustainable financial mechanisms and organizational culture
Strategy 3	<i>Developing Common and Agency-specific Applications</i> that i) common applications can be used by many or all ministries and agencies such as Human Resource Management, Planning and Management, Procurement, Project Management and Monitoring and Evaluation, Document/Record Management, Correspondence, Collaboration and Internal Communication, etc and ii) sectoral or agency-specific applications such as healthcare, agriculture, education, social welfare, etc
Strategy 4	<i>Building Capacity</i> of i) government employees in delivering public information and services and interacting with public via electronic and mobile channels, and ii) citizens in utilizing electronic and mobile services and interacting with Government

### 3.6 Action Lines for Electronic Government of Afghanistan

#### *Strategy 1 – Building Common Infrastructure*

Action Line 1	Network of Government Agencies – Information Sharing/Collaboration/Shared Services/Shared Applications/
Action Line 2	National e-ID
Action Line 3	Data Center
Action Line 4	To start the culture of using Open Source Soft wares in government agencies.
Action Line 5	Standardization (compatible Hard wares/ Soft wares)
Action Line 6	Common gateway and network
Action Line 7	Video conference facility – to connect local authorities/district level with center (agencies in Kabul)
Action Line 8	All police zones and fields soon will be connected with the MoIA through network.

Action Line 9	Share point is already activated in MoIA
Action Line 10	IT auditing
Action Line 11	License base software
Action Line 12	Egov resource center
Action Line13	

*Strategy 2 – Creating Enabling Environment*

Action Line 1	E-Citizen Program
Action Line 2	Digital Signature
Action Line 3	Electronic Transaction Act
Action Line 4	Electronic Document Management System
Action Line 5	CIO (Chief Information Officer) Program for Government
Action Line 6	EGOV Leadership Program for public and private sector leaders
Action Line 7	Partnership with national and international organizations, academia and industry for EGOV development
Action Line 8	EGOV Directorate responsible for coordination and monitoring
Action Line 9	To create CIOs and e-Government sections in all government agencies
Action Line 10	e-Election
Action Line 11	Copy right law enforcement/ legislation
Action Line 10	m-Government (m-applications) – for awareness, providing information, providing services

*Strategy 3 – Developing Common and Sectoral/Agency specific Applications*

Action Line 1	<u>Common Applications for Ministries and Agencies</u> 14) E-Procurement – Outsourcing 15) E-Administration: e-Doc Management
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	<p>16) Human Resource Management</p> <p>17) Planning and Monitoring</p> <p>18) Vehicle plate number registration Database is already created.</p>
Action Line 2	<p><u>Common Applications for Local Administrations</u></p> <p>1) E-Jirga</p> <p>2) Portal for Public Finance Laws and Regulations – Awareness and capacity building on public finance</p> <p>3) Etc</p>
Action Line 3	<p><u>Common Applications for Government Employees</u></p> <p>4) Recruitment – Competitive Recruitment System</p> <p>5) Government to Employee – Pensions/Salaries/</p> <p>6) e-Learning on Public Finance and Public Procurement</p> <p>7) Central Project Portal – Information about project information across the country</p> <p>8) To create Database for registering criminal records of all residents in Afghanistan (Criminal Investigation Database) – e-CID</p> <p>9) Biometric Database System is already created in Ministry of Interior Affairs for identifying the MoIA internal employees (to register personal information and property information of employees).</p>
Action Line 4	<p><u>Common Applications for interaction with Citizens</u></p> <p>9) Mobile applications: information dissemination and citizens reporting</p> <p>10) Collecting needs of people/ Listening to people, One telephone number for all government information/reports/complaints</p> <p>11) One point of access – one-stop-shop</p> <p>10) Citizens Reporting/Feedback System/Tracking System/ Financial Reporting - Accountability and Transparency</p> <p>11) Database is going to be created for e-passport by IOM</p> <p>12) To create a database for traffic vehicle -- e-permit /e-license</p>
Action Line 5	<p><u>Applications for Services in Healthcare</u></p> <p>11) Vaccines: Vaccination Information Management System – alerts and dissemination through e-channels (mobile/regional resource centers)</p> <p>12) Information required on the spot – on the spot information – first aid/initial information/first response systems – Rules and Regulations, Locations of hospitals and treatments available in these hospitals made available on e-channels, Expiration and quality of imported medicines</p> <p>13) Standard Treatment Procedures through e-channels and health knowledge bases and Treatment Protocol System</p> <p>14) Emergency Response System and Public health call center to provide emergency offline help</p> <p>15) Disease Early Warning System</p> <p>16) Public Health e-Learning (for doctors/health professionals)</p> <p>17) Health awareness and Public Health Knowledge Repository</p> <p>18) Telemedicine – doctors in provinces refer to and discuss with doctors in urban areas/experts</p> <p>19) Centralized patient records</p> <p>20) Disease and health information sharing mechanism –guidance on what to do next including preventative measures etc. e.g. outbreak of SARS or Hand and Mouth season etc. – early warning system – privacy of personal information is very important - HMIS</p> <p>21) Feedback facility on the quality of health services</p> <p>22) Etc</p>
Action Line 6	<p><u>Applications for Services in Education</u></p> <p>16) E-help desk for education services – like for lost certificates renewal/re-issuing: Credit based classes during holidays in Universities – similar courses for schools – Offline CD based lectures during the summer/winter holidays for self-learning – making course material available through e-channels online/offline</p>

	<p>17) E-library: Global – make available National/Local resources – partnerships with Local Authorities and Universities to digitize and make available – MoE already started building an e-Library for primary/secondary schools by digitizing school texts – National Research and Education Networks – digitize (all) resources from libraries in provinces and bring them online in a central e-library –</p> <p>18) Online courses: online examination/assessment – Interactive ICT Literacy courses (teacher based/self-learning) – ICT courses leading to diplomas – accreditation of online courses by Authorities</p> <p>19) Awareness in schools on e-government/e-services: series for workshops/seminars for teachers (students) – demonstrate -</p> <p>20) Common education standard across the country – same level of teachers across the country – online training and knowledge bases</p> <p>21) ICT Centers</p> <p>22) Mobile technology based education services: (priority area): Exam Results – Dummy Test Questions for revision – Parental Monitoring – Teacher Monitoring – Reminder of changes in Schedule – Alerts on class tests and chapters to read for classes – enrolment invitation for private sector units</p> <p>23) Educational Resource Centers (ERC) available through mobile to both women and men: (other e-channels)</p> <p>24) Distance Learning Facilities</p> <p>25) Dedicated Schools/Higher Education Institutions for Ladies</p> <p>26) Lectures through Video Conferencing – leading universities to rural provinces</p> <p>27) Price for education should be the same across the country</p> <p>28) Resources should be affordable and equally distributed</p> <p>29) Central educational portal – with information about professors and their contact details – access to expertise</p> <p>30) Etc</p>
Action Line 7	<p><u>Applications for Services in Agriculture</u></p> <p>12) Use ICT to advertise/market Afghan Agriculture Products: Developing websites (one portal) other e-channels (SMS-based) (e.g. e-chopal) – farmers/investors/traders/land owners/exporters</p> <p>13) Agriculture Community Center (ICT Centers) – and Portals with Agriculture details: could be physical – supported by the portals and e-channels and provide data to the portal – e-channels like social networks – community development centers for men/women (integrated across agriculture/education/etc) – economic models for suitability</p> <p>14) Portal with disease information:</p> <p>15) Agriculture Labs in provinces: quality of products – quarantine services in provinces supported centrally with disease information etc.</p> <p>16) RFID and Sensor Technologies – Agri Labs – tracking imports/exports (quality assurance) – rainfall/water quality (sensors technologies) – Live Stock tracking</p> <p>17) Land Management: ALA – Afghanistan Land Authority</p> <p>18) Services specifically for Nomads: 8% responsible for over 70% of the live stock – RFID, GIS, information on quality of grazing lands through mobiles</p> <p>19) Etc</p>
Action Line 7	<p><u>Applications for Services to Businesses</u></p> <p>1) Information about business opportunities, employment opportunities – job matching – across the provinces, and regulations and licensing</p> <p>2) Company registration and tracking the process of registration: ACBR – Afghanistan Central Business Registry</p> <p>3) License Issuance Service</p> <p>4) Paying taxes: Online/mobile – tax declaration - payment</p> <p>5) SME loan applications and processing online: connect to banks and registration systems</p>

	<p>6) Filtering Black Listed Companies: Portal connected with Mastofiat (unit with MoF) and AISA and ACBR – later on be used by e-Procurement</p> <p>7) Feedback system for customers to comment/report on the progress of projects and successes/failures of companies</p> <p>8) Online Reporting for Companies – annual reports/financial statements/others</p> <p>9) Social Welfare and Insurance Contributions made to government</p>
Action Line 8	<p><u>Applications for public services</u></p> <p>1) e-passport</p>

*Strategy 4 – Building Capacity of Government Employees and Citizens*

Action Line 1	<i>Capacity of Employees</i> – Awareness/ICT Literacy/Level of innovativeness/ICT Use/Collaborative Work/Information and Knowledge Exchange and Sharing
Action Line 2	<i>Institutional Capacity</i> – EGOV Program and Project Management, ICT Governance, Security and Privacy, etc
Action Line 3	<i>Capacity of Citizens</i> - Computer literacy in the curriculum: incrementally introduced – MoE is currently working on the new curriculum which includes ICT Literacy – lack of ICT Teachers is the main challenge – e-Learning for ICT Literacy – PPP – OLPC -
Action Line 4	Public awareness through TV and Radio programs
Action Line 5	Health TV Channel
Action Line 6	Activities to promote ICT culture within public and government agencies
Action Line 7	Sector based specialized training
Action Line 8	Research lab
Action Line 9	e-Library (for public and government employees)
Action Line 10	Wekipedia (provide it in two local languages Pashto and Dari)
Action Line 11	Capacity Building -- Single point of information sharing-- within school students and university students in Kabul and provinces.
Action Line 12	Training is given to all MoIA employees ( computer, Internet, English and military)

