

UNDP Uzbekistan

UNDP Local Governance Support Project: Participation and Partnership (LGSP)

Promoting e-Governance Strategy

Progress Mission Report

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Deliverable 2 – Progress Report on field trip mission to Tashkent and Djizak, summarizing major findings, suggestions of relevant stakeholders and entry points for ensuring further e-governance reform.

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Executive Summary

Key observations, conclusions, recommendations

- 1) Uzbekistan needs a radical acceleration of e-government development in order to substantially reorganize the state bodies' back-offices and significantly improve on that basis service delivery for citizens and businesses in scope, coverage and quality within the next five years. The latest executive decisions issued by the President and the Cabinet of Ministers in 2012, including the creation (reorganization) of the State Committee for Communications, Informatization and Telecommunications Technologies (GoskomCITT) and empowering it to coordinate other state bodies, demonstrate a strong political will to move much faster in this field than before.
- 2) According to world's best practices, e.g. those of Korea and Estonia, the availability of the clearly articulated leadership at the highest level is a critically important pre-condition for successful e-governance development. That pre-condition has effectively been met with the radical renewal of the legal and regulatory basis needed for successful e-governance. The forthcoming President's Decree on the new e-Government Concept and the related Action Plan for its implementation – expected in April 2013 – is the clear manifestation of such political will and leadership. The next challenge will be how to capitalize on it and manage the actual process of e-government development in a measurably accelerated manner.
- 3) However, the provisions contained in the current draft of the National e-Government Concept and the associated Implementation and Monitoring Plans may not be sufficient to secure such acceleration. More policies and organizational actions need to be additionally elaborated in order to create an effective governance mechanism for the realization of the e-Government Action Plan after its adoption in April 2013. This concerns in the first place the insufficient conceptualization of the principles and processes of state information management and especially e-government interoperability, which is the cornerstone of successful reorganization of back-office and e-service provision. The strategy and guidance for back-office reorganization that takes full account if ICT benefits will need to be developed and realized as part of the broader organizational interoperability framework.
- 4) It should be underlined that at the level of individual state bodies (ministries, agencies, organizations) a lot has been done in changing and digitizing their business processes, successfully reorganizing back-offices and deploying – often creating from scratch – new front-office e-services. Many of such organizations, at least those that have been met during the mission, are well prepared for substantial e-government acceleration and possess necessary skills and competencies in this regard. Their experience and best practices should be exploited and fully utilized by other state organizations through the creation of a knowledge exchange and best practice management mechanism. It is evident that the main issue for them has become inter-agency interaction and information exchange not just in technical terms but rather at

organizational and information management level including the compatibility of business processes and reliance on the commonly adopted interoperability standards and approaches. The development of such common standards will be a first priority, for which there is a need to establish an effective and participatory machinery of coordination management led by GoskomCITT and supported by its units such as UZINFOCOM and UNICON.UZ. Adequate administrative and knowledge capacities need to be built for the creation and management of inter-agency coordination processes.

- 5) This report attempts to fill in the identified gaps in state information management and interoperability and guide the efforts of both the Government and UNDP in putting the e-Government Concept into practice. UNDP – through its previous ICT programmes, which are positively assessed by those who were met during the meetings, and the current LGSP project, as well as other UNDP’s projects that use e-governance solutions (such as those with Supreme Court and Chamber of Commerce) – is seen as the key, and at the moment the only partner of the Government, in helping it to move ICT-enabled public services for citizens and entrepreneurs to a new level of quality and substance.
- 6) The adoption of a new legal and regulatory framework in the field of e-government creates fundamentally new cooperation opportunities to make public administration reform more effective and people-centred through the deployment of relevant e-services. The LGSP project has already successfully piloted and implemented many innovative initiatives that are very well appreciated and accepted by the Government as core solutions and standards. The e-Hujjat electronic document management system is highly successful and impactful; it has become a mandatory standard and should be rolled-out across the board the Government at all levels. An OneStopShop-based Single Window Centre in Djizak demonstrates its full potential to become a standard in service provision as an intermediary model (an approach widely accepted in the European Union, for example, for implementing e-Inclusion initiatives).
- 7) However, the value of e-Hujjat goes beyond the document management per se. There is a significant potential to use the experience that has been gained by LGSP in developing and implementing its roll-out for devising new and better standards for public office recordkeeping, which are badly needed for modernizing state administrations to make them both efficient and transparent. Cooperation with UzArchive Agency is strongly recommended in this regard.
- 8) Another important contribution of LGSP has been its catalytic role in advancing fiscal decentralization which has resulted in empowering local administration to better plan and manage locally collected taxes. UNDP is advised to deepen its involvement in making local affairs, especially budgets, more transparent by disclosing this information, making it easily accessible through specifically designed applications and consulting with citizens regarding local development priorities.
- 9) UNDP has already laid a solid ground for making local administrations more transparent in their communication with ordinary people. LGSP has been successful in piloting (in Djizak) new ways

of connecting with the public by equipping and training an Information Service within the regional administration; an excellent guide has been published to facilitate government-citizen interaction in practice. Local Information Services and Single Window Centres as intermediary actors can work in closer synergy to provide access to the status of financial resources and expenditure of local authorities that are ready for further analysis. The public discussion platforms developed by UZINFOCOM could be used for this purpose⁶ which can become the project's new activity in the future.

- 10) However, more work needs to be done to diversify the Centre's business model to make them more sustainable and impactful in the longer-term to provide tailor-made services in regions and remote locations as part of the wider national network of Single Window Centres that are well integrated both among themselves on the basis of mutual support and knowledge exchange at the back-end, when a solution or service of one Centre is known to others as well. Also, the already available solutions like e-Kommunal and UZ.ID need to be integrated including the functions of the main national gateway Portal of e-services.
- 11) On these grounds it is recommended that the LGSP project is extended until 2015 and strengthened by additional staff and relevant financial resources so as to complete the work on e-Hujjat and Single Window Centre, including following up on this Report's recommendations, as well as to exploit new emerging opportunities for helping formulate new large-scale initiatives and projects with high resource mobilization potential by involving other partners as well (e.g. ADB).
- 12) The improving for e-government progress conditions present an excellent opportunity to advance the public administration reform agenda by piloting new approaches to ICT-enabled back- and front-office reorganization by implementing new methodologies of conducting functional reviews that are specifically focused on services and dynamic core processes rather on static functions.
- 13) Through its activities, UNDP can greatly facilitate the standardization and integration of many innovative and useful solutions developed by UZINFOCOM and UNICON in order to form the e-government backbone of the state information system that is friendlier and service-oriented to citizens and businesses.
- 14) UNDP and the Government are advised to develop a comprehensive public awareness campaign to communicate to the general public the benefits of ICTs and new e-services that are expected to be developed through the realization of the e-Government Action Plan. It is strongly advised that a national e-Governance Report is issued on an annual basis on the use of ICT in public administration – it can be done jointly with the Academy of Public Administration that would do necessary research on local and international best practices. Viewed from a longer-term perspective, such reports will constitute a valuable source of not only best practices and formalized institutional memory but create also a mechanism of regular monitoring of what has been done in implementing the e-Government Action Plan.

Specific observations/recommendations within LGSP's scope

- LGSP should complete the 100% roll-out of the Electronic Document Management System e-Hujjat to all departments within regional administrations (at oblast and rayon levels and, where necessary, in subordinated commercial units), including the implementation of its newer and more functional version in two pilot regions of Djizak and Namangan.
- LGSP should finish testing the already developed OneStopShop (OSS) web interface (prototype) and put it into real practice of and also link to the main Government Portal. According to the UN e-Government Survey 2012, as many as 135 countries adopted a OSS model against 63 in 2004. It is recommended to avoid any independent development of new platforms – there should be one solution for all, at least initially to test what works and what does not. Develop a full-fledged strategy for creating a national network of Single Window Centers as OSS intermediaries run (operated) by entrepreneurs;¹ explore for this purpose various business models, which may take account of different types of hosts, operators, and owners.
- LGSP should support the newly established State Committee for Communications, Informatization and Telecommunications Technologies (GoskomCITT) to implement e-Governance Action Plan by helping create and manage organizational, technical and information interoperability frameworks across the whole state sector; the Committee's capacities to manage inter-agency coordination needs to be strengthened.
- To do so, the LGSP project needs to be extended into 2014 and 2015 by adding two-three new positions (with respective additional funding) to implement the new e-governance agenda and this Report's recommendations, especially in the field of creating a mechanism for e-government interoperability coordination and management, as well as the formulation of new projects in the field of back-office reorganization and public service provision (including projects with high resource mobilization potential).
- Undertake a public service survey and consultations among citizens regarding the quality, access and channels of service provision (use successful experience of the Trade Chamber in consulting with entrepreneurs; a Citizen Report Card model used by UNDP and the World Bank in Moldova can be exploited as well).
- Take active part in preparing and discussing the planned e-Government law; it is advised that UNDP involves international experts to review this new law bill and organizes a public discussion on its contents (possibly via a round table, a software application can be designed to allow edit the law's draft provisions in a crowd-sourcing spirit).

¹ For example, a Hungarian model of rural tele-cottages can be looked at (a detailed manual has been developed by the UNDP Bratislava Regional Centre)

- The proposed by the LGSP team list of possible services in line with the decision № 817-f of the Government adopted on 8 December 2012 is valid and should be supported (Annex 4).

Specific observations/recommendations beyond LGSP's scope (aimed at resource mobilization/government cost-sharing)

- Formulate a project for the State Committee for Communications, Informatization and Telecommunications Technologies (GoskomCITT) to build its capacity for coordination management in the field of e-government interoperability and information management.
- Formulate a project jointly with the State Archive Committee and Ministry of Finance to reengineer business processes within these two agencies in order to create a new electronic service for citizens who need a range of data (that are held by various state agencies) for calculating retirement benefits (pensions); formulate public record-keeping policies and develop appropriate practices for replication in other state bodies.
- Explore the formulation of a project to modernize a State Population Register making special emphasis on the digitalization of civil status acts (Centre for Personalization and Ministry of Justice).
- Explore the formulation of a project to modernize a patient's electronic health records and appointment system at the Health Sector
- Explore the formulation of a project to modernize a social benefits for the jobless
- Discuss with IT/Telecom industry (and banks) the establishment of the Digital Literacy Fund to finance initiatives in rural and small town areas aimed at building digital competencies and skills among ordinary end-users (computer, internet and e-service training) (the Estonian Look@World experience can be looked at).
- Discuss with IT/Telecom industry (and banks) the establishment of the Client-Centric Service Innovation Fund to finance and support service applications (especially m-services) to meet people and entrepreneurs' needs.
- Encourage GoskomCITT and other state agencies to use the UNDESA's METER2 methodology for measuring e-Government performance (Measurement and Evaluation Tool for e-Government Readiness).² The results of such measurement would help better identify the country's strengths and weaknesses and thus eventually improve its overall rankings. It can be done in the form of a National (for example, Human Development) Report at the level of oblasts and rayons.

² See more here <http://www.unmeter.org/>

The mission scope and main results

The mission included meetings with representatives of various state agencies at central and regional level (in Djizak administration and Single Window Centre – see Annex 1). A series of questions and issues were disseminated to the agencies prior to the meetings in order to make them meaningful and stimulate discussion (Annex 2). The main questions that the mission sought to receive answers were: the assessment of the current situation in e-governance; assessment of the draft e-Governance Concept and Action Plan, including such issues as the use of digital signature (identification/ authentication); level of IT competency/ preparedness within their respective organizations for e-government transformation; participation in service delivery; inter-agency interaction and data/information exchange; ICT-enabled business process reengineering; cooperation with UNDP; future needs and priorities, and others.

Below are the summarized assessment and main conclusions gathered during the meetings.

The main conclusion gathered from the meetings is that, overall, a considerable progress has been made by many government agencies, especially by the State Tax and Customs Committees, Ministries of Finance, Justice, State Archive Agency, Supreme Court, Chamber of Commerce and Industry. UNDP's support has been crucial in making significant advances to improve the effectiveness of internal business processes through the installation and use of the e-Hujjat electronic document management system developed by LGSP. It has demonstrated its effectiveness and efficiency as evidenced by the positive feedback from those agencies that use it and especially from Djizak regional administration. The Ministry of Economy has expressed willingness to install and pilot the e-Hujjat's new version. Other UNDP projects that use ICT-aided solutions have focused on the transformation of the Supreme Court and Chamber of Commerce (including their services) and have already turned them around.

The Head of the UzArchive has expressed strong desire to cooperate with UNDP in order to radically reorganize the Agency's back-office through the digitization of documents relating to retirement pension calculation and thus substantially improve the accuracy of pension payments. A clear plan exists how to do it jointly with other state agencies involved in pension calculation (branches of the Ministry of Finance). It is strongly advised to discuss a possible project with UNDP (including resource mobilization aspects). The accuracy and fairness of retirement pensions is a socially sensitive matter of trust between the state and the public, given that decent pension means decent life for three million, especially for those who need pension papers prepared decades ago to justify the pension payment size.

Specific observations by individual organizations met

UNICON.UZ, 4 Feb 2013

e-Government preparedness/competency/interest – high.

General. Provides 50 software development services. Professional and component staff. Closely cooperates with UNDP – in developing e-Hujjat (since 2006). This is a base organization for IT standardization. In charge of the integration module for inter-agency data exchange. Its digital signature certificates are widely used across the government. Confirms a need for creating a professional circle of experts to support GoskomCITT in implementing e-Government Concept and Plan of Action.

Main recommendation(s). Continue and expand cooperation, especially in interoperability standards and application development. Closer look is recommended at the experience of the Estonian x-Road technical interoperability solution – a secure service path.

Chamber of Commerce and Industry, 4 Feb 2013

e-Government preparedness/competency/interest – high.

General. Excellent CCI team and UNDP project. Aims at providing services to business community, including registration. Consults with entrepreneurs regarding services they need by paying special attention to service quality. The potential client base includes 520 thousand entrepreneurs (not all of them may be active) for the planned OneStopShop' Virtual Office Window. Closely interacts with other government bodies. Concerned that for each case of inter-agency cooperation, new technical requirements and ToRs need to be developed which is cumbersome. Confirms that inter-agency coordination is weak. Electronic document management system is important to show entrepreneurs the status of their requests (via a unique ID document number). Ministry of Justice must be involved. Not much progress so far in identification/authentication. Decision making process is not transparent for business when they submit their requests. Business processes are outdated, complex and not coordinated.

Main recommendation(s). Continue close cooperation, especially in interoperability standards, business process reengineering, application development and particularly in the conceptualization and practical realization of the OSS-based Single Window approach.

State Committee for Communications, Informatization and Telecommunications Technologies (GoskomCITT), 5 Feb 2013.

e-Government preparedness/competency/interest – high.

General. Government's main coordination agency in the field of ICT/e-Governance. Following the President's Decree of 16 October 2012 (№ УП-4475) and the Resolution of 23 October 2012 (№ ПП-1836) about the establishment of GoskomCITT, the Cabinet of Ministers approved its statute on 19

December 2012 (№ 355). The State Committee is fully empowered to develop, implement and coordinate government policies and programme in the field of ICTs and e-Governance. Closely cooperated with UNDP in the past spearheading many information society initiatives. According to the State Committee's Chairman, the main objective of e-Government in Uzbekistan is to improve public services. There should be a turn-around in the minds of government officials so that they realize this imperative rather than prioritize their narrow sectoral and organizational needs. The Coordination function will be assumed by the Department for the development of national information system (*Департамент по формированию и развитию национальной информационной системы*). Its main task will be to educate government and establish new frameworks for business process reengineering based on the functional review and analysis. While the work is underway at the service front (current offline services are being selected for online presence), a clear strategy and organizational principles of back-office reorganization is lacking. This is an area where the Department does not have sufficient knowledge and skills and where UNDP assistance is urgently needed. Another problematic area where UNDP's support is welcome is the lack of performance indicators that assess the effectiveness of e-governance progress at both organizational (level of individual state bodies in the centre and regions) and national level from the end-user perspective so as to know which areas should be improved for the country's better international rankings in e-government (reference is made to the UN e-Government Survey). Many state bodies are not necessarily prepared for the inventory of their services and internal business processes. There are legal challenges; for example, whereas there is a notion of 'interactive service' (i.e. available electronically), the law does not define what is public service provision in legal terms. World's best practices need to be studied and exploited in this regard, including from Europe.

Main recommendation(s). Discuss a new capacity building project with the State Committee (to strengthen the Information System Department) to manage interagency coordination and interoperability, to guide and supervise the user-centric back-office reorganization based on functional reviews of business processes and work flows, to develop and apply a set performance indicators to measure e-government progress at all levels of public administration, to prepare and run massive training programmes for government officials. This report provides detailed advice for each direction.

Academy of Public Administration, 5 Feb 2013

e-Government preparedness/competency/interest – medium.

General. New leadership, strongly motivated. UNDP has cooperated well with the Academy in preparing training modules for civil servants. Interested to explore new cooperation areas.

Main recommendation(s). Discuss possible opportunities in digital literacy training. A new initiative can be started with GoskomCITT to start issuing an annual report on the use of IT in Public Administration (as a source of best practices and also as a means of reporting and monitoring tool). In addition, discuss a possibility to apply the UNDESA's METER2 measurement methodology (Measurement and Evaluation Tool for e-Government Readiness), for example, in the form of the National Human Development Report. It will help measure the preparedness and identify gaps at the level of regions and districts and thus better understand the country's strengths and weaknesses.

Uzbtelcom, 5 Feb 2013

e-Government preparedness/competency/interest – high.

General. A well established commercial state entity, with a country-wide network of offices and 74 colleges. There are equipment production facilities as well. Responsible for Internet infrastructure, tariffs drop for commercial providers. Some 2 million of digital subscribers, all regional centres are connected via fibre optic (10 Gb bandwidth). Owns a call centre. Has special training programs for civil servants.

Main recommendation(s). Discuss a possibility of establishing a Digital Literacy Fund as a public-private partnership.

State Tax Committee, 6 Feb 2013

e-Government preparedness/competency/interest – high.

General. Very advanced in IT use and e-services. Competent IT staff. Strong IT department and competent staff. Maintain 2 Single Window Centres. Provide a lot of information services and undertake public awareness activities to improve the uptake of e-tax services. Has its own data centre and develop software applications. Provide 22 interactive services online by filling in electronic forms for different types of taxes. All entrepreneurs have to file their tax declarations online – 89% of legal entities do it electronically, which is a very good result. Paying taxes online is not practiced yet but is possible via a bank client application. Inter-agency cooperation is not systemically coordinated using commonly adopted interoperability principles and is decided on a case-by-case basis. Would like to cooperate with UNDP (it was the case in the past) on a project to reduce the scope and frequency of business control (IFC is already involved) and on a Single Window concept/platform at the local level. Has many other plans for using IT in tax administration.

Main recommendation(s). Study their experience in back-office reorganization and replicate in-country. Involve in business process reengineering and interoperability framework formulation. Discuss possible project on business control reduction and Single Window.

Ministry of Finance, 6 Feb 2013

e-Government preparedness/competency/interest – high.

General. Very advanced in using IT. Competent leadership and strong IT department. Provides hosting services to other government agencies and cooperates with them in data exchange using bilateral and trilateral inter-agency agreements by preparing technical specifications for data exchange on a case by case basis. Particularly important is the treasury department which runs personal pension accounts (3 million retired pensioners) in real time, with full accuracy and real time actualization, based on multiple sources of information provided by other state agencies. E-Banking (using Visa cards) and PayNet solutions are used. Multiple public key certificates issued by various agencies should be replaced by one digital signature system for all citizens. Satisfied with e-Hujjat (and e-Xat email system). There is a need to move to 100% of electronic document management. Regarding communal e-Billing – the solution should be a Single Window approach to consolidate all currently separate data bases of individual utility

providers services into one (as in Tashkent) and verify each payee by comparing residential addresses. Such a unified system would easily respond to people's enquiries and documents issued at the level of regional administrations. As a result, the number of complaints can be reduced significantly. Same Single Window concept applies to the Pension Fund. When the pension payment arrives at the beneficiary's account, the text is sent via UCELL to notify about the credited amount and when it can be disbursed. This is a very good practice to be replicated (it would be efficient if the same notification software – Software as a Service, a SaaS approach – is used across the government information system through one platform).

Main recommendation(s). Meet and discuss possible joint activities as far as services for handicapped people and pensioners are concerned. Will be an excellent partner. Involve in business process reengineering and back-office reorganization.

State Archive Agency, 6 Feb 2013

e-Government preparedness/competency/interest – high.

General. Very motivated to use IT in archive and citizen-centric services. Competent leadership. Well aware of international best practices. Received digitalization equipment from Korea. Knows very well what it wants. Maintains a network of 103 state archives. Sets standards of recordkeeping. Works at the crossroad of various agencies. Plays crucial role in maintaining records about people's pension contributions. Witnesses many errors due to paper processing. People are often unhappy about the pensions they eventually receive after many rounds of checks of personal data from Ministry of Finance (Control, Treasury and Pension departments). The Archive Agency's staff have to repeatedly open the same and often old files and re-check records again and again (each file can contain up to 250 pages). Many records are hand- and pencil written many years ago and therefore cause human error; a lot of valuation and verification work is needed. Very ineffective and error-prone business process with high social costs (there are 3 million pensioners in Uzbekistan). People approach the Archive often – 237 requests sent and processed in 2012.

Main recommendation(s). Meet and discuss a joint project. Will be an excellent partner. Involve in business process reengineering and interoperability framework formulation. Discuss Open Data and public recordkeeping for greater openness and transparency. Encourage to join the international Open Government Partnership initiative (OGP). High resource mobilization potential if a project is formulated attractively.

UZINFOCOM, 6 Feb 2013

e-Government preparedness/competency/interest – high.

General. 10 years in IT business. Excellent competent and motivated young staff. Key government agency developing and maintaining state information systems and applications both upon demand and at own initiative and cost. The products include the main government Portal www.gov.uz, Data Centre and host www.dt.uz, Ziyonet – educational initiative and resource portal, public discussion forums www.fikr.uz and www.uForum.uz, web resource for youth www.tanlov.uz, cyber security service UZ-CERT www.cert.uz, back-up service www.backup.uz, development of corporate portals using Microsoft

SharePoint, administration of national domain .UZ (over 18,000 registered domain names) www.cctld.uz, national search engine www.uz, educational video hosting www.uTube.uz with over 8,000 multimedia resources, identification system ID.UZ, catalogue of web services and widgets DESK.UZ, SMS gateway platform www.smsg.uz, web design service, norm and law development in ICT, portal e-Kommunal for municipal and housing development services, Computerization Centres Support Group, register of state bodies (some 200 included). E-Kommunal is especially promising for e-billing system – needs to be connected to the payment system and personal identification (possibly through the GIS/linked with the place of residence). Very interesting is the identification portal ID.UZ, which provides a personal account where various information and data can be stored; needs institutionalization possibly via the integration with the personal identification/ authentication/ interoperability infrastructure. Yet can be used as a stand-alone solution or in combination with commercial identification procedures, as those in e-banking.

Main recommendation(s). Continue close cooperation in all areas possible, especially in interoperability standards, business process reengineering, personal identification, e-billing, etc Building additional capacities may be needed to play a more prominent role in e-government, as an operational arm of GoskomCITT.

Video-link via Skype with Namangan regional administration, 7 Feb 2013

e-Government preparedness/competency/interest – low to medium.

General. Claimed that e-Hujjat implemented 100% at 116 work places (since May 2012). Paper consumption is reduced by 23%. The infrastructure is generally adequate and improving. A lot of training has been done. New web site is operational since October 2012, new services are introduced especially for entrepreneurs and permit/license issuing. Single Window Centre is not yet operational. Retaining good IT staff is problematic. Hoping to get support from the regional branches of Uzbtelecom and Computer Centres of GoskomCITT. Out of 162 local organizations, 42 are connected to the secure e-mail system e-Xat. Some information needs verification. According to the project team, a lot still needs to be done to achieve 100% roll-out target. Due to long distance travel, the project specialists have not been able to provide support to the same degree as it has been done in Djizak (which is close to Tashkent).

Main recommendation(s). Increase support to Namangan to meet the set targets. This is one of the reasons why the project should be extended.

State Customs Committee, 7 Feb 2013

e-Government preparedness/competency/interest – high.

General. Very advanced in IT use. Very competent staff. Have a strong IT department. Has its own IMIS. Develops own software applications. Constantly expands services for declaring cargo electronically. Grateful to UNDP for past cooperation and is eager to collaborate again. Positively assesses the impact of the regional BOMCA programme. Has benefited a lot from e-Hujjat and e-Xat. Cargo declarations are fully automated. Use digital signature actively (UNICON's PKI). New e-services are planned.

Main recommendation(s). Study experience in back-office reorganization and replicate in-country. Involve in business process reengineering and interoperability framework formulation. Consider possible cooperation. Will be a good, competent, responsible partner.

Ministry of Justice, 7 Feb 2013

e-Government preparedness/competency/interest – high.

General. Open and competent staff and leadership. Is well aware of ICT/e-Gov benefits for public sector. Well established Centre for Legal Information. UNDP supported in creating a Legal Information Portal LEX.UZ (since 2007), which is an excellent online service enjoying high demand. The Ministry has sent 5-6 project proposals to UNDP. UNDP's role is very important as a catalytic pioneer and that role should be maintained. The Ministry would like to cooperate in e-Notary services and civil status acts. It is also possible to build new e-services on LEX.UZ by adding the description of law enforcement practices following court orders in relation to specific laws and adding new analytical functionalities. Struggles with challenge of deciding how best to identify citizens (assign a unique identification number). It is not a technical but inter-agency organizational challenge. The State Personalization Centre (Ministry of the Interior) will be assigning such ID numbers. The problem is that such number is generated at the age of 16 years old when passports are issued. Yet 50% are below this age threshold but who also need their personal IDs to receive services. Civil status acts following all key life cycle events need to be digitized, stored, (re)used and shared. It is not yet entirely clear how to do it – there are over 100 million of civil act records to be digitized. The plan and ToRs have been already developed. Does not believe that information and data centralization (consolidation) is always useful. Decentralized data have benefits too. Regarding the parallel electronic and paper documents processing – hardcopies are maintained only in case of external documents, while all internal documentation is maintained electronically in the Ministry. To avoid parallel documents keeping, regional authorities can approach the government and ask to switch to electronic documents only.

Main recommendation(s). Meet and discuss possible joint projects in digitizing civil status acts, explaining law enforcement practices, and e-notary services. Involve in business process reengineering and interoperability framework formulation. Sharing UNDP and the Government of Azerbaijan's experience in creating and operationalizing the State Population Register would be useful.

Supreme Court, 7 Feb 2013

e-Government preparedness/competency/interest – high.

General. Very motivated and competent leadership. Excellent UNDP project and team. Focused on digitizing legal/judicial proceedings (outside criminal justice). Demand on judges is very high. 160,000 civic cases reviewed by inter-rayon courts in 2012. It will be impossible to meet the demand without managing documents electronically. High social costs in case of system failure. People turn to courts more and more including via attorneys. Over 2 million of court orders are issued for unpaid communal/housing services, or 5,000 per day. All such requests from utility providers must be registered and processed. Portal is created.

Main recommendation(s). Continue cooperation. Study experience in back-office reorganization and replicate in-country. Involve in business process reengineering and interoperability framework formulation.

Centre for training young software developers, 8 Feb 2013

e-Government preparedness/competency/interest – high.

General. A training institution, mostly self-financed, provides training in computer use, including for government officials via a range of training packages consisting of 28, 36 and 40 hours depending on the competency level. A new programme is under development for top government executives. Hoping to get financing from the education support fund. Established 9 years ago. Has 5 regional branches in Urgench, Nukus, Samarkand, Bukhara. Rebranded itself to position as a major software developer. The main problem is how to retain and motivate IT specialists, especially young. The local analogue of ECDL is not sufficient to build digital competencies among civil servants.

Main recommendation(s). Discuss with them digital literacy training programmes for ordinary citizens (under the umbrella of the recommended Digital Literacy Fund initiative). Another idea is to discuss a possibility to train IT project managers including official certification in project management cycles (PRINCE, Microsoft Project; CISCO Academy and the Academy of Public Administration can be involved as well).

Uzkommunhizmat, 8 Feb 2013

e-Government preparedness/competency/interest – medium

General. Project Management Group of the Asian Development Bank. There has been decentralization of communal services. Utility providers (gas, electricity) are self-financed and work directly with regional administrations, which have to coordinate their technical policies with the Agency. The Agency is in charge of policy development and monitoring in water services (drinking water, waste water and sewerages) and has prepared a strategy until 2020 (excluding heating supply), which does not include an ICT component; a sector-wide e-strategy is needed. The programme 2013-2015 exists, which includes service development, clients' database is available. The e-billing system will be created in Khorezm and Karakalpakstan regions (using e-Kommunal linked with PayNet, a contract has been concluded with UNICON.UZ) according to the government decision. A billing system has been implemented in Samarkand and Bukhara in 2010. Coordination and communication among all stakeholders are badly needed. Inter-agency cooperation is weak.

Main recommendation(s). Meet the agency and discuss possible cooperation. There might be an opportunity to mobilize resources from ADB.

Djizak regional administration , 8 Feb 2013

e-Government preparedness/competency/interest – medium to high.

General (Mayor's office and Chancellery – *Общий Омдел*). e-Hujjat implemented (since March 2012) with equipment provided and staff trained. Highly effective in improving administrative efficiency but

not yet used by all departments. It takes just 10 minutes to process 8 documents (scanning, registering, signing digitally, and sending off for action). There is a perception of danger among some staff who fear that they may be made redundant and downsized as a result of using IT solutions. The number of electronic documents is constantly growing – over 4,000 processed in less than a year in 2012, which reduces fuel and paper costs substantially (23 kg paper is saved every day in all departments at regional and rayon levels, or 8.5 tons per year). Cooperates with the regional branches of GoskomCITT (computer centre) and Uzbtelcom. The oblast centre is connected via fibre optic with all 13 rayon centres (the current bandwidth of 1 Gb per second will grow up to 10 Gb/s). In 2013, 17 information resources and services will be available, including a single point for business registration. Administration's staff undergo IT testing. Retaining IT specialists is a problem, which may be solved in cooperation with Uzbtelcom's regional colleges. Computer Centres are not financed from the state or regional budget, as a result it is difficult to maintain competent staff – e.g., recently, a key IT specialist left the Administration and has not been replaced yet. Another problem is that the regional administration interacts with 128 disparate organizations, which do not necessarily use e-Hujjat. Digital signature certificates are issued by the regional Computer Centres and actively used with e-Hujjat, which in turn is well synchronized and used in conjunction with the secure email systems e-Xat to send processed electronic documents further down the reporting line. There is an idea to pilot a fully vertical integration of electronic document management from the regional centre to the local (municipal) *mahalla* committee via rayon administration. Very often paper documents are maintained alongside electronic records, but within the administration only electronic documents are used, which is a very good outcome. The UNDP project team in Djizak is excellent (competent and committed).

Main recommendation(s). Continue close cooperation to ensure that 100% of regional departments use e-Hujjat regularly. Explain benefits and motivate people to remove fear of new technology. Undertake targeted peer-to-peer awareness campaign among administration staff with convincing demonstration of positive results. Request central government authorities to stop practice of maintaining paper documents if e-Hujjat is used. There is a positive example – when the State Tax Committee decided to accept tax declarations online only, the uptake of this e-service has increased significantly. Review organizational and funding arrangements of IT at the regional level; it might be more effective and sustainable (to prevent IT staff turn-over) if regional administrations maintain their own IT departments (on their premises) rather than relying on GoskomCITT computer regional centres, which are located separately. Switch from aDSL internet connections to dedicated fibre optic channels across whenever possible

Single Window Centre Djizak, 9 Feb 2013

e-Government preparedness/competency/interest – high

General. Consists of 5 working places/operators who help visitors from the street to use e-government services, especially for submitting tax declarations and signing them digitally. Excellent centrally located and refurbished premises, competent staff, a lot of hand-out materials, availability of self-service information kiosks (terminals) connected to the internet (however, the software needs updating), large room for in-class trainings (Figure 1). Provides various services, including in the field of mandatory car insurance; direct connection to data bases to respond enquiries in the field of communal/housing

services, tax administration, employment (job fairs), education, kindergarten places. On average, 15 clients are served every day (which is not many). Overall – excellent model of service intermediary. In total, over 1,000 entrepreneurs have filed their tax declaration forms via the Centre's Single Window. Many people come to learn about what they owe for communal and housing services to utility providers. Some 4,200 individuals have approached the Centre this way or another. Demand for services should grow as more services are available online and if properly advertised. A network of Single Window Centres would substantially facilitate the uptake of online services in future. The legal status and statute of Single Window Centres needs to be better clarified and a minimal set of the formally authorized services (in some cases, as with the pension-related documents, the Centre is not allowed to deal with them). The best way to do it will be to make special provisions in the planned e-Government law.

Main problem(s). Not funded from the budgetary resources (self-financed). No clear business model. Little networking. Staff turnover due to the lack of sustainability. Include key provisions governing the Single Window operations into the new e-Government law to institutionalize their sustainability including financial.

Main recommendation(s). Elaborate and discuss a concept of expanding the OSS-based Single Window facilities into a national network linked to the central Citizen and Business Portal; test different business models based on the various combination of owners, operators, hosts and encouraging local entrepreneurs to run them, for example, as operators (after proper training) on a contractual basis. Estonian and Hungarian models of Public Internet Access Points/Telecentres can be looked at. Some of OSSs may turn in future into, e.g. a Living Lab model to nurture and support technology- and service-based local social innovations;³ on the other hand, locally run telecentres (where available) can become OSS-based Single Windows too.⁴ For more on the business model side see a UNDP publication *Telecottage Handbook: How to Establish and Run a Successful Telecentre*.⁵

Ministry of Economy, 11 Feb 2013.

e-Government preparedness/competency/interest – high.

General. Government's main coordination agency for UNDP. Well aware of UNDP activities, which are highly respected. Believe that UNDP should continue its work in e-governance. Eager to expand cooperation into new areas. Wants to pilot a newer version of e-Hujjat.

Main recommendation(s). Discuss new opportunities in e-governance and ICT-enabled public administration reform.

³ The European Network of Living Labs (ENoLL) is a good model to follow <http://www.openlivinglabs.eu>.

⁴ The network of European Telecentres is a good resource <http://www.telecentre-europe.org/>.

⁵ http://www.connectaschool.org/en/community/ict/women/enpowerment/refdocs/telecottage_handbook.

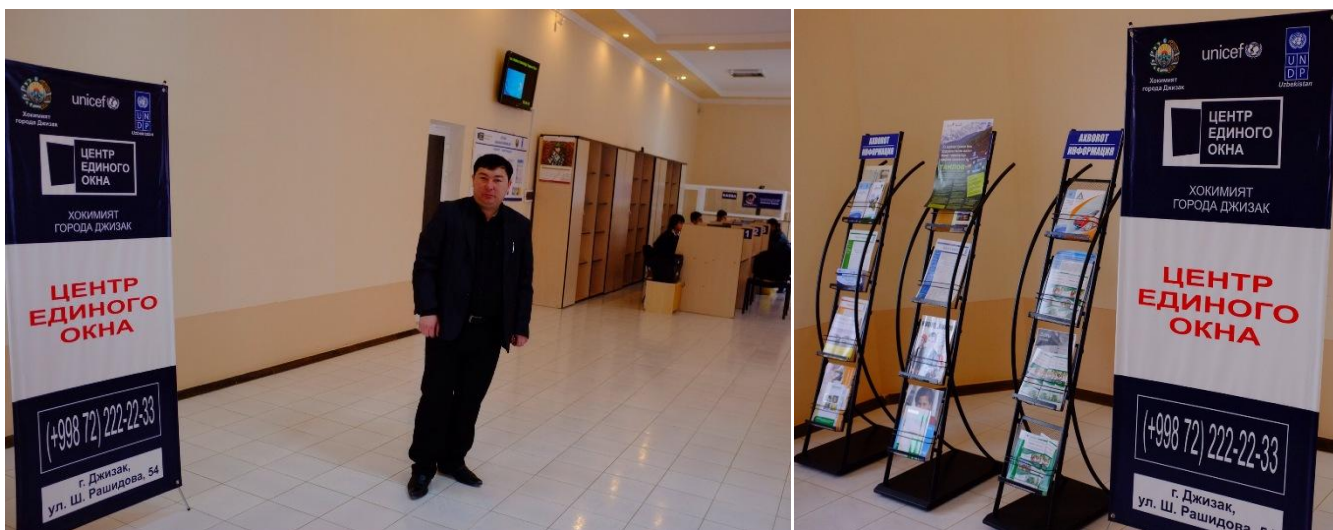


Figure 1 – The Single Window Centre in Djizak

Key Findings

Baseline: e-Gov index

According to the UN e-Government Survey 2012, Uzbekistan is ranked number 91 among 190 surveyed countries with the index value 0.5099; the index consists of three indicators reflecting (a) online service presence (0.4967), (b) telecom infrastructure (0.2075) and (c) human capital (0.8255).

Table 7.2 Online service index and its components

| Country | Online Service Index Value | Stage I % | Stage II % | Stage III % | Stage IV % | Total % |
|---------------------------|--------------------------------|-----------|------------|-------------|------------|---------|
| Relative Weight of Stages | (in order of decreasing value) | 7% | 24% | 30% | 39% | 100% |
| Republic of Korea | 1.0000 | 100% | 79% | 92% | 87% | 87% |
| Sweden | 0.8431 | 92% | 90% | 71% | 62% | 74% |
| Estonia | 0.8235 | 100% | 69% | 65% | 74% | 72% |
| Saudi Arabia | 0.7974 | 92% | 60% | 77% | 67% | 70% |
| Malaysia | 0.7908 | 100% | 64% | 79% | 59% | 69% |
| Kazakhstan | 0.7843 | 92% | 64% | 52% | 80% | 69% |
| Uzbekistan | 0.4967 | 100% | 62% | 21% | 39% | 43% |

Figure 2 – Online service ranking (source: UN e-Government Survey 2012)

Table 7.3 Telecommunication infrastructure index and

| Country | Index value (in order of decreasing value) | Estimated Internet users per 100 inhabs. | Main fixed phone lines per 100 inhabs. | Mobile subscribers per 100 inhabs. | Fixed Internet subscriptions per 100 inhabs. | Fixed broadband per 100 inhabs. |
|-------------------|---|--|--|--|--|---------------------------------------|
| Liechtenstein | 1.0000 | 80.00 | 54.40 | 98.52 | 47.35 | 63.83 |
| Monaco | 0.9370 | 80.00 | 96.40 | 74.31 | 35.42 | 41.89 |
| Switzerland | 0.8782 | 83.90 | 58.56 | 123.62 | 36.74 | 38.16 |
| Iceland | 0.8772 | 95.00 | 63.72 | 108.72 | 35.96 | 34.65 |
| Luxembourg | 0.8644 | 90.62 | 53.68 | 143.27 | 34.26 | 32.83 |
| Denmark | 0.8615 | 88.72 | 47.26 | 124.41 | 39.13 | 37.38 |
| Republic of Korea | 0.8356 | 83.70 | 59.24 | 105.36 | 34.08 | 36.63 |
| Philippines | 0.2082 | 25.00 | 7.27 | 85.67 | 3.93 | 1.85 |
| Uzbekistan | 0.2075 | 20.00 | 6.79 | 76.34 | 10.09 | 0.32 |
| Tonga | 0.2069 | 12.00 | 29.79 | 52.18 | 4.33 | 0.96 |

Figure 3 – Telecom infrastructure ranking (source: UN e-Government Survey 2012)

These data, however disputed the rankings can be, point at the gap in infrastructure and services against a high ranking in terms of human capital; it is obvious that Uzbekistan has not used in full its significant human potential to advance in e-government as well. According to the Survey, the undeveloped e-governance is an obstacle to advance faster socially and economically.

Policy level

- Information management and interoperability as an overreaching e-governance agenda and systemic inter-agency policy is missing in the latest draft of the e-Government Concept, while – as the meetings during the mission have demonstrated – there is growing demand for it from all state institutions met.
- Whereas a need for technical interoperability is highlighted in the draft Concept, it is not justified sufficiently.
- The Electronic Document Management System E-Hujjat is an excellent product, fully functioning (as the meeting with the oblast administration has demonstrated); however, more efforts are needed to ensure its use by all those employees on which desktops e-Hujjat is installed; additional motivations and demonstrations (proving such ICT benefits as job satisfaction) and pressures from senior management are needed for 100% roll-out; additional rulings from the Cabinet of Ministers may be needed to meet this target. In future, e-Hujjat may grow into a full-fledged standard of recordkeeping in public offices.

- Insufficient reliability of data transmission network at oblast and rayon levels, which makes the benefits of e-Hujjat less obvious when the Internet connection is interrupted.
- At the moment, IT capacities at the level of individual organizations/ministries – ICT Centres – are weak due to staff turnover and lack of budgetary allocations (they are usually self-financed which is not sustainable). It is vitally important that such Centres are financed from the state budget;
- Institutional capacity to coordinate and manage state information systems, including the formulation and implementation of interoperability of e-government is not fully adequate in light of the goals set in the e-Government Action Plan; there is a need to establish a mechanism of professional and expert support and coordination outside GoskomCITT, but under its direction.
- Technical capacity at the central level of GoskomCITT (UNIKON.UZ and UZBINFOKOM) is adequate. The main challenge is at the oblast and rayon level.

Project/Programme level

- LGSP is highly catalytic and successful, but overloaded with the available staff stretched to the limit (it is evident when a new task to handle communal e-billing has been added).
- E-Hujjat is the only actually functioning in Uzbekistan EDMS created with direct support from LGSP.
- Many good lessons can be learned from Djizak; Namangan is behind and needs acceleration and stronger support.
- All OSS Single Window initiatives (current and future) need to be integrated on the same platform as a network and linked to the National Portal.
- LGSP needs to complete what is started, i.e. supporting the roll-out of e-Hujjat, including its newer and better version, enriched with new analytical functionalities in the pilot regions ensuring that all functional departments of oblast administrations use it.
- Unite Single Windows on the same platform (together with UZINFOCOM, UNICON, Chamber of Commerce and Industry) as a network of service intermediaries.
- Make e-Hujjat the core of e-government making it a full-fledged Electronic Document/Record Management System adding new functionalities; the new version of e-Hujjat (under piloting) has more user-friendly interface and provides analytical functions via generating reports on demand.

The proposed scope of Uzbekistan's national e-Government policy

Principles

The main conclusion of the first Initial Report about interoperability as the 'missing link' has been confirmed during the mission. The current draft of the e-Governance Concept and the associated Implementation Programme and Monitoring Indicators do not prioritize information management and interoperability sufficiently. Key principles on which to build the national e-Government system are missing. It is suggested to clearly articulate and include the following main principles:

- 1) **Openness**: reliance on Open Standards and Free Software
- 2) **Complementarity**: elements/components of state information to complement each other
- 3) **Efficiency/Effectiveness**: value for money and input-output maximization
- 4) **Service/Client Orientation**: priority to end-user interest in public service delivery, including through multiple channels
- 5) **Business process re-engineering**: priority to front-office and people-centric services
- 6) **Interoperability**: organizational/institutional, informational/semantic and technological/technical

Interoperability: Approaches and Contents (based on European Best Practices)

The first Report has provided a basic overview of e-Government interoperability arguing that it is central for successful state information systems. Special emphasis was made on organizational and informational interoperability. It was underlined that neither conceptually nor pragmatically the issue of interoperability receives sufficient attention in the draft e-Government Concept (as of the time of report writing).

The mission has reaffirmed those main findings. It is evident that the lack of the national interoperability strategy (and/or specialized framework) for state information systems leads to the multiplication of inter-agency agreements (usually bilateral but also three-lateral) in order to facilitate - and legalize - information and data exchange between government bodies for particular purposes. This is not economical or justified, for different agencies apply different standards which are not subject to quality control under the current system of e-government management.

The main pre-condition for effective e-government is to have a state body that has full authority for inter-agency coordination in the area of e-government. This pre-condition has been met with the establishment of the State Committee for Communications, Informatization and Telecommunications Technologies (GoskomCITT), which statute provides sufficient legal powers to supervise and coordinate e-government development in Uzbekistan (delegated to the National Information System Department).

In this light, the first task for GoskomCITT is to establish a clear governance system in the field of e-government (state information system) and lead the coordination of the implementation mechanism. In practice, such coordination mechanism will aid the implementation of the Action Plan to realize the e-Government System in Uzbekistan in line with the Presidential Decree expected in April 2013.

It should be noted that effective and user-friendly e-government is not only a technological problem, but organizational and human in the first place. Such mechanism should be designed and enforced in close cooperation and consultation with other state bodies that are central to e-government development so as to get a comprehensive overview of the diversity and varying needs by sectors and directions.

The next step will be to develop a national interoperability strategy and specialized frameworks. The strategy will define a clear set of interoperability principles in the field of state information management. The latter will develop a comprehensive set of interoperable e-government standards as an integral part of the national state information system.

For example, Estonia has a number of interoperability frameworks endorsed by the directives of the Minister of Economic Affairs and Communications. Such frameworks cover the overall interoperability of the State Information System supplemented by the interoperability frameworks for web, security, software. These are full-fledged documents in its own right which address a wide range of issues that need to be dealt with by government agencies. For example, the Estonian Interoperability of the State Information System states that

Interoperability is the ability of disparate and diverse organisations to interact towards mutually beneficial and agreed common goals, involving the sharing of information and knowledge between the organizations, through the business processes they support, by means of the exchange of data between their respective ICT systems.

Interoperability, based on standards and open platforms is the precondition of achieving the objectives of the European Digital Agenda, which was a leading initiative of “Europe 2020”. Hence, interoperability is not merely an IT issue, but includes very many facets of information society.

Interoperability framework is an inter-organizational agreement and instrument to achieve interoperability. The framework is a collection of requirements, standards and instructions, handling the interoperability of information systems and services of the Estonian public sector, which ensures serving public sector institutions, enterprises and citizens both in Estonia and all over Europe.

Interoperability framework is a guideline for preparing public sector IT legal acts, designing IT solutions and organizing IT related public procurements.

The objective of the interoperability framework is to make the operation of the Estonian public sector more effective, improving the services offered to Estonian and EU citizens. The more concrete objectives of the framework are to:

- contribute to the development of a service oriented society, where people can

- communicate with the state without knowing anything about the hierarchic structure of the public sector or the division of roles in it.
- bring more transparency into information related political decisions of the information system.
- support co-development of the state information system.
- create conditions for free competition, following the agreed framework.
- reduce public sector IT costs.

The target group of the interoperability framework is chief executive officers (CEO), chief financial officers (CFO), chief information security officers (CISO), chief information officers (CIO) and chief technical officers (CTO). The present document is also a guideline for private sector managers and project leaders who offer development and administrative services to the public sector.

The Ministry of Economic Affairs and Communications, as the ministry responsible for developing the state information system, is responsible for designing the Interoperability Framework and the related documents. Within the Ministry, there was created an interagency state information systems interoperability working group, whose duty is to advise the ministry on designing interoperability documents. For the sub-topics of the interoperability framework, there have been created official and unofficial working groups

Its content covers the following issues:⁶

Underlying principles of interoperability

- Subsidiarity and proportionality
- User-centricity
- Inclusion and accessibility
- Security and privacy
- Multilingualism
- Administrative simplification
- Transparency
- Preservation of information
- Openness
- Reusability
- Technology neutrality and adaptability
- Effectiveness and efficiency

Service model and service room

- Interoperability architecture of services
- The concept of service, requirements for services
- Service levels
- Catalogue of services
- Estonian and European Union conceptual model of services

Interoperability dimensions

- Political context
- The political context of the interoperability framework of the state information system

⁶ Source: www.riso.ee/wiki

- Political context of public sector information systems
- Legal interoperability
- General legal acts regulating the state information system
- Coordination of legal acts from IT aspect
- Organizational interoperability
- Organizations
- Responsibility
- Cooperation and division of labour
- Coordination
- Strategic planning
- Council of Computer Science
- Coordination of information systems of local governments
- Semantic interoperability
- Technical interoperability

Open standards

Software and open specifications

Joint infrastructure services

- Support systems
- Joint supporting infrastructure

Management of interoperability frameworks

- The interoperability frameworks of the state information system
- Interoperability frameworks of public sector institutions
- Harmonization of the Estonian framework with the European framework

A more specialized framework of websites is one of the sub-documents of the framework of interoperability of the state information system. It is noted that this framework is not a guide for creating websites but a regulation for web masters who should guarantee the interoperability, availability and usability of the websites they design. The framework's scope addresses:

The role of websites in the state information system:

- Website obligation
- Website as a registry
- Websites and service room
- Service levels
- Domains riik.ee and eesti.ee

Semantic interoperability:

- Agreed addresses (URL-s)
- Clear uniform resource locators (URL)
- Taxonomy
- Language-technological support and search
- Annotation

Web engines

Open standards:

- IPv6
- Default ports

- Reduction of the number of file formats
- Office software formats
- UTF-8
- XML
- RDF and RSS
- HTML and XHTML
- RDFa in XHTML
- CSS
- WAI WCAG
- XForms

Requirements for website content:

- Usability
- Availability
- Security

Archiving of a website

(Self)assessment of the interoperability of websites

Centrality of building capacities for information management

The best way to approach this complex issue of interoperability will be to start with the definition of what is state information management, followed by the development of a common for all government bodies (that manage significant informational assets and are part of the national e-government system) standard for information management at the organizational level (ministries, committees, agencies). It is recommended that the definition of the state information management is based on such principles as understanding information held by the state as a critically important asset, which needs to be protected and at the same time regularly used, re-used and widely shared among other government agencies, on the one hand, and disclosed, when needed, to the general public, on the other.

Information management should also ensure that it is held in a format that is easy to use in internal business processes. The state information management standard will set out a range of agreed requirements that will be effected during a defined timeframe. Such requirements typically provide guidance regarding the assigned responsibility for information management by identifying a department and an official (usually its head/deputy head) to be in charge of information management within the body. Such an official (it can be, for example, Chief Information/Technical Officer) – is responsible for complying with national policies and standards, undertakes monitoring of such compliance and coordinates all information-related issues including those that concern privacy and personal data protection. Relevant job descriptions should be drawn up.

The ultimate role of the Information Manager is to be a champion in information management and constantly advance the state body in managing information effectively and according to the set standards. This official will also represent its organisation in the national Inter-Agency Board (Council) of CIOs/CTOs. Other duties may be assigned as well. The information management standard (framework) should be regularly reviewed and updated as needed by the above-mentioned Board (Council).

The next step is to determine roles and responsibilities in information management across the state in an instruction/guide. It should explain what are information assets, how to create information databases and registers, what could be information types and relevant metadata profiles, who owns, administers information and who is responsible for its maintenance, relevance and security, who is information user, how information can be shared, what are legal foundations of different types of information, etc. The subsequent interoperability framework in information management and coordination would establish practical principles for inter-agency interaction.

As mentioned, it is critically important that each state body assigns a person responsible for information management. Ideally, larger agencies may set up special committees that monitor the information management processes and procedures. These are not necessarily should be IT departments or Computer Centers alone; it least, they should include representatives from other departments, beyond IT specialists.

The chart below schematically presents a possible organizational structure that should help the GoskomCITT establish an effective governance system for the implementation of the e-Government Action Plan. It is proposed that UNDP assists the GoskomCITT and other ministries in the formation of such coordination support cloud by consolidating in one place functions, processes, knowledge. The focus will be on the development of common understanding and approaches through discussion and collaborative drafting of key policy documents in interoperability and information management standards. Special Task Forces can be established to perform these tasks.

Special emphasis should be placed in public record keeping standards. A SWOT analysis is recommended as a first step to be undertaken jointly with the State Archive Committee (and other relevant state bodies) to understand status quo and map out best strategies to create an effective system of information management through public office record keeping rules. These would include recordkeeping objectives, procedures, processes, practices, management systems, physical infrastructures, facilities, human resources, competencies, ethics, motivations, disclosures and publicness, cultures, custodianships, etc.

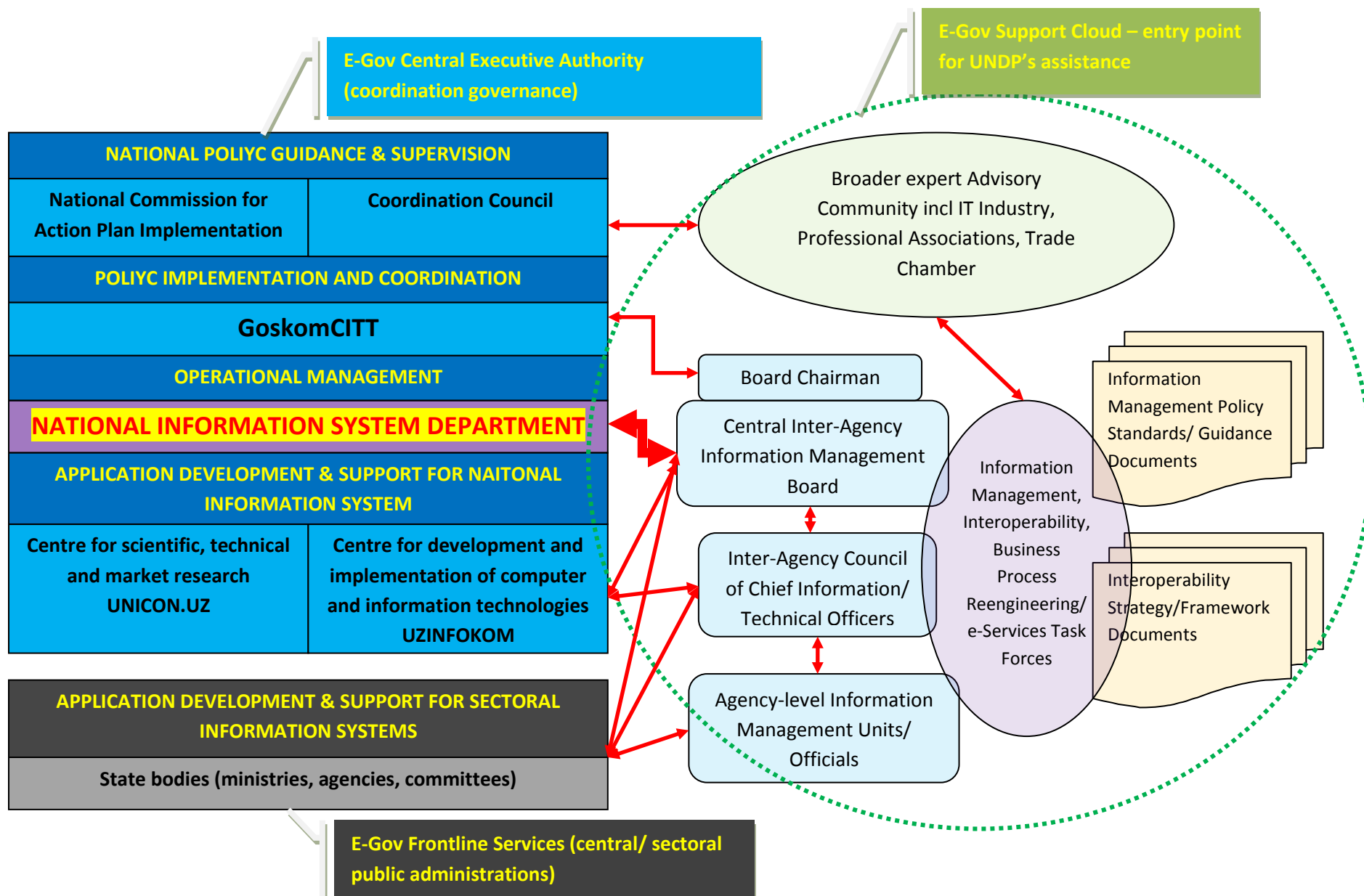


Figure 4 – Proposed organization of the e-Government Action Plan implementation mechanism for better inter-agency coordination and interoperability

Business process reengineering for back- and front-office reorganization

In the short- and mid-term, the management coordination agenda should concentrate on the ICT-enabled back-office reorganization for better public services. It could include undertaking inventory of business process reengineering and priority setting in view of benefits brought by ICTs. The following strategy options could be used in this regard⁷

- **Digitisation of largely unchanged back-offices** where existing back-office arrangements function well and are easy to digitize without significant changes to further improve the quality of public services via online channels.
- **Deep reorganisation of back-offices** where existing back-office arrangements are complex, not integrated or absent altogether – as a result, significant reorganisation would be required to produce quality services for end-users.
- **Consolidation (centralization) of back-office and de-concentration (de-centralisation) of front-office functions** where back-offices and their functions are rationalized (e.g. data-storing and management) rather than deeply re-organized in order to increase efficiency and make savings primarily at central level and delegating front-office functions to local level (e.g. to service intermediaries in the form of OneStopShops-Single Window, of which the Djizak model is a very good example in the conditions when Internet penetration is still low, especially outside major urban areas; it is advised to create a dense network of such service intermediaries by using common interface (which has already been developed by UNDP jointly with UNICON in a test mode for further integration with the national Portal).
- **Back-office clearing house** where existing back-office arrangements are relatively complex and often unintegrated but are difficult to change; therefore, separate data exchange mechanisms need to be established for use both between agencies and with users thus ensuring high quality on-line services.
- **Generic types of interaction between user and agency** where common back-office or service components cover a broad area in order to benefit from economies of both scale and scope; it is possible in this case to maintain flexibility in meeting specific requirements for service provision in particular situations or locations.
- **Portals** where a user-centred approach enables provision of a range of services from one point linked up with particular back-offices (as described above).
- **Pro-active services** where back-offices become more and more mutually integrated in order share data and resources seamlessly and automatically without ad hoc requests; it is therefore possible to offer services with little or no initiative from, or action by, the end-user, which saves the user's time, expense and effort.

⁷ Quoted from *Reorganisation of government back-offices for better electronic public services – European good practices (back-office reorganisation)*. Final report to the European Commission, January 2004, Volume 1: Main report prepared by Jeremy Millard and Jonas Svava Iversen, Danish Technological Institute, Herbert Kubicek, Hilmar Westholm and Ralf Cimander, Institut für Informationsmanagement GmbH, University of Bremen.

A central repository of good practices both from Uzbekistan itself and across the world should be created and regularly updated. An annual report IT in Public Administration⁸ is recommended for preparation jointly with all state bodies involved under the leadership of GoskomCITT and the Academy of Public Administration (responsible for research and good practice analysis) to demonstrate the progress in implementing the national e-Governance Action Plan.

The use of a Portal-based approach, in combination with public service ‘multipliers’ and intermediaries (OSS Single Window Centres) is especially useful for both state administrations and end-users, as it can generate more traffic and improve service up-take through economies of scale making thereby service provision cost-effective, encourage public-private partnerships, adapt better to local needs through the Single Window Centre intermediation.

As suggested above, UNDP is advised to establish a project for enhancing GoskomCITT’s internal and external potential to manage the coordination of e-Governance Action Plan implementation across all sectors and organizations. It could be done through the development and testing of the methodology for preparing Strategic Management Development Plans for the Committee itself and for other central/sectoral administration authorities as far as information management/e-governance is concerned.

Such plans would define (but not limited to) the following issues: timeframes, mission and objectives, responsibility, capacity and skill assessment, staff and departmental profiles, key functions, core processes, communication lines, strengths and weaknesses, inter-agency coordination roles, performance indicators, etc. As a result, each central or sectoral state body would be placed in a broader matrix of e-government implementation effort as specified by the national Action Plan and with reference to the Plan’s measures as far as their mandate is concerned. The preparation of such plans in a coordinated methodological manner across public administrations will prevent duplication of efforts and ensure adherence to the goals set in the national e-Government Concept.

Role of functional review in business process reengineering: From functions to core processes

Functional analysis as a method of managing organizational change is important for business process reengineering and back-office reorganisation. The traditional functional review is the systematic process of identifying, describing, and relating the functions that a system must perform in order to be successful. It does not necessarily address how these functions will be performed.

In the beginning, functional analysis identifies the top-level functions – or the mission – that need to be performed by the system, which includes answering to the following questions (Figure 6):

- What is the organization’s main mission now and what it should be in a several of years from now (e.g. to serve clients better and be more transparent)?
- What indicators should be used to prove this change?
- Where in the organization the functions are actually performed and need to be performed?
- How often they need to be performed?
- Under which operational conditions (reporting, data generation, etc) they need to be performed?

⁸ An Estonian good practice since the late 1990s.

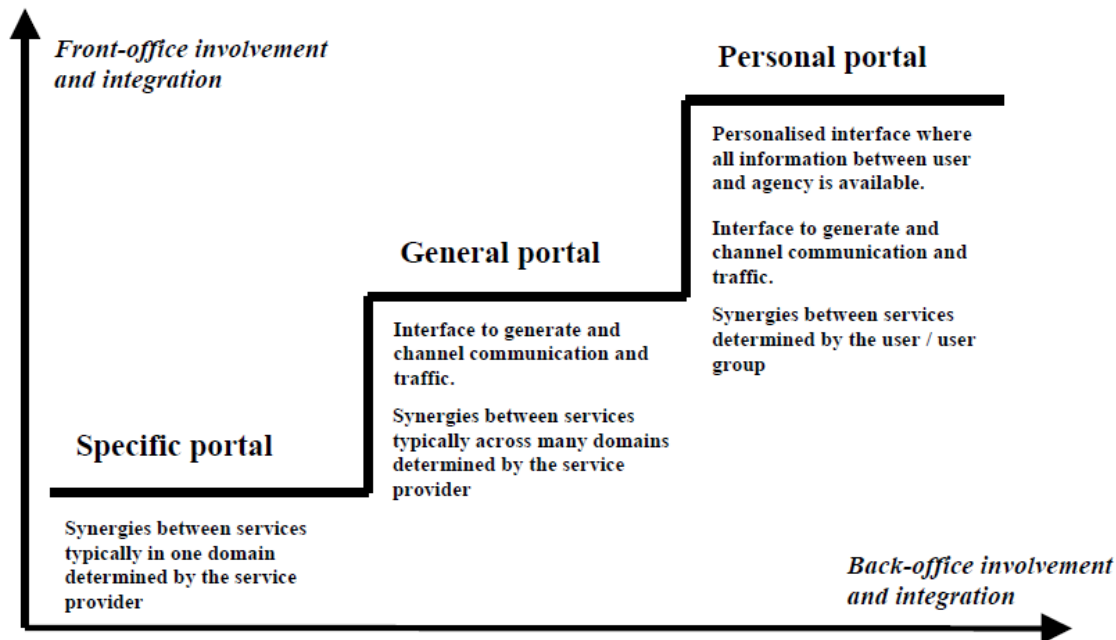


Figure 5 – Service portal viewed through back- and front-office reorganization perspective (source: *Reorganisation of government back-offices for better electronic public services – European good practices (back-office reorganisation)*. Final report to the European Commission, January 2004, Volume 1: Main report prepared by Jeremy Millard and Jonas Svava Iversen, Danish Technological Institute, Herbert Kubicek, Hilmar Westholm and Ralf Cimander, Institut für Informationsmanagement GmbH, University of Bremen)

Later in these early phases, functional analysis proceeds to lower levels of the organizational structure to define the system functional design and interfaces. Usually, it starts with the identification of the core mission (as demonstrated in Figure 7 below), followed by three main steps: (i) Creating a Functional Architecture by defining top-down definition of system functions and developing a dictionary describing each function, (ii) Creating Functional Flow Block Diagrams (FFBDs) to show the sequence of all functions to be accomplished by a system, and (iii) Building timelines to show functional durations and support the development of requirements for operations, test and maintenance functions.

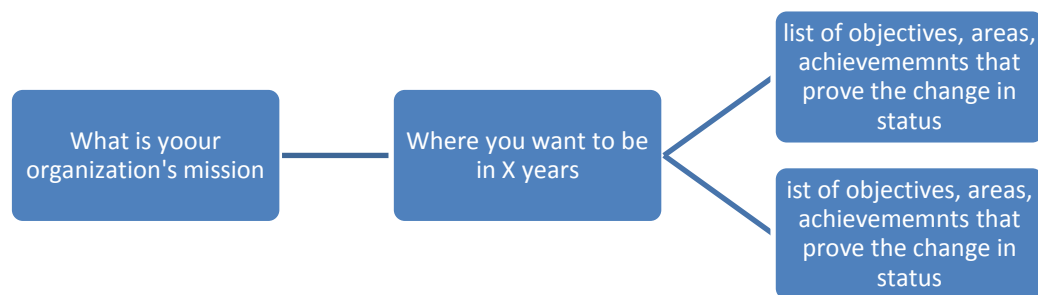


Figure 6 – Getting started with functional analysis

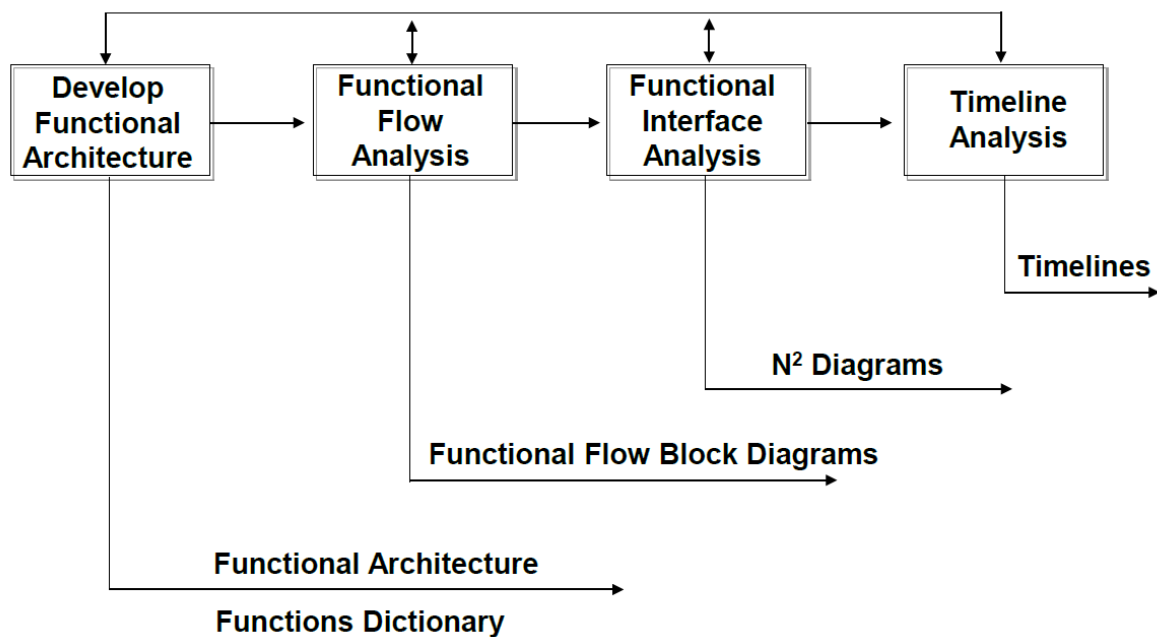


Figure 7 - Instruments of Functional Analysis (source: NASA Functional Analysis Module, Space System Engineering)

A primary functional analysis technique is the Functional Flow Block Diagram (FFBD). Its purpose is to show the sequential relationship of all functions that must be accomplished by a system. Each function (represented by a block) is identified and described in terms of inputs, outputs, and interfaces from top down so that sub-functions are recognized as part of larger functional areas. Some functions may be performed in parallel, or alternate paths may be taken. Functions are arranged in a logical sequence so that any specified operational use of the system can be traced in an end-to-end path. The FFBD network shows the logical sequence of “what” must happen, and does not assume a particular answer to “how” a function will be performed.

As mentioned, the functional analysis provides a high level representation of critical functions for each of the major work areas in the organization. These functions are the ones that ensure timely, high quality, least cost services are provided. Having understood the core functions, one should proceed with the organizational redesign. It can be done as follows:

- I. Firstly, by listing current major work units: Making a list of all major areas of work in the organization. This can be from an organizational chart or some other form of organizational documentation showing responsibilities and reporting relationships.
- II. Secondly, by brainstorming functions performed in each unit: For each major area, all of the basic duties, processes, or services provided need to be brainstormed.

- III. Thirdly, by selecting critical or core functions that lead to timely, high quality, least cost outputs (goods or services): Having determined a list of functions in each area, each function needs to be analyzed through a number of criteria such as: which ones help ensure provision of timely, high quality, and least cost services.
- IV. Fourthly, by exploring how critical core functions connect or interrelate to each other: How does one core function impact the other? Using this as a guiding question, connect all core functions by arrows to see whether there a pattern.
- V. Fifthly, by discovering how and where core functions can be improved: having understood how the organization is composed, a question should be asked: what improvements would help make services better than they are today. Prepare a list of such improvement by work area, function or for the whole organization. Clients (citizens, entrepreneurs) need to be consulted in order to better understand what people prioritize themselves which should guide the process of improvements.

The Annex contains, as one of the numerous examples available, the World Bank Guide to preparing a functional review report.⁹

The functional analysis needs to be viewed as a business process analysis. First of all, there should be

- common understanding about the internal workflows (with the help of maps, flowcharts and visualization tools) broken into key core processes that should be specified in the Business Process Report; that will help understand how the organization does its business in terms of inputs, functions, steps, and outputs and whether these are citizen-centric, i.e. provide added value to citizens; all unnecessary processes and related services should be eliminated and the new ICT-aided ones will be introduced,
- needs assessment for ICT systems viewed through the lens of organizational workflow,
- prioritization of citizen-centric e-services,
- elaboration of relevant to such services back-office systems of internal information management,
- identification of the information and data that should be made public and the strategy to make such information known and re-usable,
- setting up a transparent progress tracking system accessible to everyone on the organization to ensure internal equality and credibility of the IC systems. Otherwise speaking, the organization should re-invent itself based on the advantages brought by ICTs.

The chart below (Figure 8) demonstrates how to transform a function-based organization into a process-based organization.

⁹ <http://siteresources.worldbank.org/EXTADMCIVSERREF/Resources/FRPGuidelinesTemplate.pdf>

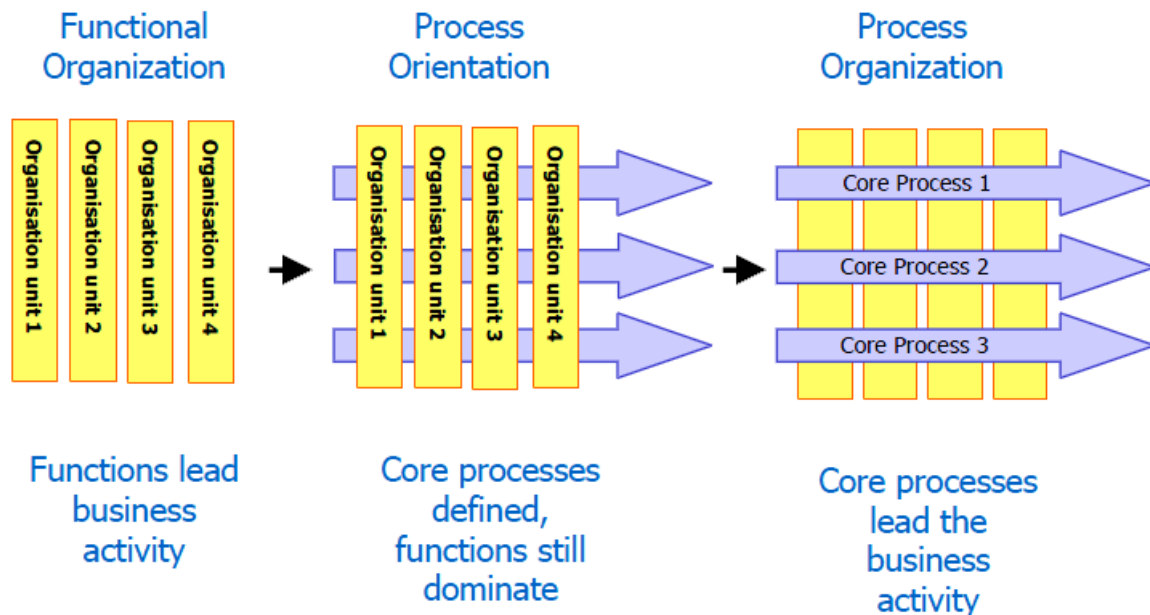


Figure 8 – From functions to processes (Source: UNDP/UNOPS project “Improving Democratic Governance through Information and Communication Technology in Kyrgyzstan” implemented by InDevelop, Sweden)

The Business Process Analysis viewed this way, could help identify areas where citizen satisfaction needs to be increased through better e-services (it is expected that the latter will raise productivity thanks to the reduced process cycle time and cost). Mapping and revealing cross-functional relationships will help understand how internal communication systems and knowledge sharing are organized. It is assumed that due to the ICTs’ networking and multiplier effect, inputs will become more functional by crossing their (departmental) boundaries and related outputs. That, in turn, will serve a source for other functions. In effect, that will reduce the number of unique functions through their inter-departmental communication. The diminished functional redundancy and the commonly shared accountability will be one of the major outcomes of such a rational use of digital technology. The planned outputs will be produced regardless of how many functions or departments the work flow crosses. As a result, thanks to ICTs, a function-based body transforms itself into to a communication- and process-based organization. Its performance will not be any longer measured through the functional effectiveness but instead via the actual outputs produced regardless of how many functions or departments the organization has.

Annex 1 - Mission Programme

| | 4 Feb | 5 Feb | 6 Feb | 7 Feb | 8 Feb | 9 Feb | 10 Feb | 11 Feb |
|-------------|------------------|----------------------------------|---------------------|---------------------|--------------------------------------|-----------------------------|-------------------------|---------------------|
| Time/Day | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday | Monday |
| 9:30-10:30 | LGSP | Uztelecom | State Tax Committee | Ministry of Justice | Uzkommunhizmat Agency | Djizak | Report writing Tashkent | Ministry of Economy |
| 11:00-13:00 | UNDP CO briefing | Communications Committee | UzArchive | Supreme Court | Software development training centre | Djizak Single Window Centre | | UNDP CO debriefing |
| 14:00-15:30 | UNICON.UZ | | Ministry of Finance | Customs Committee | Djizak | | | |
| 16:00-18:00 | Trade Chamber | Academy of Public Administration | UZINFOCOM | | Djizak | | | |

Annex 2 – Issues to be discussed during the meetings (in Russian)

Вопросы по внедрению системы «Электронное правительство» в Республике Узбекистан

Для встреч с представителями разных ведомств и организаций

Межведомственная совместимость и межсистемная интеграция.

Одной из основной задач внедрения системы «Электронное правительство» в Республике Узбекистан на период 2013-2017 годы является создание единой программной и технологической платформы электронного правительства, как основы формирования информационных систем с возможностью использования этих функций другими программами. Будут разрабатываться регламенты межведомственного взаимодействия и обмена данным в рамках функционирования системы «Электронное правительство» (как часть развития нормативно-правовой базы по внедрению системы «Электронное правительство»).

Фактически речь идет об межсистемной совместимости и межведомственного взаимодействия информационных систем в государственных органах, или, если пользоваться международной терминологией, интероперабельности компонентов системы «Электронное правительство».¹⁰ В 2010 году ПРООН совместно с Агентством связи и информатизации подготовило отчет МЕЖСИСТЕМНАЯ СОВМЕСТИМОСТЬ ИНФОРМАЦИОННЫХ СИСТЕМ В ГОСУДАРСТВЕННОМ СЕКТОРЕ: РЕКОМЕНДАЦИИ ДЛЯ УЗБЕКИСТАНА.¹¹

В отчете всесторонне исследован международный опыт взаимодействия информационных систем и даются рекомендации по политике совместимости, определяются участники и их роль. Так, концепция взаимодействия государственных систем определена как «набор стандартов, правил или политик, которые правительство использует для определения предпочтительного способа взаимодействия между государственными учреждениями, гражданами и партнерами», что включает в себя не только техническую совместимость (т.е. определенные и обязательные для соблюдения всеми участниками технические спецификации), но также организационную и семантическую (информационную) совместимость.

Авторы отчета справедливо отмечают, что наибольшее распространение получили решения в области технической совместимости, поскольку их легче планировать и реализовывать. Тем не менее, как другие исследования на примере Евросоюза показывают, для успешной реализации важны именно организационные и информационные аспекты интероперабельности. Игнорирование последних является одной из причин положения, когда до 70 процентов проектов

¹⁰ Government Interoperability (framework, strategy)

¹¹ Данный отчет подготовлен совместным проектом ПРООН и правительства Узбекистана “Содействие Правительству Республики Узбекистан в формулировании и внедрении политики информационно-коммуникационных технологий для развития Узбекистана”

в сфере электронного правительства являются слишком затратными и не достигают поставленных целей.¹²

Как показывает последний опыт работы Центра Электронного Управления Молдовы, наиболее сложные проблемы возникают не на стадии закупки или разработки технических решений, а их воплощение на практике государственными органами, в результате чего страдает предоставление услуг. Внедрение ИКТ в живую практику административных органов является очень сложной проблемой во всех смыслах, включая организационно-функциональную структуру и психологически-этические аспекты. Отсутствие квалифицированных кадров в отдельных органах государственного управления, прежде всего на местном уровне, усугубляет проблемы эффективного внедрения технологий электронного управления.

Именно для устранения таких проблем необходимы стратегии организационной и информационной интероперабельности. Анализ мероприятий, предусмотренный Проектом Комплексной Программы внедрения системы «Электронное правительство» в Республике Узбекистан на период 2013-2017 показывает, что приоритет отдан именно технической интеграции и совместимости.

В связи с этим возникает вопрос - Каким образом будет оцениваться влияние и организационно-функциональные последствия технической политики на все аспекты работы органов государственного управления на всех уровнях и каким образом будет формироваться и внедряться политика в области организационной и информационно-семантической интероперабельности?

Предполагается ли разработка концепций интероперабельности в межинституционально-организационной и информационно-семантической сфере электронного правительства?

Нормативно-законодательная основа

Предусматривается принятие 3-х важных законов - «О государственных услугах», «Об электронном правительстве» и «О персональных данных». Последний будет особенно важным.

Вопросы – что будет положено в основу законов и какова будет их сфера действия? Будут ли они обсуждаться общественностью и профессиональным сообществом, учитывая, что законы затрагивают практически каждого гражданина страны? Будет ли учитываться опыт других стран в практической реализации этих законов? Предполагается ли принятие закона о доступе к информации публичного пользования, содержащейся в государственных органах, в виде электронной услуги?

Инфраструктура открытых ключей, ЭПЦ и цифровая идентификации пользователей «электронного правительства»

¹² Данные Ричарда Хикса и университета Манчестера

Очевидно, что будут активно расширяться условия электронного взаимодействия пользователей с государственными органами (заполнению электронных форм, бланков отчетности и т.п.).

Вопрос – смогут ли все граждане и индивидуальные предприниматели пользоваться ЭПЦ? Будет ли она платной или бесплатной? Каким образом будет осуществляться цифровая идентификация пользователей «электронного правительства»; например, будет ли использоваться инфраструктура открытых ключей не только для ЭПЦ, но также и как универсальное средство цифровой идентификации пользователей электронных услуг?

Критерии и механизмы оценки внедрения и эффективности использования систем «электронного правительства»

Что будет положено в основу такой оценки? Например, будет ли использоваться система оценки прогресса в области развития электронных услуг по пятиступенчатой шкале их зрелости (e-service maturity model)?

Потенциал определения и реализации единой политики формирования Национальной информационной системы

Департамент по формированию и развитию Национальной информационной системы Центра развития и внедрения компьютерных и информационных технологий UZINFOCOMa будет отвечает за единую техническую политику.

Вопросы – достаточно ли у Центра полномочий осуществлять также и другие формы межведомственной координации, например, практическое внедрение единых стандартов электронных услуг в отдельных секторах и отраслях? Координировать работу ИТ отделов в министерствах по трансформации внутренних бизнес-процессов? Осуществлять мониторинг и оценку эл услуг? Нужна ли помощь в укреплении такого потенциала? Как будет решаться проблема нехватки квалифицированных кадров и повышения их квалификации, особенно в ведомствах и министерствах, а также на местном уровне? Какие существуют планы по повышению роста цифровой грамотности населения для лучшего восприятия и более эффективного получения электронных услуг?

Другие вопросы

Какая будет политика государства в области использования программ с открытым кодом?

Будут ли разрабатываться секторальные планы и стратегии для отдельных отраслей, министерств, ведомств по модернизации бизнес-процессов и развития электронных услуг (баланс между бэк и фронт офисами)?

Какова политика в развитии межведомственного взаимодействия систем электронного документооборота в органах государственного управления? Интегрирована ли она с ЭПЦ? Будет ли заложена возможность в системах электронного документооборота доступа пользователей к данным в виде электронной услуги?

Стратегии и планы развития электронных услуг

Вопросы – Будут ли разрабатываться секторальные планы и стратегии для отдельных отраслей, министерств, ведомств по модернизации бизнес-процессов, модернизации инфраструктуры и развития электронных услуг (баланс между бэк и фронт офисами)? Как будет решаться вопрос нехватки кадров? Какая нужна помощь в подготовке квалифицированных кадров? Проводятся ли мероприятия по межведомственной координации среди ИТ персонала?

Annex 3 – Functional Review Process Guidelines

FUNCTIONAL REVIEW PROCESS GUIDELINES

Background

In this section, provide background on:

- (a) the Government's overall Public Sector Reform (PSR) agenda, including why it is being undertaken (e.g., what pressing issues or problems prompted the Government to launch such a reform agenda), what it hopes to achieve (key objectives), what are its major elements (the FR being one, but also PEM/public financial management reform, Strategic Planning, anti-corruption, CSR, downsizing of SEEs, etc.), how that overall PSR effort is being led and supported, etc.;
- (b) more detailed explanation of how a Functional Review is expected to contribute to that overall reform agenda, what problems it is intended to address and what it hopes to accomplish.

Objectives

In this section, provide:

- a) Statement of the broad objectives of the FR process (e.g., rationalizing functional responsibility assignments, reducing government-financed costs, making it easier to hold public entities accountable for meeting policy and program objectives, rationalizing within-entity organizational structures, rationalizing within-entity employment structures, etc.)
- b) Statement of coverage of the FR (e.g., which sectors to be reviewed, which functions to be reviewed, etc.)

Tasks

In this section,

- (a) Summarize prior actions already undertaken (e.g., leadership arrangements and assignment of implementation responsibilities; agreement to the methodology; clarification of Government priorities for the FR process)
- (b) Spell out criteria to be employed in each of the technical tasks to be undertaken:
 - i. Identify necessary functions (specify categorization scheme for functions; specify criteria to be employed to decide whether a given function is necessary or not)

- ii. Determine how to undertake remaining functions (specify criteria to be employed to decide the type of organization and legal framework under which a function is best undertaken – inherently governmental and left at the central government level; devolved or decentralized; contracted from the private or not-for-profit sectors; left to the private or not-for-profit sectors)
 - iii. Deal with inherently governmental functions (specify criteria to be employed to decide the appropriate structural option for any given inherently governmental function – core ministry; statutory commission or independent regulator; supervised body or executing agency; state-owned enterprise or trading body)
 - iv. Structure the remaining organizations (specify criteria for structuring functions within any given government organization -- i.e., criteria for determining whether services should be located in a common department, whether departments or divisions need restructuring, and whether managerial responsibilities are balanced and sustainable)
 - v. Prepare implementation plan (specify what issues must be addressed in each implementation plan – contents, sequencing, etc.)
- (c) Spell out risk mitigation issues that the FR process will address and specify both design features and tactical actions that will be employed to address them.
- i. Overcoming resistance
 - ii. Ensuring realistic expectations
 - iii. Ensuring focus on results, rather than activities or inputs
 - iv. Aligning the FR process with the budget process

Sequencing and Schedule

In this section,

- (a) Spell out the sequence of FR activities (either identify a specific sequence of FRs (e.g., by sector, by organization, etc.), or spell out criteria for sequencing FRs (e.g., budgetary importance, ensuring balance across central and line ministries, policy importance, etc.)

Institutional arrangements

- (a) Provide details of organizational arrangements for undertaking the FR process that have not already been clarified under Task (a)

Other useful references include: Towards Effective Public Administration: Methodology for Functional Analysis (UNDP, 2009); and also the following:

- <http://unesdoc.unesco.org/images/0010/001085/108562eb.pdf>
- <http://www.martymodell.com/pgsa2/pgsa12.html>
- <http://www.oecd.org/std/clits/42495745.pdf>,
- <http://www.griffinhammis.com/publications/ResistingArrest.pdf>,

- http://map.rks-gov.net/userfiles/file/FRIDOM/Fridom_en/Vertical_Reviews/Functional_Review_of_the_Ministry_of_Agriculture_Forestry_and_Rural_Development_104e_MAFRD.pdf
- http://map.rks-gov.net/userfiles/file/FRIDOM/Fridom_en/Vertical_Reviews/Functional_Review_of_the_Ministry_of_Labour_and_Social_Welfare_111.pdf
- <http://www.reformsmin.gov.lk/developmet-programmes/functional-and-work-processes-review>
- http://zunia.org/sites/default/files/media/node-files/gu/184276_Guideline%20for%20Conducting%20Functional%20Reviews%20-%20Geopolicy1260181979.pdf.

Annex 4 – LGSP’s possible services in line with the decision № 817-f of the Government adopted on 8 December, 2012

- 1) The system of interagency E-document workflow will be developed and introduced (Due date: 30 December, 2012, in close collaboration with UNICON.UZ);
- 2) The automatic information system of OSS will be developed and introduced (Due date: 30 December, 2012, in close collaboration with UNICON.UZ). The automatic information system developed on basis of:
 - Service Oriented Architecture,
 - Developed on the base of Industry Standards and Web 2.0 technologies,
 - Supporting high availability and clustering of information system with possibility to provide services based on cloud system through national data-centers;
 - Supporting flexible reporting system, mobile systems and SMS services
 - Enabling opportunity to provide public services through OSS and interactive online services;
- 3) Consultation on inclusion of common trusted national identity verification system in “E-hujjat” and automatic information system of OSS and possibility to send online request and receiving results through Internet portal (for example the usage of <http://my.gov.uz>)
- 4) in automatic information system will be held with UZINFOCOM;
- 5) Compile best practices of foreign countries on transition to e-governance (in close collaboration with international consultant on e-governance);
- 6) Conduct analysis of e-governance progress in Uzbekistan in public administration system;
- 7) Provide technical advice on standards that should be complied with while transition to e-governance of public administration system at the local level;
- 8) Prepare methodology for functional review of government agencies to self-assess their information systems to identify the applicable ways and options to transform into fully-fledged e-governance mechanism and provide interactive public services;
- 9) Internet portal of online public services will be developed and introduced;
- 10) The results of Functional review on public services will be presented;
- 11) LGSP will participate in process of development of accounting and billing system for water management, namely review current database of utility services (according to Decision of the Government № 337 adopted on 30 November, 2012);
- 12) LGSP will participate in improvement and implementation of pilot project on automatic accounting and billing system for water management in Tashkent (according to Decision of the Government № 337 adopted on 30 November, 2012);

LGSP will participate in development of exemplary rules and regulations on public services provided through OSS in Djizak and Namangan cities.