



# Report on Monitoring and Evaluation of Electronic Services in Azerbaijan

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## I. SUMMARY

E-government establishment gained a new dynamic in last two years in Azerbaijan. Pursuant to strategic decision of the government of Azerbaijan on introduction of electronic services followed by adoption of the list of electronic services (e-services) and the requirements on their development, central executive bodies of the Republic of Azerbaijan started creating e-service sections on their websites. As of 1 December 2014, the number of e-services announced by 42 public institutions is 449. The quantity of e-services has increased, but what about the quality? From this point of view, assessment of the level of development of the e-services provided in Azerbaijan has become a necessity.

The authority for organizing and identifying quality indicators of e-services provided by public institutions is entrusted with the State Agency for Public Service and Social Innovations (ASAN) under the President of the Republic of Azerbaijan. ASAN conducts regular monitoring of e-services provided by public institutions; however, the results are not released to the general public.

Civil society also conducted first monitoring activity in 2011. This monitoring activity found that of the 284 e-services provided by 41 public institutions, only 18% (51 e-services) were functional. It was further concluded that 50 (17, 6 %) other e-services were partly operational, with additional 183 (64.4 %) e-services not providing any services at all<sup>1</sup>.

In order to stimulate the development of e-services in Azerbaijan, experts from the Estonian E-Government Academy were invited to Azerbaijan with the support of the OSCE Office in Baku in 2011. After reviewing the local situation, these experts developed a methodology, based on the European and UN assessment criteria. The Transparency Azerbaijan conducted its monitoring on the e-government infrastructure and e-services, based on this methodology.

The assessment consists of two parts: (i) assessment of e-government infrastructure and (ii) of e-services development.

### ASSESSMENT OF E-INFRASTRUCTURE

E-infrastructure is crucial for development of e-services and was assessed in accordance with seven main components, given below.

**Authentic sources (databases or information systems)** stand for a register with basic data on a person or business, which the government is obliged to use in communication with citizens and businesses. This refers to data collections held and maintained by public authorities, in which the identity attributes of a clearly defined subset of entities is managed, and to which a particular legal or factual trust is attached (i.e. which is generally assumed as being correct). This includes population registers, tax registers, company registers, etc. The use of authentic sources allows citizens and businesses to provide data only once, whilst it can be used multiple times by government.

**E-identity** allows for electronic identification and signature in an e-government.

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<sup>1</sup>Report on Monitoring on Implementation of the Presidential Decree on Some Measures on Organization of Application E-services by State Agencies dated May 23, 2011, publication by Transparency Azerbaijan Anti-corruption Public Union, Information and Cooperation Network of NGOs on Anti-corruption Initiatives, and Entrepreneurship and Market Economy Development Assistance Foundation, December 2011, [www.transparency.az](http://www.transparency.az)

**Secure e-delivery** stands for a secure delivery infrastructure for exchange of documents and data among public institutions, the business sector and members of the general population.

**Single Sign-On (SSO)** is a property of access control of multiple, related, but independent software systems. With this property a user logs in once and gains access to all systems without being prompted to log in again at each of them. Single logout provides synchronized session logout functionality across all sessions.

**E-Safe** is a secure storage spaces for documents and alike and the secure, following formal delivery of information from/to businesses or citizens in their communication with government organizations. The e-Safe enables citizens and/or businesses to store legally valid, digital documents of any kind: certificates, diplomas, etc.

**Open standards** - the word "open" is here meant in the sense of fulfilling the following requirements: the standard is adopted and will be maintained by a not-for-profit organization, and its ongoing development occurs on the basis of an open decision-making procedure available to all interested parties (consensus or majority decision etc.). The standard has been published and the standard specification document is available either freely or at a nominal charge. It must be permissible to all to copy, distribute and use it for no fee or at a nominal fee. The intellectual property - i.e. patents possibly present - of (parts of) the standard is made irrevocably available on a royalty-free basis. There are no constraints on the re-use of the standard.

**Electronic payment** allows for payments in an electronic format, among public institutions, members of general population, commercial physical and legal persons.

Assessment used two-scale system (minimum 0 and maximum 1) for each of the seven components. The following results were found while assessing the components of e-government infrastructure:

**1. Existence of information systems and data base; exchange of information between data bases and legal foundation of the information exchange: total score 1/0.33**

It is impossible to assess all existing data bases, therefore the monitoring focused on the three main types of data bases of vital importance: personal data base, business data base and real estate data base.

- If personal and business data bases have been created, the real estate information systems are in the process of formation.
- Personal data (national IDs) in the IAMAS system by Ministry of Interior is exchanged with other public agencies, whereas access to real estate data from the data bases of the State Property Committee and State Land and Mapping Committee (address of real estate, land cadastre information; real estate information) is not exchanged with other agencies within provision of e-services. At the same time, many state agencies do not use business data from the AVIS system of the Ministry of Taxes (tax payer ID, business registration certificates) within provision of e-services.
- In the result, users of e-services have to provide scanned copies of documents that shall be easily available to public agencies from e-information systems managed by respective agencies.
- Legal framework for information exchange is rather well formed, still there is no law obligating public agencies to consult existing data bases of other respective agencies.

## **2. Information exchange infrastructure - 1/0.66**

In order to ensure secure exchange of information between public agencies, the Ministry of Communication and High Technologies created Internal Information System of E-government (EHDIS). However, even if about 50% of information systems are integrated into the e-government portal, in practice in the process of rendering e-services public agencies make a little use of this system while exchanging information. Instead, public agencies (Ministry of Internal Affairs to Ministry of Taxes; Students Admission Commission to Ministry of Internal Affairs; Ministry of Justice to Ministry of Health) use www.azstate.net network created by Special State Security Service for information exchange.

## **3. Standards of information exchange - 1/0**

The Cabinet of Ministers 1 May 2014 decree No 118, approves technical requirements for information systems and databases and e-services. This decree sets forth some standards for information exchange. Thus, information system integrated into e-government portal shall use SOAP protocol (Sample Object Access Protocol) when sending an information inquiry. The volume of this inquiry shall not exceed 10 kilobyte. However, these standards do not meet all requirements for overall information standards. The information exchange standards shall be regulated by dedicated legal acts. These standards shall be open for all interested stakeholders and available online.

## **4. E-safe - 1/1**

Infrastructure to ensure secure storage of e-documents exists in Azerbaijan. Information resources of public agencies of Azerbaijan Republic are protected by Special State Protection Service. According to the presidential decree, responsibility and measures to be taken to ensure security of the e-government portal are delegated to the Special State Protection Service.

## **5. E-payment system - 1/1**

E-payment is made through the APUS system established by the National Bank, however, centralized e-payment system is not integrated into the e-government single portal. Also, private companies offer on-line payment mechanisms such as web-based Azeri Card, Golden Pay, Easy Pay; and payment kiosks such Milli On and E-manat.

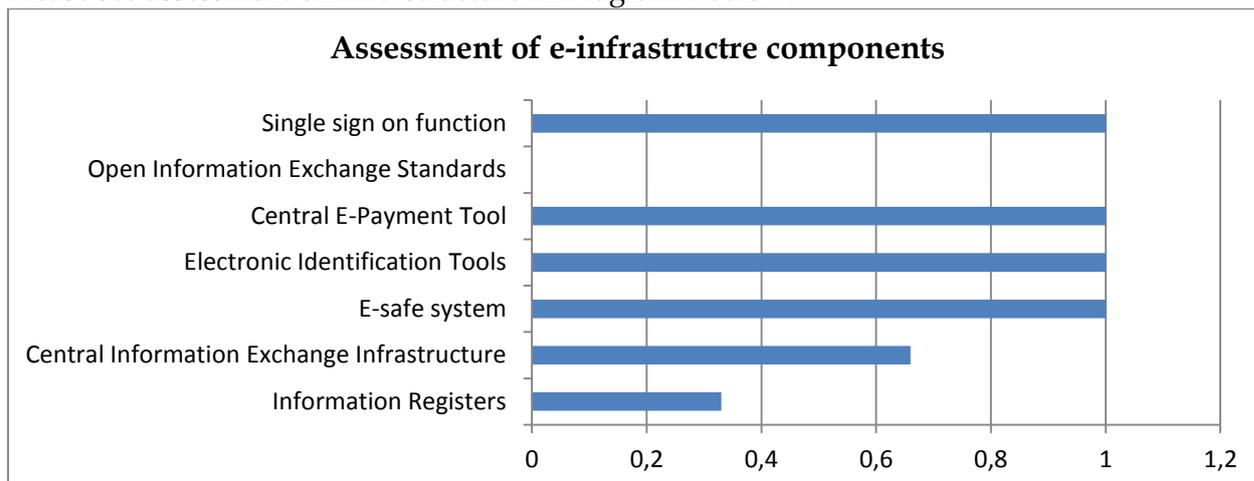
## **6. Single Sign-On System - 1/1**

Single Sign-On function was made possible with creation of single e-government portal. However, once registered at the portal, users have to re-register to be able to use services of the Ministry of Taxes, which shows that information system of this agency is not harmonized with the technical requirements of the portal.

## **7. Electronic identification - 1/1**

Electronic identification in Azerbaijan uses two technical tools: *smart card based e-signature* and *SIM-card based e-signature*; issued by respectively the Ministry of Communication and High Technologies and Ministry of Taxes. MCHT tool is mostly used by citizens and officials, whereas the Ministry of Taxes targets the business sector. Also, in contrast to many other countries, in Azerbaijan electronic signature is not compulsory and therefore, not widely spread.

Please see assessment of infra-structure in Diagram 1 below.



**The overall E -government Infrastructure Index in Azerbaijan is 5 out of maximum 7.**

The current infrastructure allows:

- I. Avoid requesting the hard copy of the following documents by public agencies at e-service delivery: national ID card, Tax Payer Identification information, registration certificates of business legal entities and individual entrepreneurs; this data can be derived from IAMAS system of the Ministry of Interior and AVIS system of the Ministry of Taxes;
- II. Use Government Payment Portal ([www.apus.az](http://www.apus.az)) tool to pay the service fee, whenever applicable;
- III. Receive documents and application forms with e-signature;
- IV. To elevate the e-services to the third level of e-application at minimum;
- V. To fully automate any service that is not dependent on any other public agency;
- VI. Integrate all e-services into the single e-government portal.

## ASSESSMENT OF E-SERVICES

Assessment of e-services relied on three criteria: maturity (technical development), level of public participation and level of transparency described below.

### 1. Maturity (technical development)

In theory, depending on the nature of the e-services, three, four and five-tier or level model can be applied. In accordance with existing e-government infrastructure, during this monitoring three and four-tier models were used. The levels of e-services development are described below.

**First level: Informative.** This level includes provision of static information on the service, requirement documents, as well as contact information for the institution responsible for the service.

**Second level: Unilateral interactive.** This level means unilateral interaction between the public institution and the general member of the public or legal or natural person. Members of the general population download application forms from websites, manually fill them out and submit them personally or through post.

**Third level: Bilateral interactive** – Members of the general population is authenticated for use of e-services and are able to apply filling out electronic forms or by sending scanned copies of relevant documents. At this level, officials of the public institution respond by email and the interaction continues in a bilateral format.

**Fourth level: Fully automated transaction.** E-services, including payments are fully carried out in an online format. The main characteristic feature is that the user does not use “papers” while using the service.

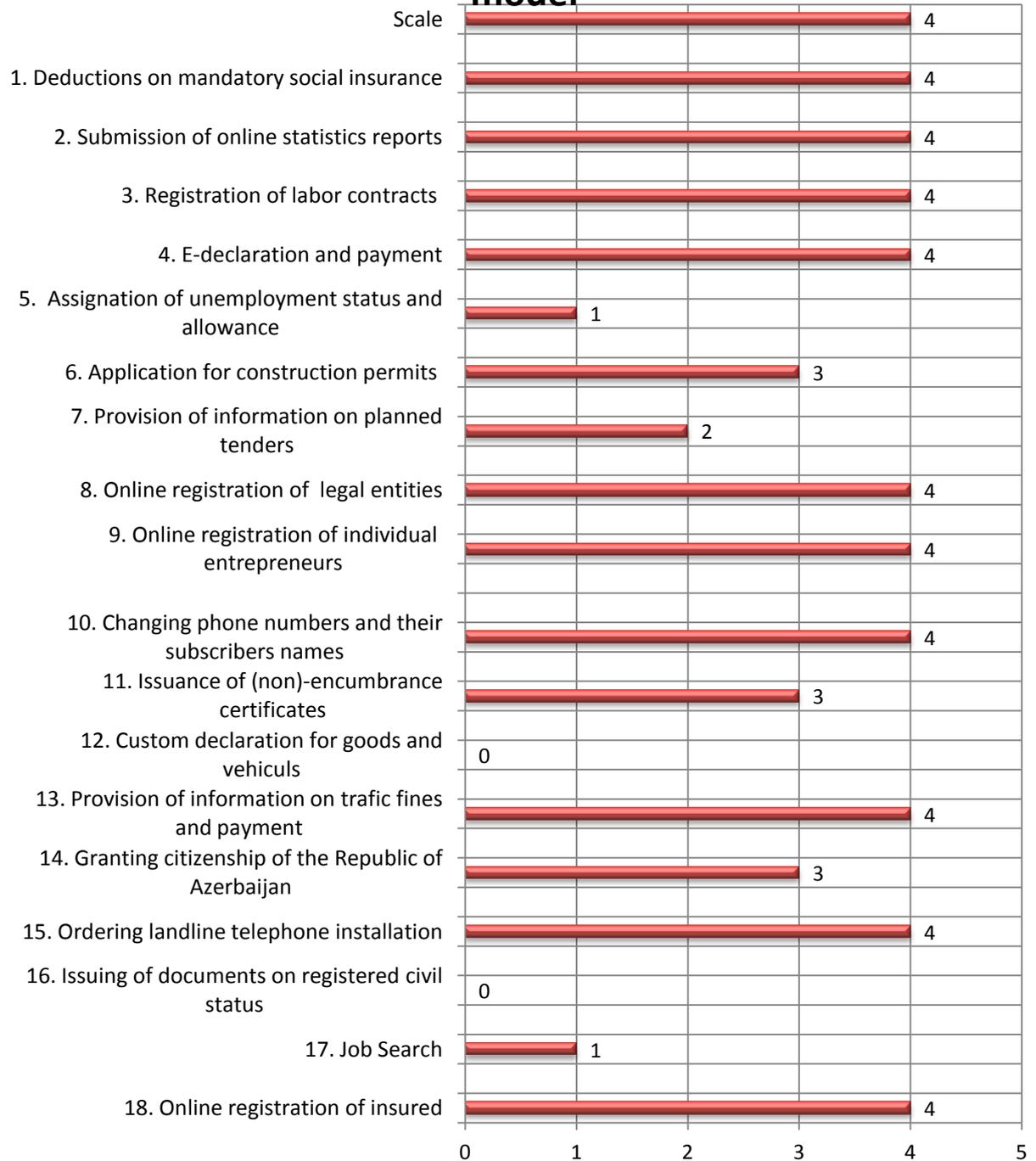
**Fifth level: Automated and proactive (individualized).** The 5 tier-model is applied only to those services where the government has sufficient information about financial situation, rights and needs of citizens and is able to render a proactive and fully automated service. For example, if a citizen is registered as unemployed, the state shall be proactive in contacting the citizen to assign unemployment allowance or offering a job. No e-service in Azerbaijan has reached the fifth level.

Out of 30 e-services assessed in this report, 12 services were assessed on three tier model. Results are summarized in the Diagram 2 below.



Alongside with this, 18 e-services were assessed on 4 tier model and results were summarized in the Diagram 3 below.

## Assessment of e-services on the basis of 4 tiers model

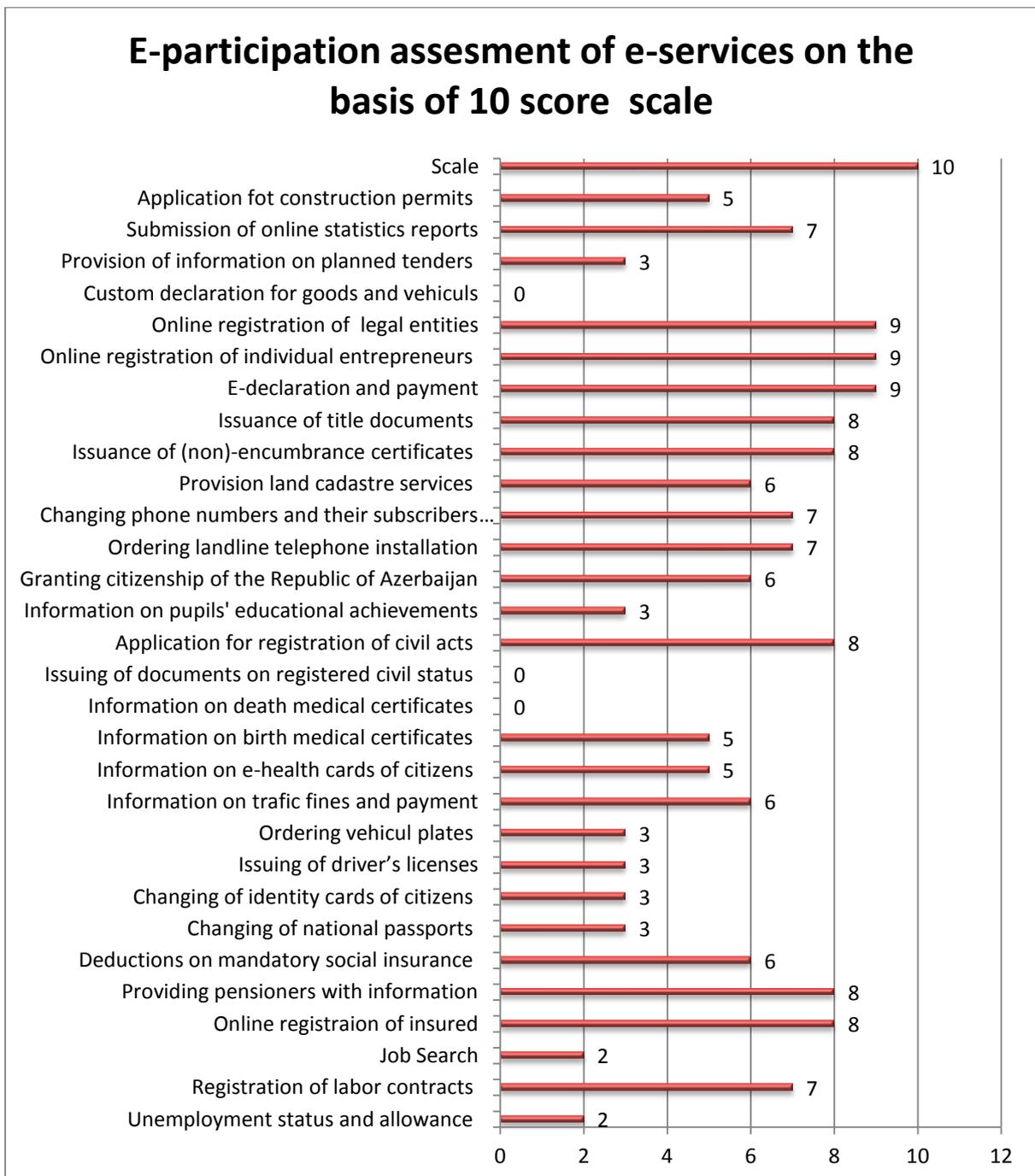


## 2. Level of public participation

The assessment also scored the level of public participation that is based on the UN three-tier model of e-participation. The assessment used only first two tiers (e-information and e-consultation), as the third tier (e-decision making) is yet to be developed in Azerbaijan. The scoring system is as follows:

- 1-3 - low level of e-participation
- 4-6 - satisfactory level of e-participation
- 7-8 - good level of encouragement, in terms of public participation
- 9-10 - excellent level of encouragement, in terms of public participation

E-participation assessment results for 30 e-services are represented in Diagram 4 below.



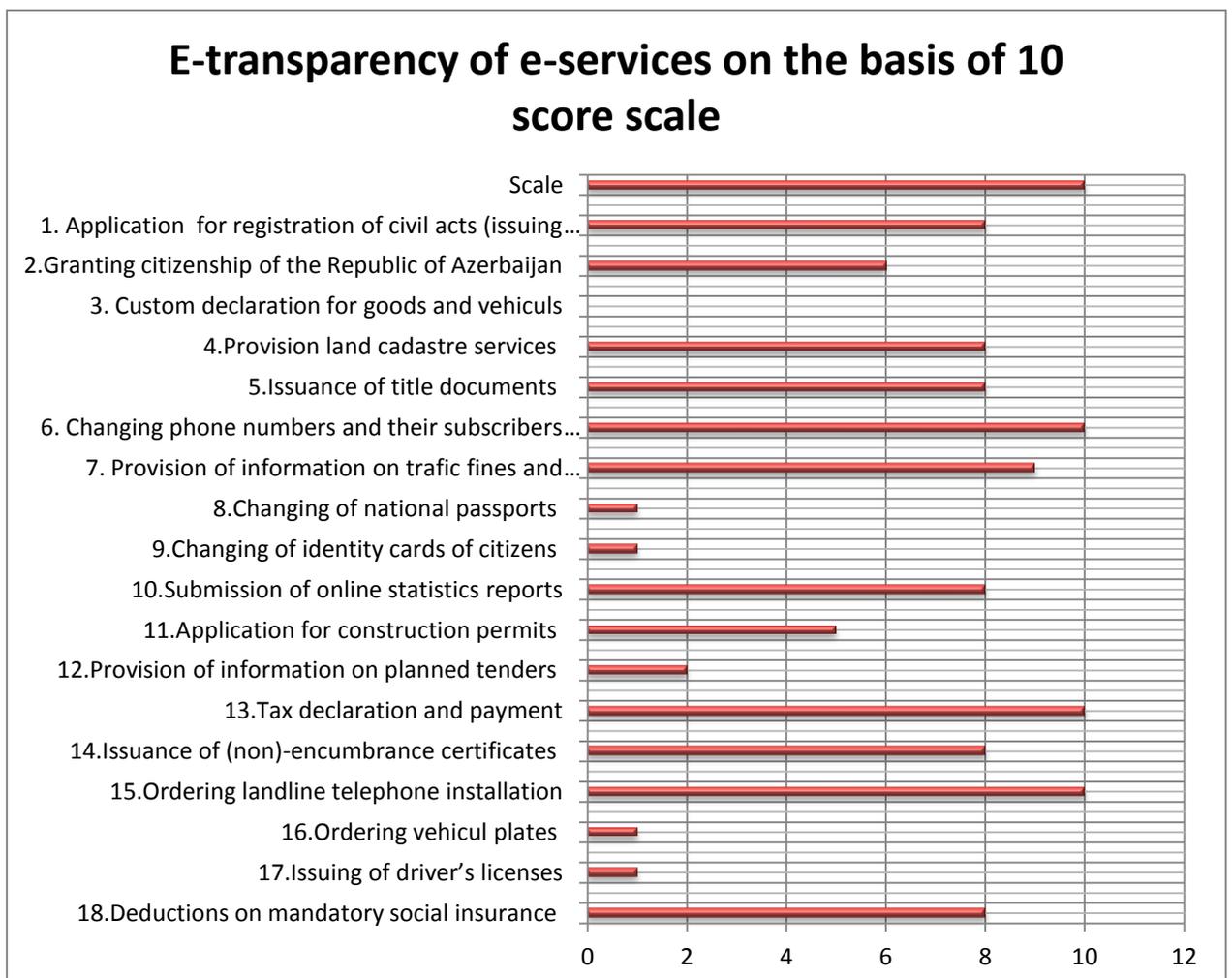
### 3. Level of transparency

The third aspect of the assessment looked at the transparency of services. Transparency is understood as transparency in e-services. It does not assess the overall transparency of a given public agency. According to the methodology below, e-services are assessed with regards to the contribution to reduce the corruption through increasing transparency. The assessment looks at interactive communication and e-communication, availability of tools, cashless payment communication, and inter-operation of data bases. Maximum score for paid services is 10, while for services that do not require a fee, maximum score is 8 (respectively, questions 9 and 10 above are not applicable to these services).

Scoring is as follows for the 10 score assessment:

- 1-4 - non-transparent
- 5-7 - relatively transparent
- 8-10 - sufficiently transparent

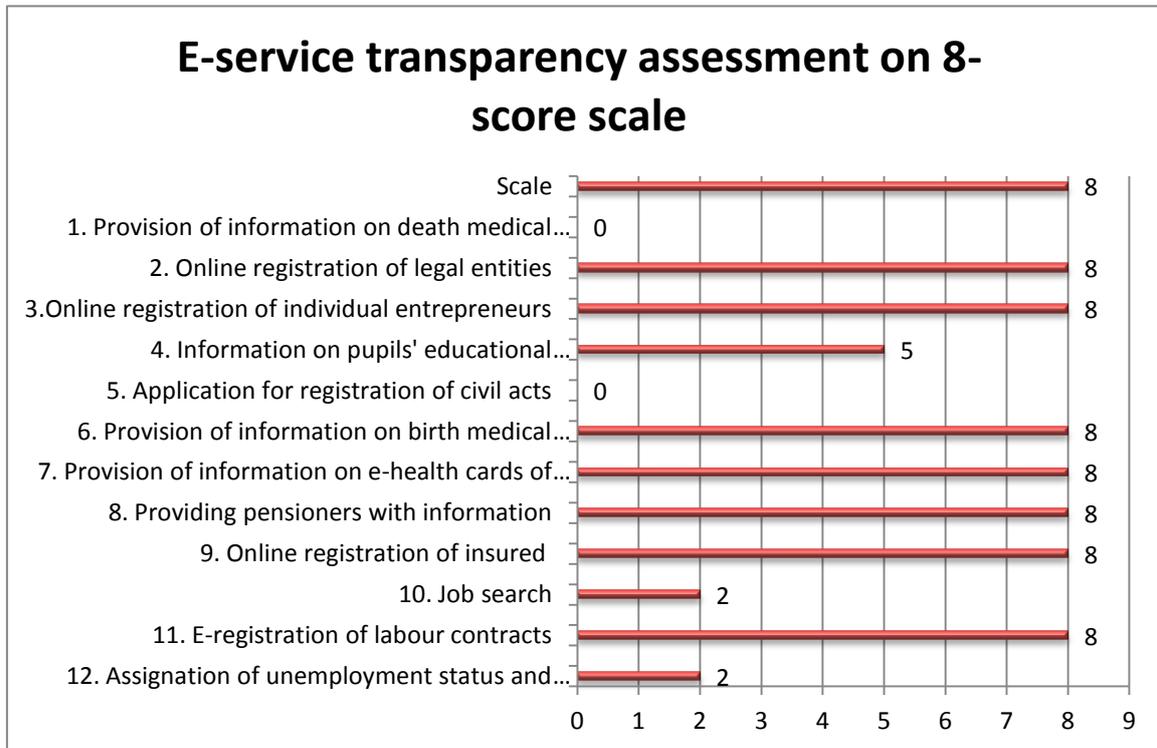
18 of 30 e-services were assessed on 10 score transparency scale and summarized in the Diagram 5 below.



Scoring is as follows for the 8 score assessment:

- 1-3 – non-transparent
- 4-5 – relatively transparent
- 6-8 – sufficiently transparent

12 of 30 e-services were assessed on 8 score transparency scale and summarized in the Diagram 6 below.



Positive tendencies, as well as problems have been revealed while analyzing e-government. Main achievements and current problems, including recommendations to state agencies are listed below.

## MAJOR ACCOMPLISHMENTS

### 1. Ongoing parallel development of “e-government” and “mobile government” systems in Azerbaijan

The main component of mobile government system is mobile or ASAN signature. Estonia happened to be the first country to introduce mobile signature and the concept was brought to Azerbaijan by Best Solutions Company. The number of owners of mobile or ASAN signature even surpasses the number of card reader based e-signature by a factor of two. This can be explained by three main reasons: it is easier to use ASAN signature as apart from a mobile phone no additional device (i.e., a card reader) is required; the Ministry of Taxes managed well to convince tax payers that ASAN signature is a secure electronic tool. Also, businesses as a social group are more innovative stakeholders as compared to the population in general.

### 2. The tendency to centralize development of e-government is taking over the tendency of decentralization

Even if the “e-government” and “mobile government” systems develop in parallel in Azerbaijan, there is a tendency of centralization as well as inclination towards decentralization. Development of e-government by Ministry of Communications and High Technologies, including single e-portal, smart card based e-signature, etc., are evidences of centralization, whereas creation of mobile (ASAN) signature, late integration of substantive tax services to the single e-government portal are the driving force behind decentralization. However, the tendency to centralization is taking over. Thus, in 2013-2014 the number of public agencies with services integrated to the single government portal increased from 40 to 48<sup>2</sup>. At the moment, Ministry of Taxes, has integrated all its e-services into the single government portal. Once registered at the single government portal, a customer has access to all types of services; still, the transfer to the services of the Ministry of Taxes at the single portal requires new registration.

### **3. The number of users of e-services is increasing**

The number of users of the single e-portal reached 1.5 million in the past two years. The increase has been particularly spectacular lately. Thus, from July to November 2014 one million users joined in and in total 4,5 million transactions were made. This can be explained by the fact that, on one side, the number of services increased considerably (from 179 to 383). The growth in July-September 2014 shall also be attributed to the new procedure of registration of labor contracts introduced by the Ministry of Labor and seasonal active use of the services rendered by the Students' Admission Commission.

### **4. Broad use of e-payment tools offered by private sector**

This is related to increase of the number of online payment tools (azercard, goldenpay, easy pay), as well as of payment kiosks (milli ön, e-manat). Even some public agencies (State Property Committee, state owned companies rendering services in the utilities sector) use online payment tools and payment kiosks operated by the private sector to collect fees for their services rendered.

### **5. Legal framework regulating e-government is developing**

Substantive legal framework to regulate electronic exchange of information between electronic data bases has been developed. For example, statutes of e-government portal, presidential decree on expansion of the range of e-services dated 5 February 2013; List of Information Systems and Resources to Be Integrated to the E-portal, etc.

### **6. Public agencies make good presentations of electronic services introduced**

This facilitates cooperation between the government and civil society.

### **7. Harbingers of development of social e-services**

Though E-services for businesses, especially those related to taxes and social insurance, are better developed, recently a new impetus was given to development of services to the population by the Ministry of Labor and Social Protection of Population.

### **8. Human resources gap is attended to**

International experience is used to attend to the problem of the lack of qualified staff. Good relationships have been established with Korea, one of the leaders in the sphere of e-

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<sup>2</sup> <https://www.e-gov.az/az/news/read/93#.VHZRuDGsWAK>

government. Korean Development Agency (KOICA) organizes training programs for local specialists.

## **PROBLEMS AND RECOMMENDATIONS: E-INFRASTRUCTURE**

### **1. Strategic and conceptual plan has not been formed**

It is important to prepare a conceptual plan of electronic government development by 2020. The plan shall set forth stages of development and have measurable indicators of success. The draft State Program on Development of E-services shall be adopted. The e-registry of public services rendered by all public agencies, including online and offline services, shall be created.

### **2. The financial support of electronic government is not clearly determined**

To ensure that budgets allocated for public institutions include budget lines on development of e-services. Priority in allocation of funds from the state budget should be aimed at developing shared e-services that require participation of several agencies.

### **3. Barriers to development of information systems and resources**

Insufficient cooperation between several public agencies in provision of some e-services (that require references from other agencies to deliver a service) has resulted in the situation when most e-services have stuck at the application stage; moreover, most e-services send scanned version of paper based documents. It would be expedient to put together a list of priority information systems and resources being developed to be funded by the state budget in priority order. Therefore, it is recommended to include into the priority list the establishment and development of information systems on personal data, business, real estate, land cadastre, as well as information exchange among state agencies. Alongside with this information, electronization of the state archive, courts, movable property and health data shall not be neglected.

### **4. Barriers remain to smooth exchange of information**

Today Azerbaijan has developed to a certain degree the database of personal and business data which has a direct impact on the quality of e-services; however, the data base of real estate has not been completed yet, neither full use of data from business database (AVIS) is ensured by state agencies within the e-service provision framework. Data System (X-road System) for secure data exchange among public institutions has been established. Public agencies use this tool to a certain extent by joining the e-government portal. However, at these stage public agencies when rendering e-services, especially those that are targeting citizens, make a very limited little use of this information exchange tool. Alongside, with the Data System, public agencies AZSTATE data exchange system created by Special State Security Service as their communication network. It should also be noted that unified data exchange standards (general format and standards), to which public institutions would refer to, has not been developed. It is recommended: To expedite development of the data base of real estate and land cadastre, as well as exchange of the information with other public agencies; to ensure exchange of data between AVIS information system and data bases of the Ministry of Labor, State Property Committee, Land and Mapping Committee, State Procurement Agency; to expand use of the X-road system channels, as this is a secure data exchange infrastructure; to develop standards (formats and protocols) for data exchange based on EU experiences, especially, Estonia, Germany and France.

**5. The practice of using different program languages in creation of information systems by various public agencies continues**

The created X-road system allows overcoming this barrier. Technical requirements for information systems and e-services integration to the e-government portal have been adopted<sup>3</sup>. It is very important that public agencies pay more attention to implementation of this decree to ensure interoperability (working together) of different information systems.

**6. The public agencies in Azerbaijan perceive e-government in a narrow sense as a tool to combat petty corruption**

E-government is one of the main instruments to ensure rationalization and structural transparency of and quick service delivery by the public administration system. The tender process of public agencies shall be automated and become more transparent. The information and communication technologies shall be widely used in order to ensure financial transparency of public agencies. Creation of electronic Integrative Financial Management Tool shall become the government's policy priority. This is also good field for cooperation with local IT businesses.

**7. E-government portal is perceived only as a platform to deliver e-services**

The e-government portal shall be one of the main tools to deliver the e-government policy and strategy. The portal shall additionally offer the laws by sector (e-qanun), government's orders, decrees, court decisions, execution of the state budget, and contact details of public officials.

**8. Further development of e-service delivery to business shall be ensured**

The website [www.icaazeler.gov.az](http://www.icaazeler.gov.az) shall offer a simplified list of documents required to obtain licenses and permits, introduce tools for online payment of state fees, as well as issue those licenses and permits online. Reforms to ensure acceptance and clearance of customs' tax declarations online should be expedited.

**9. Single online payment system needs to be enhanced**

The country has government payment portal under the Central Bank ([www.apus.az](http://www.apus.az)), however, it is not integrated into the single e-government portal.

**10. Further development of legal framework is needed**

It is necessary to expedite the process of adoption of the law on information data bases and set forth provisions obligating public agencies to exchange data while rendering e-services.

**PROBLEMS AND RECOMMENDATIONS: E-SERVICES**

**11. Delivery of socially important e-services to citizens is not well developed, neither broadly used as compared to e-services for business sector**

In order to increase the number of e-service users in Azerbaijan, national ID cards of new generation is planned<sup>4</sup>. The national IDs to be issued will have e-signature certificates

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<sup>3</sup> Cabinet of Ministers decree No 118 dated 1 May 2014

<sup>4</sup> Presidential order No 893 dated 28 November 2014

incorporated, which will allow multiple use of e-signature. It is advised to introduce a single multi-function electronic identification card. The new generation of national ID cards shall be multifunctional (serve as health card, pension card, drivers' license, bank card).

## **12. Uneven development of different destination e-services shall be attended to**

Services that help public agencies to perform their direct functions (tax collection, payment of fines for violation of traffic rules, etc.) are fully automated, whereas services per se (issuance of national IDs, awarding allowances, issuing business licenses, etc.) have stuck at information provision level and need to be further developed to the e-delivery level.

## **13. E-participation shall be ensured**

Few service providers arrange customer satisfaction surveys or have feedback mechanisms to inquire into needs of customers.

## **14. Transparency in e-service provision shall be enhanced**

Many public agencies do not have their services integrated into single e-government portal, neither use e-signature and e-payment tools. It is recommended to use available e-payment mechanisms to all services requiring taxes and apply legal mechanisms for its enforcement. In addition, all state services should be integrated to one window – e-government portal.

## **CONCLUSION**

Monitoring revealed that e-infrastructure that is a crucial pre-requisite for e-services development has been formed and is further developing in Azerbaijan. The current e-infrastructure allows elevating an e-service that does not require cooperation with other public agencies to the level four of e-delivery, when the whole process of application and reception of the services takes place online. In order to elevate to the fourth level those services that involve cooperation with other agencies (shared services), secure and smooth exchange of information shall be provided. There is no technical or legal barrier to enabling information exchange, apart from reluctance of public agencies to cooperate. As a result, the panorama in development of e-services is not uniform. On one pole, the Ministry of Taxes, State Social Protection Fund, Ministry of Communications and High Technologies render developed e-services; on the other pole the State Procurement Agency and State Customs' Committee limit their services to provision of information. Also, often one the same agency renders different services at different levels, for example, Ministry of Labor and Social Protection and Ministry of Interior, Financial support of the government should be channeled to further development of social e-services and creation of all planned information data bases, first of all, data base of real estate and land cadastre information.

## II. CONCEPT AND STRUCTURE OF THE E-GOVERNMENT

*If initially the concept of e-government was understood as provision of e-services per se, subsequently the states moved towards the idea of use of information and communication technologies to create a new model of the state administration, i.e. e-administration.*

Increased use of the internet by the general population leads to higher expectations from the government. Furthermore, the growth in fiscal requirements of states, as well as in the number of actors due to globalization creates more responsibilities for states. Therefore, states making use of the opportunities created by information and communication technologies have begun to move their traditional services into electronic environment. E-government establishment has turned into one of the main public policy trends in the contemporary world.

But what is the definition of e-government? According to a UN definition, *e-government is provision of information and public services to the population, making use of information and communication technologies.*<sup>5</sup> Furthermore, OECD defines e-governance as *a means for achieving better governance through information and communication technologies, especially the internet.*<sup>6</sup> The European Commission has a broader definition, which defines *e-governance as the use of information and communication technologies in public administrations combined with organizational change and new skills in order to improve public services and democratic processes and strengthen support to public policies.*<sup>7</sup>

Today the process of e-government consists of three consecutive stages:

(a) First of all, e-government is perceived as provision by the state of services and information to citizens with the help of information and communication technologies. Therefore, the concept of the state front office in its dealings with the citizens, businesses and other legal entities has undergone a huge transformation. The governments started to provide public information and service on their own websites. As a result, e-government expedites the services rendered by the state and minimizes direct contact with the service providers.

(b) Later, information and communication technologies were incorporated into internal structures of states. In other words, in the result of the government services' e-delivery, the transformation originally started with the government' front office, covered back office as well<sup>8</sup>. Under this concept, a government not only renders e-services, but also uses electronic data base and internal documentation turnover.

(c) Finally, a new and more efficient form of governance was developed, i.e. e-governance, based on information and communication technologies. This form implies substantive structural change of the government's administration system. In other words, information systems held by different public agencies are integrated into a single system to provide shared, and therefore, more efficient and faster services.

The structure of the e-government consists of the following:

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<sup>5</sup> UN. Global e-Government readiness report 2004. Towards access for opportunity. Web available, 2007. <http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN019207.pdf>. 14

<sup>6</sup> <http://www.oecd.org/gov/budgeting/43496369.pdf>

<sup>7</sup> Communication from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Region, p. 7

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2003:0567:FIN:EN:PDF>

<sup>8</sup> Introduction to Electronic Government, Tomasz Janowski, PHD, UNU-IIST,

<http://ocw.unu.edu/international-institute-for-software-technology/introduction-to-electronic-government/introduction1.pdf>

- **External data system of the government** – Public authority institutions interact with citizens, organizations and other public institutions;
- **Internal data system of the government** – Electronic exchange mechanism for public service information within public authorities, related with legally important decision-making;
- **Comprehensive data security system** – Ensures security of information content and protection from any foreign interventions – attempts of illegal copying, distribution, isolation or destruction.

Today two main technologies of electronic government are applied: cloud computing and X-road technology. Most of European and South-East Asian counties apply cloud computing model<sup>9</sup>.

**Pictures 1 and 2: Singapore cloud computing model<sup>10</sup>**



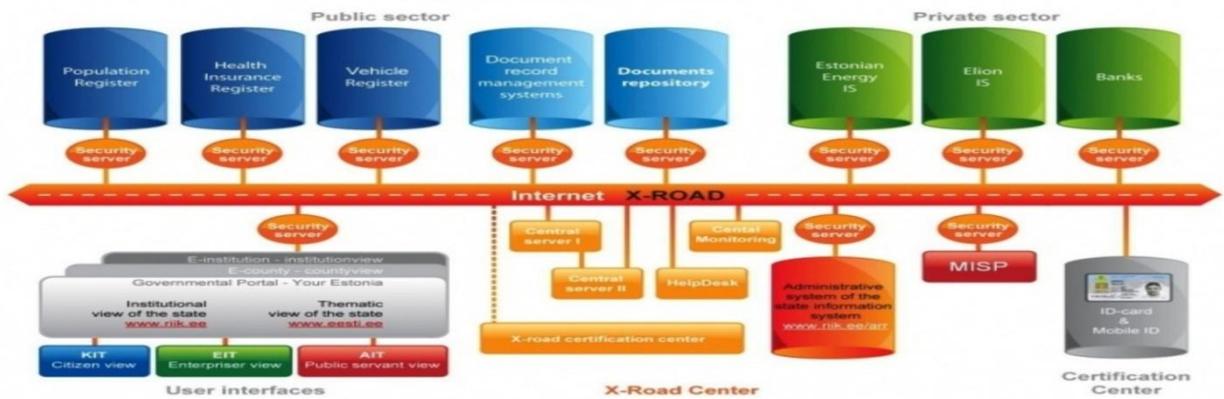
Under the cloud computing system of e-government a fast and smooth exchange of information is possible through a centralized mechanism, whereas the X-road model implies autonomous management of information data bases by individual public agencies that nevertheless allow information exchange. Therefore, unlike, the cloud computer system, the X-road infrastructure does not imply a single information holder and acts only as a secure data exchange layer<sup>11</sup>. Secure data exchange allows providing innovative and high quality e-services.

<sup>9</sup> Cloud Computing in E-Government across Europe A Comparison, 2013, [www.springerlink.com](http://www.springerlink.com)

<sup>10</sup> Cloud Computing for Government, <http://www.egov.gov.sg/egov-programmes/programmes-by-government/cloud-computing-for-government>

<sup>11</sup> Data Exchange Layer X-Road, [www.ria.ee/x-road](http://www.ria.ee/x-road)

Picture 3: Estonian X-road model<sup>12</sup>



Estonian e-government system is composed of three main components:<sup>13</sup>

- Availability of information registries (data base).
- Secure data exchange; and
- Provision of e-services.

The third stage of e-government structure in Estonia is ensured by establishment of X-road infrastructure that enables provision of secure and smooth information exchange between state agencies. Azerbaijan e-government is based on the Estonian X - Road system. Besides Estonia and Azerbaijan, another country using the X - Road e-government model is Finland<sup>14</sup>.

<sup>12</sup> X-road, Estonian Information System's Authority, [www.ria.ee/public/x\\_tee/xRoadOverview.pdf](http://www.ria.ee/public/x_tee/xRoadOverview.pdf)

<sup>13</sup> E-Government in Estonia: Best Practices, <https://www.ria.ee/x-road/>

<sup>14</sup> <http://news.err.ee/v/scitech/664fbc95-f5d1-4c3b-a2be-fd735c673b9e>

### III. OVERVIEW OF E-GOVERNMENT IN AZERBAIJAN

#### E-GOVERNMENT POLICY AND DEPLOYMENT ACTIVITIES

*In Azerbaijan basic elements of the e-government infrastructure, including secure exchange of information have been created. The process of integration of state information systems into the infrastructure of secure exchange of information is continuing. However, the exchange of information between different information systems is very limited, which is the main obstacle to development of quality e-services and an increase in the number of e-service users.*

The idea of “e-government” was first mentioned in the National Strategy on Information and Communication Technologies for (2003-2012)<sup>15</sup>, adoption of which has led to establishment of the Ministry of Communication and Information Technologies in 2004. To achieve the goals set forth by the Strategy, the Ministry has implemented “Electronic Azerbaijan” State Programs during 2005-2008 and 2010-2012<sup>16</sup>. The first State Program was aimed at establishing the basis for information society, whereas the second Program focused on facilitation of the transition to e-government. As part of the second State Program, *Application of ICT in public and local self-governance bodies and development of e-services* was identified as one of the four main directions. The following tasks were identified in this direction:

- Development of a unified confidential multiservice network and establishment of a unified information space;
- Establishment, integration and development of public data systems and application of advanced mechanisms for secure data exchange among public institutions, as well as in their interactions with natural and legal persons;
- Implementation of “e-government” applications and introduction of e-services based on a “one window” principle.

In order to carry out the state program the Cabinet of Ministers order dated 2010 approved of the Action Plan on Formation of Electronic Government in Azerbaijan in 2010-2011. The Action Plan set out the following priorities:

- Establishing legal-normative and methodological foundation;
- Providing broad application of modern information systems in public administration;
- Creating major components of the e-government;
- Establishing and developing e-services in public administration;
- Increasing the level of IT education of public servants and ICR specialists;
- Ensuring secure operation of the E-government infrastructure, information systems and personal information;
- Reducing the digital gap between various social and regional groups and increasing their level of their IT literacy in order to facilitate their access to the e-government services.

As a conclusion of the work carried out in this area, e-signature was introduced during 2010-2012 and the E-government Portal ([www.e-gov.az](http://www.e-gov.az)) based on one window principle was launched. Furthermore, in the spring of 2012, the Ministry of Communication and High Technologies of Azerbaijan selected an Azerbaijan-Estonian company called Best Solution LTD as a contractor, in addition to two other Estonian companies as partners - Cybernetica AS and OÜ Aktors. The e-

<sup>15</sup> National Strategy on Information and Communication Technologies for (2003-2012) , adopted date, [www.mincom.gov.az](http://www.mincom.gov.az)

<sup>16</sup> State Program on Development of Communication and Information Technologies for 2010-2012 (Electronic Azerbaijan), adopted date [www.mincom.gov.az](http://www.mincom.gov.az)

government public data system in Azerbaijan was created based on this cooperation. The budget of this cooperation project is reported to be 7 million Euros<sup>17</sup>.

Although a secure data exchange was established, which serves as an infrastructure for the operation of public data systems (X - Road layer), a secure and mutual exchange of public information resources has not been realized yet. In other words, even if “a highway has been built, it does not have any traffic so far”<sup>18</sup>.

The draft “Electronic Azerbaijan” State Program for 2013-2015 has been prepared and is in the process of approval. The new Program aims to develop unified standards for data exchange among public institutions and provision of higher level e-services, through integration of data systems<sup>19</sup>, whereas “Azerbaijan 2020 – Vision for the Future” concept aims at 100% application of “E-government” services<sup>20</sup>.

International reports demonstrate positive dynamics of e-government development in Azerbaijan. According to the UN E-government Survey<sup>21</sup>, Azerbaijan rose from 96th place in 2010 to 68th place in 2014 or went up by 28 ranks. When compared to the region’s other countries, Azerbaijan is ahead of Russia and Turkey but behind Georgia and Armenia.

**Picture 4: the ranking of Azerbaijan in UN E-government Index**

Table 1.5. Top 20 countries in Asia

Country	Level of Income	EGDI	2014 Rank	2012 Rank	Change in Rank
Very High EGDI					
Republic of Korea	High	0.9462	1	1	-
Singapore	High	0.9076	3	10	↑ 7
Japan	High	0.8874	6	18	↑ 12
Israel	High	0.8162	17	16	↓ 1
Bahrain	High	0.8089	18	36	↑ 18
High EGDI					
Kazakhstan	Upper Middle	0.7283	28	38	↑ 10
United Arab Emirates	High	0.7136	32	28	↓ 4
Saudi Arabia	High	0.6900	36	41	↑ 5
Qatar	High	0.6362	44	48	↑ 4
Oman	High	0.6273	48	64	↑ 16
Kuwait	High	0.6268	49	63	↑ 14
Malaysia	Upper Middle	0.6115	52	40	↓ 12
Georgia	Lower Middle	0.6047	56	72	↑ 16
Cyprus	High	0.5958	58	45	↓ 13
Armenia	Lower Middle	0.5897	61	94	↑ 33
Mongolia	Lower Middle	0.5581	65	76	↑ 11
<b>Azerbaijan</b>	<b>Upper Middle</b>	<b>0.5472</b>	<b>68</b>	<b>96</b>	<b>↑ 28</b>
China	Upper Middle	0.5450	70	78	↑ 8
Turkey	Upper Middle	0.5443	71	80	↑ 9
Sri Lanka	Lower Middle	0.5418	74	115	↑ 41
Regional Average		0.4951			
World Average		0.4712			

## ORGANIZATIONAL MANAGEMENT OF THE E-GOVERNMENT

*Conceptual development of electronic services and monitoring of implementation thereof is performed by a newly established State Agency for Citizens’ Services and Social Innovations, whereas the Data Processing Centre under Ministry of Communication and High Technologies provides technical infrastructure.*

<sup>17</sup>Azerbaijan to Launch E-government Platform Created in Estonia, dated 11 august 2012

<http://www.cyber.ee/home/news/aserbaidzaan-kaevitab-eeistis-loodud-e-valitsuse-susteemi>

<sup>18</sup> Interview with Vugar Abdullayev, advisor to director of Data Processing Center, Ministry of Communication and Information Technologies, dated 7 December 2013

<sup>19</sup> Interview with Jeyhun Salmanov, head of Innovations and Strategic Research department, State Agency for Citizens’ Services and Social Innovations, dated 12 December 2013

<sup>20</sup> Azerbaijan 2020 – Vision for the Future, p. 11, www.president.az

<sup>21</sup> UN E-Government Survey, www.unpan3.un.org

Since its establishment, the Ministry of Communication and High Technologies (MCHT) has been the main technical implementing institution in identifying policies related to “e-government.” As it was mentioned above, the Ministry has implemented two state programs entitled “Electronic Azerbaijan” during the past few years. However, by his July 2012 decree on establishment of the new State Agency for Citizens’ Services and Social Innovations<sup>22</sup> (ACSSI), President Ilham Aliyev annulled his previous April 2012 order on establishment of a State Agency on E-government under the Ministry of Communication and Information Technologies<sup>23</sup>. Subsequent 5 September 2012 decree<sup>24</sup> approved statutes of this new Agency and identified it as the national executive authority in implementation of mutual integration of databases under various public institutions, facilitation of the e-service establishment process, and improvement of the management system in this area. Alongside with this, the same decree delegates to the State Agency for Citizens’ Services and Social Innovations the authority, upon justified opinion and requirements of the E-government portal operator, to enhance and take important technical measures against e-services, information systems and resources that do not meet technical requirements. Consequently, this Decree transferred a significant portion of MCIT’s authorities to the newly created agency. Currently, the agency conducts monitoring of establishment of e-services and guides their conceptual development. At the same time, together with the Ministry the agency is in the process of developing a legal basis for mutual integration of databases. The Data Processing Centre under the MCIT serves as a technical operator for the e-government portal and provides technical support for service providers.<sup>25</sup>

#### FINANCIAL PROVISION OF THE E-GOVERNMENT

*Budgets for the “Electronic Azerbaijan” state program has not been publicized yet.*

The last state program<sup>26</sup> provides a general description of its financing as below:

- State budget;
- Internal and foreign investments;
- Technical and financial assistance, loans and grants from international and foreign entities;
- Funds from other sources, in accordance with the law.

At the same time, dedicated funds are not allocated for public institutions for establishment and development of e-services. Each institution provides for establishment of such services through their own administrative expenses. This situation puts public agencies that do not generate their own income at a disadvantageous position. For the first time, the draft State Program on Expansion of E-services and development of E-government for 2013-2015 includes a budget, which is publicly available<sup>27</sup>.

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<sup>22</sup> Presidential decree No 675 dated 13 July 2012, [www.asan.az](http://www.asan.az)

<sup>23</sup> Presidential order No 2187 dated 18 April 2012, [www.asan.az](http://www.asan.az)

<sup>24</sup> Presidential decree No 706 dated 5 September 2012, [www.asan.az](http://www.asan.az)

<sup>25</sup> Interview with Vugar Abdullayev, advisor to director of Data Processing Center, Ministry of Communication and Information Technologies, dated 7 December 2013

<sup>26</sup> State Program Electron Azerbaijan 2010-2012, [www.mincom.gov.az](http://www.mincom.gov.az)

<sup>27</sup> A Interview with Jeyhun Salmanov, head of Innovations and Strategic Research department, State Agency for Citizens’ Services and Social Innovations, dated 12 December 2013

#### IV. ANALYSIS OF THE LEGISLATION ON REGULATION AND ESTABLISHMENT OF E-SERVICES

*Even if existing legislation creates opportunities for development of electronic services, however, one of the crucial laws – the Law on Data Base (or Information Resources) is not in existence yet. This Law shall lay the legal foundation for mutual exchange of data between various public agencies and lead to full automation of e-services. Also, two other important laws: the Law on Access to Information and the Law on Personal Data have contradictory provisions and loopholes, and do not set forth clear rules of collection, processing and protection of personal data, as well functions and authorities of the information holders and agency responsible for monitoring of their activities. On the top of that, implementation of these laws leaves much to be desired.*

During the past 10 years, a number of legislative acts, Presidential decrees and decisions of the Cabinet of Ministers have been adopted, in addition to those discussed above.

The following laws have been adopted at the Parliament level<sup>28</sup>:

- Law of the Republic of Azerbaijan on E-signature and E-document, 9 March 2004;
- Law of the Republic of Azerbaijan on Electronic Trade, 10 May 2005;
- Law of the Republic of Azerbaijan on Personal Data, 30 September 2010

In addition, laws were adopted on joining the following international conventions<sup>29</sup>:

- Law on joining Budapest Convention on Cybercrime, 23 November, 2001;
- Law Convention for the Protection of Individuals with regard to Automatic Processing of Personal Data, 28 January, 1981.

The President of the Republic of Azerbaijan has adopted the following decrees<sup>30</sup>:

- On certain measures related with establishment of e-services at public institutions of the Republic of Azerbaijan – 23 May, 2011;
- Approval of the Statutes on “E-government Portal” and measures related with expansion of e-services in the Republic of Azerbaijan, 5 February, 2013;
- The Cabinet of Ministers of the Republic of Azerbaijan has adopted the following decisions<sup>31</sup>:
- On approval of “Guidelines for uploading draft normative legal acts, prepared by the Cabinet of Ministers of the Republic of Azerbaijan and central executive authority institutions, on the E-government Portal” – Decision No 142, 25 June, 2011;
- On approval of the “Guidelines for provision of e-services in specific areas, by central executive authority institutions” and the “List of e-services” – Decision No 191, 24 November, 2011;
- On approval of technical requirements for the list information systems and resources to integrate into the E-government portal – decision No 118 dated 1 May 2014.

In general, the current legislative acts provide opportunities for e-services. However, a Law on Data Resources, which is one of the main legislative tools in this area, has not been prepared yet. Below Law on Personal Data and Access to Information, also Law on E-signature and E-

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<sup>28</sup> [www.e-qanun.az](http://www.e-qanun.az)

<sup>29</sup> [www.e-qanun.az](http://www.e-qanun.az)

<sup>30</sup> [www.president.az](http://www.president.az)

<sup>31</sup> [www.cabmin/gov.az](http://www.cabmin/gov.az)

documents are analyzed separately; on the basis of this legal analysis the recommendations are prepared for the development of current legislation.

## ANALYSIS OF THE LAW ON PERSONAL DATA

<b>Notion of personal data</b>	
<b>Current situation</b>	<b>Analysis</b>
<p>Article 2 of the Law of the Republic of Azerbaijan on “Personal data” defines personal data as following:</p> <p>2.1.1. <i>Personal data - any information that allows for direct or indirect identification of the identity of the person;</i></p> <p>2.1.6. <i>Personal data of special category – data in regards to the racial or national identity, family life, religious religion and belief, health or criminal record;</i></p>	<p>This definition does not provide a detailed clarification of personal data. What is personal information? What kind of information shall be considered as personal data enabling identification of particular individual? What does personal information cover? In brief, personal data is information on a given person, which allows for his/her identification. In broader sense personal data is information that allows identifying an individual and his/her physical, psychological, economic, cultural and social characteristics, relationships or associations.</p>
<b>Recommended is more concrete definition as given below:</b>	
<p><b>Personal data</b> – information on a given natural person or a natural person who can be identified based on such information, including:</p> <ul style="list-style-type: none"> <li>• Last name, name and patronymic;</li> <li>• Date and place of birth;</li> <li>• Address, family, social and property ownership information, education, occupation, revenues, religious beliefs, political views, community involvement, race, ethnic affiliation, criminal record and health;</li> <li>• Other information (financial and tax reports, medical cards and biometric information, genetic and other personal identification data).</li> </ul>	
<b>Collection, processing and protection of personal data</b>	
<p>Main principles, such as collection, processing and protection of personal data are not specified. In this regard, Article 4 of the Law states that:</p> <p>4.1. Establishment of data resources and data systems on personal data shall be carried out in compliance with <i>the main human and civil rights and freedoms provided by the Constitution of the Republic of Azerbaijan and in accordance with rule of law, confidentiality, and principles of balancing voluntary participation with obligations.</i></p>	<p>The notions of “<i>compliance with the main human and civil rights and freedoms provided by the Constitution of the Republic of Azerbaijan</i>” and “<i>rule of law,</i>” as well as “<i>the principle of voluntary participation and obligations</i>” are difficult to reconcile and associate in this context.</p>
<p><b>Recommendation is that the following principles should be upheld in collection, processing and protection of personal data:</b></p> <ul style="list-style-type: none"> <li>• <b>Rule of Law</b> – Personal data may only be collected based on lawful justification;</li> <li>• <b>Utility</b> – Personal data may only be collected for identified and lawful purposes. Personal data may not be collected in a manner that is not consistent with lawful processing of such information;</li> <li>• <b>Minimal</b> – Personal data may only be collected in proportion to the purpose of their usage;</li> <li>• <b>Limited usage</b> – Personal data may be used for purposes other than those referred during their collection, with the permission of their owners or authorization of relevant institutions;</li> <li>• <b>Quality of data</b> – Personal data must be comprehensive for the purpose of their processing;</li> <li>• <b>Security</b> – Personal data must be protected against destruction, unauthorized access and</li> </ul>	

<p>irregular or unlawful manipulation;</p> <ul style="list-style-type: none"> <li>• <b>Personal participation</b> – Owners of personal data must be informed on the data collected on themselves and must have the right to demand correction of inaccurate or misleading information.</li> </ul>	
<p><b>Protection of personal data</b></p>	
<p>The Law does not include the necessary requirements for protection of personal data. From this point of view, Article 5 of the Law indicates that:</p> <p>5.5. Protection of personal data shall be ensured by their holders and operators. Natural persons who work in areas of collection, processing and protection of personal data shall give written liability for preserving confidentiality of such data during and after discharge of their functions.</p> <p>5.6. In order to provide the general population with information on telecommunication, post, address and data relating to other areas, information submitted by their owners based on their written consent may be included in data system of general use (name, last name, patronymic, date and place of birth, gender, citizenship, telephone number and e-mail, place of residency and actual address, specialization and place of work, occupational area, family situation, photo and other information).</p> <p>5.7. When personal data is entered into a data system of general usage through open sources, operators of such data systems shall inform the subject on the content and source of this information. This data shall be removed from such data systems, without undue delay, based on court order or written demands from relevant executive authority.</p> <p>5.8. Personal data holders or operators shall take technical-organizational measures that ensure protection of such data (including accidental and unauthorized destruction, loss, illegal intervention, change or prevention of other circumstances).</p> <p>5.9. Requirements for protection of personal data shall be identified by the relevant executive authority.</p>	<p>As it is evident from the above-mentioned requirements, the measures specified for protection of individual data are not specific and clear.</p>
<p><b>Recommendation</b></p>	
<p>Requirements for protection of personal data should be specific, where information holders or operators should take organizational, physical and IT measures to ensure security.</p> <ul style="list-style-type: none"> <li>• Physical protection of personal data: to protect against accidental or deliberate loss.</li> <li>• Protection of comprehensiveness of data: to protect against accidental or deliberate change of data, to ensure that information on data users and time of usage is recorded (input, change, deletion of data).</li> <li>• Limitation of access to data: to prevent unauthorized access to equipment used for processing of personal data, in order to deter illegal reading, copying or changing of such data;</li> <li>• keeping records of equipment: Information holder or operator should maintain a registry of the equipment and software used for processing of personal data under their control. Further, they should document the following information: <ul style="list-style-type: none"> <li>- name, type, producer and location of the equipment;</li> <li>- name, version and details of the software producer, as well as the location of software documentation.</li> </ul> </li> </ul>	
<p><b>Collection of personal data</b></p>	
<p>The legislation sets forth the process of collection of personal data as follows:</p>	<p>The Law mentions compulsory collection of</p>

<p>7.2. <i>Except circumstances under which collection and processing of personal data is compulsory in accordance with the legislation, information subject has the right to object to gathering and processing of his/her personal data.</i></p> <p>7.3. <i>Except circumstances under which collection and processing of personal data is compulsory in accordance with the legislation, information subject has the right to object to gathering and processing of his his/her personal data through information technologies, in cases when decisions on gathering and processing of personal data through such technologies violate interests of the information subject.</i></p> <p>8.1. <i>With the exception of compulsory gathering and processing of personal data in accordance with the legislation of the Republic of Azerbaijan, gathering and processing of personal data shall only be permissible when the information subject provides a written consent, including in the form of strengthened electronically signed e-documents or when the information subject provides his/her data in a written format.</i></p> <p>9.7.1. <i>Gathering and processing of information pertaining to special categories is compulsory under circumstances specified by the legislation.</i></p>	<p>personal data, However, the compulsory nature of data collection, lawful circumstances allowing compulsory collection, as well as rules for collection of such data are not clarified.</p>
<p style="text-align: center;"><b>Recommendation:</b></p> <p>The nature, conditions under which gathering and processing of such personal data is carried out, as well as the rules to perform his task should be further clarified. Furthermore, it should be clarified that compulsory nature of gathering, processing and transfer of personal data is permissible under the following conditions:</p> <ul style="list-style-type: none"> <li>• Ensuring implementation of contracts signed with the personal data subject;</li> <li>• Protection of life, health or freedom of the personal data subject or other person (persons);</li> <li>• Fulfillment of obligations under the legislation or international agreements.</li> </ul> <ul style="list-style-type: none"> <li>• Except the following circumstances, transfer of information on health conditions of persons under medical care in hospitals should be permissible for closest persons to the information subject:</li> <li>• Prohibition of access or transfer of such information by the personal data subject;</li> <li>• Prohibition of access or transfer of such information by investigative authorities for apprehension of suspects, prevention of crime or investigation of facts.</li> </ul>	
<p style="text-align: center;"><b>Monitoring agency for collection, processing and protection of personal data:</b></p>	
<p>Article 17 of the Law specifies the authorities of monitoring agency for gathering, processing and protection of personal data:</p> <p>17.1. <i>The relevant executive authority shall ensure that gathering processing and protection of personal data entered in the public registry conforms to the requirements of this Law, as well as that the data and the processing methods are in conformity with the declared objectives of the data system.</i></p> <p>17.2. <i>The relevant executive authority shall have the following authority:</i></p> <p>17.2.1. <i>Submit inquiries to data holders or operators, in accordance with the legislation, during fulfillment of its functions specified by this Law and obtain required information from public institutions, data holders or operators without making any payments for such;</i></p> <p>17.2.2. <i>Verification of information provided by data holders during public registration of personal data systems, as well as ensuring that</i></p>	<p>However, the Law does not indicate the specific executive authority to which these functions are entrusted. Furthermore, the authorities specified above are not clear or specific. In fact, the authorities of the monitoring agency for holding accountable of persons who violate the Law are limited. In addition, the guidelines for submitting complaints on actions of this monitoring agency have not been established.</p>

<p><i>data systems are in conformity with projects, and carrying out public expertise on data systems, in accordance with established guidelines;</i></p> <p><i>17.2.3. Demand corrective action from public institutions, legal and natural persons which engage in gathering, processing and protection of personal data, in cases when the requirements of this Law are violated;</i></p> <p><i>17.2.4. Take measures, in accordance with specified guidelines, in order to hold accountable persons who have violated the requirements of relevant legislation on gathering, processing and protection of personal data;</i></p> <p><i>17.2.5. Use other authorities provided by the legislation of the Republic of Azerbaijan.</i></p> <p><i>17.3. The relevant executive authority shall ensure confidentiality of personal data, obtained during fulfillment of its functions.</i></p> <p><i>17.4. Complaints on action (inaction) of the relevant executive authority may be submitted, in accordance with the guidelines established by the legislation of the Republic of Azerbaijan.</i></p>	
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**Recommendation:**

In order to ensure efficiency in collection, processing and protection of personal data, the law should establish a central executive authority, which should serve as a monitoring agency and have clear and specific functions. This executive authority should have the following powers for fulfillment of its functions in cases when the requirements of the Law are violated:

- To cease the gathering and processing of personal data;
- To demand that inaccurate personal data is corrected;
- To prohibit the gathering and processing of personal data;
- To prohibit blocking and ceasing of the gathering and processing of personal data (including destruction or archiving);
- To take immediate organizational, physical and IT security measures, if necessary, to ensure protection of personal data;
- To require relevant documentation and other necessary information from public institutions, data holders or operators, to make copies of such documentation;
- To take administrative measures and action on violations of the legislation;
- To create normative-legal basis for gathering, processing and protection of personal data.

**ANALYSIS OF THE LAW ON ACCESS TO INFORMATION**

One of the main legal acts regulating relations of actors of the e-government is the Law on Access to Information. Alongside with several internal contradictions of this law, implementation of some of its provisions is yet to be seen.

<b>Freedom of access to information</b>	
<b>Current situation</b>	<b>Analysis</b>
<p>Article 2 of the Law of the Republic of Azerbaijan on “The right to obtain information” provides for free access to data. At the same time, Article 2.4-1 indicate limitations on such access, which contradicts Article 50 of the Constitution of the Republic of Azerbaijan which states that “Everyone is free to look for, acquire, transfer, prepare and distribute information.”</p> <p><i>2.4-1. Access to information is granted under the condition that such access shall not contradict the</i></p>	<p>However, the Law does not specify the decision-making authority or the methodology in identifying damages to national interests, related with access to information. Even further, restriction of access to information in regards to “objectives related with ensuring authority and impartiality of courts” is absurd, which contradicts the principles of access to information specified in Article 6 of the Law:</p>

<p>protection of political, economic, military, financial, monetary, and currency interests of the Republic of Azerbaijan, as well as the protection of public order, health, and moral values, rights and freedoms of other persons, commercial and other economic interests, and objectives related with ensuring authority and impartiality of courts.</p>	<p>6.1.7. State protection of the right of information access, including protection of this right by courts; □In other words, court protection of access to information would not be reliable when such access may be deemed to be contradictory to objectives related with ensuring authority and impartiality of courts."</p>
<p><b>Recommendation:</b> To remove from the wording of the Article 2.4-1. of the Law the expression "ensuring authority and impartiality of courts".</p>	
<p><b>Responsibility of the information holder</b></p>	
<p>Furthermore, the Law does not entail responsibility for organization of access to information: 11.2. Information owners specified by Article 9 of the present Law are responsible for the organizing of the information access as provided by the legislation. 11.4. The responsibility for information disclosure is placed with the manager of the information owner, unless the other person is officially in charge of implementing this function.</p>	<p>From this point of view, the Law does not specify the type of responsibility (disciplinary, administrative, or criminal), the extent of such responsibility nor names of those who shall hold perpetrators accountable as such.</p>
<p><b>Recommendation:</b> Responsibility of the information holder shall be set forth in details in the Law.</p>	
<p><b>Sending requests</b></p>	
<p>Specifically, Article 13 of the Law indicates the forms in which inquiries for access to information are made: 13.1. Requests for information are submitted through the following means: 13.1.1. verbally by applying to the official responsible for the information owner directly or by phone;</p> <p>Whereas Article 18 of the Law specifies that verbal inquiries are not registered and not provided with written answers: 18.2. Request for information is not registered and is not executed in written form in below cases: 18.2.2 The request is verbal.</p> <p>At the same time, Article 16 of the Law lists the methods in which requests for information are processed: 16.1. Information owner executes a request under the following methods: 16.1.4. Verbally; 16.1.5. Permitting the access to places designated for familiarization with the information.</p>	<p>The provision of the Law setting forth the forms of information requests contradicts other provisions of the same Law. Given that verbal information requests are not registered, how shall direct or telephone inquiries to officials of information owners, as indicated in Article 16 of the Law, be implemented?</p>
<p><b>Recommendation:</b> To make amendments to the Law to ensure that verbal or telephone information requests are registered and responded.</p>	
<p><b>Disclosure of public information</b></p>	
<p>Article 29 of the Law obliges information owners to disclose public information: 29.1. In order to meet the public interests more easily and efficiently and lessen the number of multitudinous</p>	<p>In accordance with Article 29.1.8 of the Law, information on public and municipality procurement conditions, results, as well as sale of public and</p>

<p><i>requests for information, the information owner should disclose the following information available, or produced or acquired as a result of fulfillment of public duties:</i></p> <p><i>29.1.8. information on conditions and results of state and municipal purchases, as well as sales of and changes in ownership rights in state and municipal properties;</i></p> <p><i>29.1.28. Judicial acts;</i></p> <p><i>29.1.32. Information on information owner's ownership of, and owner's obligation of the information owner;</i></p>	<p>municipality property and changes in related property ownership must be disclosed; however, in practice this information remains secret. The Law of the Republic of Azerbaijan on "Public procurement" requires that information on procurement be published in state owned newspapers (despite the fact that the Law does not identify a specific official newspaper for this purpose). At the same time, the same Law does not have any provisions on online publication of information.</p> <p>Besides, despite the principles indicated in Article 29.1.28 of the Law, as well as Article 127 of the Constitution and Article 12 of the Law on "Courts and judges" decisions of lower instance court, sentences, resolutions and other judicial acts remain unavailable for the general population.</p> <p>However, despite the requirements established by 29.1.32 of this Law, in practice information on information holders and their ownership is not disclosed either.</p> <p>Furthermore, the Law on Public Service<sup>32</sup> and Rules on Submission of Financial Information by Public Servants<sup>33</sup> require release of annual reports by officials on their financial and property, which is not implemented either.</p> <p>In general, the Law on Access to Information does not meet requirements of transparency and needs serious revisions.</p>
<p><b>Recommendations:</b></p> <ol style="list-style-type: none"> <li>1. To make amendments to the Law on Public Procurement to envision mandatory publication of information public procurement in media and website of the Public Procurement Agency.</li> <li>2. To publicize all court decisions, sentences, resolutions and other judicial acts including documents of lower instance courts.</li> </ol>	
<p><b>Information disclosure monitoring agency</b></p>	
<p>Responsibility for monitoring the implementation of the Law is entrusted with the manager of the information owner, as well as the Information Ombudsman. As per recent amendments to the Law on Ombudsman (Articles 1.3. and 13.1)<sup>34</sup>,</p>	<p>Even if formally the Human Rights Ombudsman has broad powers, however, many observers agree<sup>35</sup> that this institute is practically not able to effectively ensure access to information - mostly because the</p>

<sup>32</sup> Law on Civil Service, 21 July 2000, [www.commission-anticorruption.gov.az](http://www.commission-anticorruption.gov.az)

<sup>33</sup> Law on Approval of Rules for Submission of Financial Information by Officials, 24 June 2005, [www.anti-corruption.gov.az](http://www.anti-corruption.gov.az)

<sup>34</sup> Amendments to the Law on Ombudsman (Articles 1.3. and 13.1) 24 June 2011, [www.e-qanun.az](http://www.e-qanun.az)

<p>the Human Rights Ombudsman has been assigned the role of Information Ombudsman as well. Whereas in the earlier version of Law on the Access to Information the Information Ombudsman had to be a separate entity, after recent amendments these powers were deplorably delegated to an already existing officer.</p>	<p>institution lacks specific competence. Though, under the Law, information owner is required, to report to the Ombudsman on information issues, the latter has no investigative powers to verify the information received<sup>36</sup>.</p>
<p style="text-align: center;"><b>Recommendation:</b></p> <p>To expand functions of the Ombudsman to enforce existing legislation and to expand authority of this institution to enable it to conduct investigation of violations in the sphere of access to information.</p>	
<p style="text-align: center;"><b>Cost of information</b></p>	
<p>Based on the Law on Information, Informatization, and Protection of the Information <sup>37</sup>, prices for information products and information services are established by the relevant executive authority, in accordance with the legislation of the Republic of Azerbaijan or agreements that the state is a party to. However, the Law on Access to Information indicates that the prices for information products and payment methods are agreed with the Information Ombudsman (please see above).</p>	<p>This is clear contradiction between the two laws and needs to be attended to.</p>

#### ANALYSIS OF THE LAW ON E-SIGNATURE AND E-DOCUMENTS

<p><b>Definition of e-signature</b></p>	
<p>The Law defines it as follows:  <i>1.1.4 E-signature – data added to another data or logically linked to them, admitting identification of signature holder.</i></p>	<p>The definition of e-signature, as established by this Law, is not clear or specific.</p>
<p style="text-align: center;"><b>Recommendation:</b></p> <p>To consider the following definition: E-signature allows for identification of the signature key certificate and uses closed-key cryptography in order to prevent falsification of the data in the e-document.</p>	

<sup>35</sup> Handbook on Freedom of Information in the South Caucasus Countries, May 2012, publication by Transparency International Georgia, [www.transparency.az](http://www.transparency.az)

<sup>36</sup> Azerbaijan National Integrity System Assessment, July 2014, publication by Transparency Azerbaijan, [www.transparency.az](http://www.transparency.az)

<sup>37</sup> Law on “Information, Informatization, and Protection of the Information, 3 April 1998. [www.e-qanun.az](http://www.e-qanun.az)

## V. METHODOLOGY OF MONITORING OF E-SERVICES IN AZERBAIJAN

### ESTABLISHMENT OF E-SERVICES IN AZERBAIJAN

Legislation<sup>38</sup> defines e-services as – *services that are provided for public institutions, natural and legal persons, without direct contact and with use of information and communication technologies by central executive authority institutions, in accordance with their functions.*

One of the main documents related to organization of e-services – the Presidential decree<sup>39</sup> specifies the following instructions for central executive authority institutions:

1. Establishment of e-service sections in official internet information resources;
2. Indicating the names of e-services that are provided in such e-service sections;
3. Indicating the precise list of documents required for provision of e-services;
4. Uploading relevant documents (applications, forms, etc.) in electronic format;
5. Ensuring unrestricted and free access of users to these services;
6. Accepting scanned copies of applications and other required documentation in an electronic format, as submitted by users to e-service sections;
7. Providing submitters of such documentation with receipt of their submissions;
8. Ensuring review of such documentation, in accordance with the guidelines and timeframe specified by the legislation;
9. Use of electronic information resources maintained by public institutions for obtaining information on relevant documents (databases, data search systems, registries and other information resources). When this is not possible, requesting original documentation from relevant persons;
10. Ensuring payment of duties and other fees for services in an electronic form;
11. Taking necessary technical security measures for ensuring security of personal data and operations carried out through e-service;
12. Providing monthly reports on the above mentioned activities to the Cabinet of Ministers of the Republic of Azerbaijan.

In order to ensure implementation of the Decree, the Cabinet of Ministers approved the guidelines for provision of e-services and the list of these services<sup>40</sup>. This Decision approved 284 e-services provided by 41 public institutions. In 2012, the list of e-services was expanded to 425<sup>41</sup>. Several subsequent decrees of the Cabinet of Ministers added new services and the last decree<sup>42</sup> brought up the number of e-services to 449.

### METHODOLOGY

The monitoring methodology was proposed by the experts of Estonian E-Governance Academy<sup>43</sup> and adjusted by TA to the local context in Azerbaijan. The methodology provided a basic monitoring of the e-government infrastructure, as well as the relevant e-services. This is the first independent assessment of the e-services infrastructure in Azerbaijan. It identifies directions for development of e-services and allows for formulation of proposals for public institutions. The objectives of the monitoring are as follows:

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<sup>38</sup> Cabinet of Ministers Decision N 191, 24 November, 2011, [www.cabmin.gov.az](http://www.cabmin.gov.az)

<sup>39</sup> Presidential decree, 23 May 2011, [www.president.az](http://www.president.az)

<sup>40</sup> Cabinet of Ministers Decision No 191, 24 November, 2011, [www.cabmin.gov.az](http://www.cabmin.gov.az)

<sup>41</sup> Cabinet of Ministers Decision on Amendments to Decision N 191 on approving the List of E-services, N 225, 17 October, 2012, [www.cabmin.gov.az](http://www.cabmin.gov.az)

<sup>42</sup> Cabinet of Ministers decree No 364 dated 4 November 2014, [www.cabmin.gov.az](http://www.cabmin.gov.az)

<sup>43</sup> Development of a monitoring methodology for e-governance in Azerbaijan, by e-Governance Academy, December 2012, Tallinn, Estonia, [www.osce.org](http://www.osce.org)

- To understand the current situation of e-services in Azerbaijan, identifying problem areas, and making proposals on development of services;
- To encourage public participation in e-services;
- To promote transparency of e-services;
- To promote integration of e-services into the E-government Portal;
- To contribute to formulation of vision of the public institutions on development of e-services;
- To prioritize development of e-services;
- To identify the existing problems related to the e-government and make proposals.

Full assessment of e-infrastructure as recommended by the EU is based on evaluation of 9 horizontal enablers<sup>44</sup> (i.e. criteria). Out of those three major components of the e-government infrastructure: electronic identification of users, secure e-delivery (i.e., secure data exchange infrastructure) and authentic sources (i.e. data bases) are fundamental for organization of quality e-services. Therefore, in line with the methodology prepared by the Estonian experts, the current assessment has focused on these three major components only. The study uses a calculation based on 1 (YES) and 0 (NO) points, which is followed by an e-infrastructure index. The table below presents assessment questions and scoring system.

N	Monitoring of e-government infrastructure components in e-government service delivery	Assessment method	Scores
<b>1</b>	<b>Authentic sources (databases and information systems)</b>		
1.1	Does the electronic registry (information system) of personal data exist?	YES = 1 / NO = 0	
1.2	Does the electronic registry (information system) of real estate and other property exist?	YES = 1 / NO = 0	
1.3.	Does the electronic registry (information system) of commercial legal entities and individual entrepreneurs' data exist?	YES = 1 / NO = 0	
1.4	Can public agencies jointly use the personal data registry (information systems) while providing e-services?	YES = 1 / NO = 0	
1.5.	Can public agencies jointly use the registry (information systems) of real estate (including cadastre, address, geometric data) while providing e-services?	YES = 1 / NO = 0	
1.6	Can public agencies jointly use registry (information system) of commercial legal entities and individual entrepreneurs while providing e-services?	YES = 1 / NO = 0	
1.7	Is there a legal basis that obliges state administrations to use data from personal data e-registry (information system)?	YES = 1 / NO = 0	
1.8.	Is there a legal basis that obliges public institutions to use electronic real estate (information system)?	YES = 1 / NO = 0	
1.9	Is there a legal basis that obliges state administrations to use data from e-registry (information system) of commercial legal entities and individual entrepreneurs?	YES = 1 / NO = 0	
<b>2.</b>	<b>Means of electronic identification</b>		
2.1	Does state provide citizens with electronic identification means for public e-services?	YES = 1 / NO = 0	

<sup>44</sup> Digitalizing Public Services In Europe: Putting Ambition into Action, December 2010, [www.eceuropa.eu](http://www.eceuropa.eu)

2.2	Does state provide businesses with electronic identification means for public e-services?	YES = 1 / NO = 0	
2.3	Does the e-identification means contain an electronic signature for citizens?	YES = 1 / NO = 0	
2.4	Does the e-identification means contain an electronic signature for businesses?	YES = 1 / NO = 0	
2.5	How many of the public e-services can citizens use via electronic signature?	0 %-50%-0 51%-100%-1	
2.6	How many of the public e-services can businesses use via electronic signature?	0 %-50%-0 51%-100%-1	
2.7	How many of the e-service providers are compatible with electronic signature framework?	0 %-50%-0 51%-100%-1	
<b>3.</b>	<b>Secure e-delivery</b>		
3.1	Does a country have a central solution for data exchange?	YES = 1 / NO = 0	
3.2	How many of the e-service providers are using the common data exchange solution?	0 %-50%-0 51%-100%-1	
3.3	How many of the public e-services have been used in the common data exchange solution?	0 %-50%-0 51%-100%-1	
<b>4</b>	<b>Single Sign-On (SSO)</b>		
4.1	Does your country have Single Sign-On functionality for accessing multiple e-Government services and/or websites?	YES = 1 / NO = 0	
<b>5</b>	<b>E-Safe</b>		
5.1	Does your country provide an 'e-Safe' (secure storage of e-documents) to citizens?	YES = 1 / NO = 0	
5.2	Does your country provide an 'e-Safe' (secure storage of e-documents) to businesses?	YES = 1 / NO = 0	
<b>6</b>	<b>Open standards</b>		
6.1	Does your country have a (legal/ policy) framework in order to stimulate the use of open standards?	YES = 1 / NO = 0	
<b>7</b>	<b>Electronic payment</b>		
7.1	Is it possible in your country to pay electronically for public services?	YES = 1 / NO = 0	
7.2	Does your country have a common (country-wide) generic e-Payment solution available for usage in different e-Government services?	YES = 1 / NO = 0	
	General conclusion		

As part of the monitoring, 30 e-services were selected, that are considered to be of special importance for members of the general population, natural and legal persons, according to the EU recommendation.

Monitoring consisted of three components: desk research; interviews with public agencies in question and outside experts, as well as users of some services from among Transparency Azerbaijan Legal Advice Centers.

Assessment of e-services was conducted on three main criteria: e-sophistication, e-participation and e-transparency.

N	List of e-services (30 services)
	<b>SOCIAL PROTECTION OF POPULATION</b>
	<b>1. Ministry of Labor and Social Protection of Population</b>
1.1.	Receipt of applications and documents for assignation of unemployment status and allowance
1.2.	Job searches through employment authorities
1.3.	Registration of labor contracts and informing the employers
	<b>2. State Social Protection Fund</b>
2.1.	Online registration of the insured
2.2.	Providing the pensioners with information
2.3.	Online submission of reports on deductions on mandatory social insurance
	<b>CIVIL REGISTRATION</b>
	<b>3. Ministry of Internal Affairs</b>
3.1.	Receipt of applications and documents for changing of national passports
3.2.	Receipt of applications and documents for issuing of driver's licenses
3.3.	Receipt of applications and documents for changing of identity cards of citizens
3.4.	Ordering a combination of numbers or letters on state registration plates of means of transportation
3.5.	Provision of information on measures related with administrative violations of traffic regulations and payment of fines
	<b>4. Ministry of Health</b>
4.1.	Provision of information on e-health cards of citizens
4.2.	Provision of information from the electronic registry of medical certificates on birth
4.3.	Provision of information from the electronic registry of medical certificates on death
	<b>5. Ministry of Justice</b>
5.1.	Issuing of documents on registration of registered civil status (death, birth, marriage, divorce certificates)
5.2.	Receipt of applications and documents for registration of civil acts (issuing death, birth, marriage, divorce certificates)
	<b>6. Ministry of Education</b>
6.1.	Provision of pupils with information on their current educational achievements
	<b>7. State Migration Service</b>
7.1.	Receipt of applications and documents for granting citizenship of the Republic of Azerbaijan
	<b>PROPERTY ISSUES</b>
	<b>8. Ministry of Communication and High Technologies</b>
8.1.	Receipt of applications and documents for landline telephone installation
8.2.	Receipt of applications and documents for change of phone numbers and their subscribers names
	<b>9. State Land and Mapping Committee</b>
9.1.	Receipt of applications and documents for preparation of land cadastre information and provision of cadastre services
	<b>10. State Registry of Real Estate</b>
10.1.	Receipt of applications and documents for issuance of title documents
10.2.	Receipt of applications and documents for issuance of (non)-encumbrance certificates
	<b>SERVICES FOR BUSINESSES</b>

	<b>11. Ministry of Taxes</b>
11.1	Receipt of electronic tax declarations and payment of taxes and other budgetary dues through the internet
11.2	Online registration of individual entrepreneurs
11.3	Online registration of legal entities
	<b>12. State Customs' Committee</b>
12.1	Receipt of electronic customs' declarations for customs clearance of goods and means of transportation
	<b>13. Public Procurement Agency</b>
13.1	Provision of information on planned tenders under public procurement
	<b>14. State Statistics Committee</b>
14.1.	Submission of online statistics reports
	<b>15. State Committee for Urban Building and Architecture</b>
15.1.	Application for construction permits

## METHODOLOGY FOR ASSESSMENT OF E-SERVICES SOPHISTICATION LEVEL

E-sophistication will be defined at the following model. Depending on the nature of the e-services, three, four and five-tier model could be applied.

<b>Assessment of the level of e-services in accordance with the three-tier model</b>		
<b>Levels</b>	<b>Percentage interval of the indicators</b>	<b>Description of the level of service provision</b>
0	1-32%,	The web site does not exist or access to public information or services is not provided.
1	33-66%	<b>Informative:</b> Required information on provision of services is provided.
2	67-99%	<b>Unilateral interactive:</b> Varied necessary samples have been provided for the services. (These forms are filled out and submitted to the relevant institution in an offline format).
3	100%.	<b>Bilateral interactive:</b> Necessary samples have been provided for the services. (The forms can be submitted in an online format).

<b>Assessment of the level of e-services in accordance with the four-tier model</b>		
<b>Levels</b>	<b>Percentage interval of the indicators</b>	<b>Description of the level of service provision</b>
0	1-24%,	The web site does not exist or access to public information or services is not provided.
1	25-49%	<b>Informative:</b> Required information on provision of services is provided.
2	50-74%,	<b>Unilateral interactive:</b> Varied necessary samples have been provided for the services. (These forms are filled out and submitted to the relevant institution in an offline format).
3	75-99%	<b>Bilateral interactive:</b> Necessary samples have been provided for the services. (The forms can be submitted in an online format).
4	100%	<b>Fully digitalized transaction:</b> It is possible to obtain the services fully in an electronic format. (Decision-making, notification, payment, delivery and etc.).

<b>Assessment of the level of e-services in accordance with the five-tier model</b>		
<b>Levels</b>	<b>Percentage interval of the indicators</b>	<b>Description of the level of service provision</b>
0	1-19%	The web site does not exist or access to public information or services is not provided.
1	20-39%	<b>Informative:</b> Required information on provision of services is provided.
2	40-59%	<b>Unilateral interactive:</b> Varied necessary samples have been provided for the services. (These forms are filled out and submitted to the relevant institution in an offline format).
3	60-79%	<b>Bilateral interactive:</b> Necessary samples have been provided for the services. (The forms can be submitted in an online format).

4	80-99%	<b>Fully digitalized transaction:</b> It is possible to obtain the services fully in an electronic format. (Decision-making, notification, payment, delivery and etc.).
5	100%	<b>Automated and proactive -</b> Provision of e-services are ensured.

**Informative** – The first level of e-services. This includes provision of static information on the service, requirement documents, as well as contact information for the institution responsible for the service.

**Unilateral interactive** – Unilateral interaction between the public institution and the general member of the public or legal or natural person. Members of the general population download application forms from websites, manually fill them out and submit them personally or through post.

**Bilateral interactive** – Members of the general population is authenticated for use of e-services and are able to apply filling out electronic forms or by sending scanned copies of relevant documents. At this level, officials of the public institution respond by email and the interaction continues in a bilateral format.

**Fully digitalized transaction** – E-services, including payments are fully carried out in an online format. The main characteristic feature is that the user does not use “papers” while using the service.

**Automated and proactive (individualized)** – The 5-th level of e-service consists of two main concepts. It is necessary to provide additional explanation on these concepts. Automated e-service means that the relevant public institution provides the necessary services for members of the general population, as well as natural and legal persons, based on their economic and social rights, regardless of application for such. In other words, the user does not need to apply for the service. Furthermore, proactive e-service means that the relevant public institution informs the user for action. Such e-service also means that, within the framework provided by the law and through efficient public databases, as well as a secure data exchange, the public institution automates filling out of electronic forms, where the citizen only needs to review and approve these forms. The monitoring study mainly used 3 and 4-tier models.

The Table below represents the questions that public institutions were asked during interviews, in regards to **maturity** (or technical development) of e-services, as well as the scoring system.

Name of the e-service  (The numbers indicated after the questions represent the requirements related with provision of e-services)	NO - 0 YES - 1	Level 1	Level 2	Level 3	Level 4	Level 5
		A user can receive online information about a service before a personal visit to an agency 	A user downloads an application for the service, fills in a printed out hard copy before a personal visit to an agency 	A user fills in electronic application for a service before a personal visit to an agency 	A user applies online and gets electronic service online 	A user does not apply for a service, the government takes a pro-active approach and renders a service
Does the public institution provide e-service?						
Does the e-service section of the agency's website provide information on the name and essence of the e-service, and list of required documents? (7.1.1)						
Are there supporting administrative regulations? (9.1)						
Has the e-service provider uploaded electronic versions of the relevant documents (application, forms and etc.) on the e-service section? (7.1.1)						
Is e-application available? Is it possible to submit scanned copies of applications and/or other documents, filled out in accordance with specified guidelines? Alternatively, is it possible to fill out such documents online? (7.1.2)						
Is it possible for the users to retrieve their personal data from the database linked with the service? (4.4)						
Is the e-service provided under the single window? Has the e-service been integrated to the "E-government" Portal? (6.2.3)						

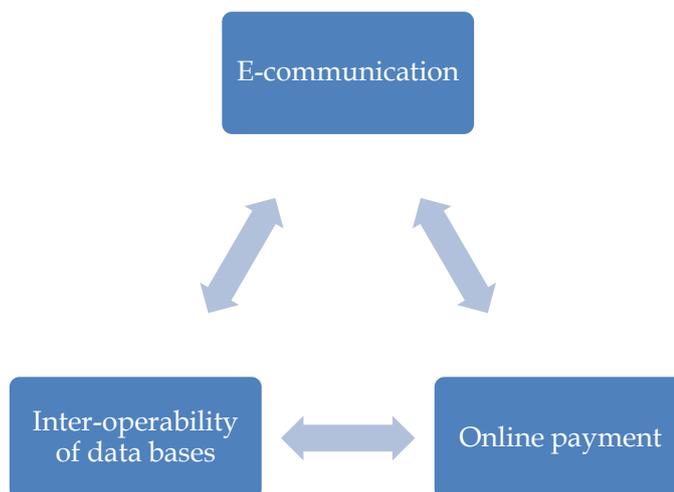
and 11.1)						
Is it the case that public authorities do not require information that already exists in the data system? (Certificate, identity card and etc.) (6.1.1)						
Are the users informed on proceedings through various communications (telephone, post, e-mail) (notification or confirmation of receipt)? (7.1.2)						
Is it possible to use e-services with use of e-signature or mobile signature (or "Asan" signature) without referring to an official authority?						
Does the e-service provider accept cashless payment through financial institutions (bank transfers, pay points)? 8.2	-					
Does the e-service provider accept cashless payment through their websites? 8.2						
Can the complete service be treated via the website (case handling, decision making and delivery, including payment for the service) - no other formal procedure is necessary for the applicant via "paperwork"?	-					
Is there a need for manual completion of electronic forms? Are electronic forms automatically filled out by the system? Is the user required to apply for the e-service? For ex., does the e-service calculate the tax amount automatically and notify the taxpayer?						
<b>Level of the e-service</b>						

According to the methodology used in this study, the second aspect of the assessment looked at the **transparency of services**. Transparency is understood as transparency in e-services. It does not assess the overall transparency of a given public agency. According to the methodology below, e-services are assessed with regards to the contribution to reduce the corruption through increasing transparency. The assessment looks at interactive communication and e-communication, availability of tools cashless payment communication, inter-operation of data bases.

**E-communication eliminates** the possibility of face-to-face contact between an official and a citizen and as a result reduces the possibility of corruption. A citizen also has the opportunity to give feedback on the content and procedure of an e-service.

**Online payment** can be defined as digital and observable transaction which also contributes to transparency.

**Inter-operability of data bases** or mutual exchange of information between information resources of various public agencies simplifies the procedures and reduces delays in service delivery.



**Picture 5. Model of transparency of e- services**

**Questions to assess transparency of e-services**

	<b>Name of the e-service</b>	<b>Score</b> NO - 0 YES - 1
1	Does the public institution, which provides the service, have a special section on its website?	
2	Is giving one’s opinion about provision of a service easy? For example, is feedback about the service quality requested in the course of providing service through the public agency’s website?	
3	Is giving one’s opinion about provision of a service easy? For example, is feedback about the service quality requested in the course of providing service through the single e-portal?	
4	Is it possible to use e-services with use of e-signature or mobile signature (or “Asan” signature) without referring to an official authority?	
5	Is e-application available? Is it possible to submit scanned copies of applications and/or other documents, filled out in accordance with specified guidelines? Alternatively, is it possible to fill out such documents online?	
6	Do public authorities require from members of the general population, information that already exists in the data system? (Certificate, identity card and etc.)	
7	Are the users informed on proceedings through various communications (telephone, post, e-mail)? Do they receive notification	

	or confirmation of receipt?	
8	Can the complete service be treated via the website (case handling, decision making and delivery, including payment for the service) – no other formal procedure is necessary for the applicant via “paperwork”?	
9	Does the e-service provider accept cashless payment through financial institutions (bank transfers, pay points)?	
10	Does the e-service provider accept cashless payment through their websites?	

Maximum score for paid services is 10, while for services that do not require a fee, maximum score is 8 (respectively, questions 9 and 10 above are not applicable to these services).

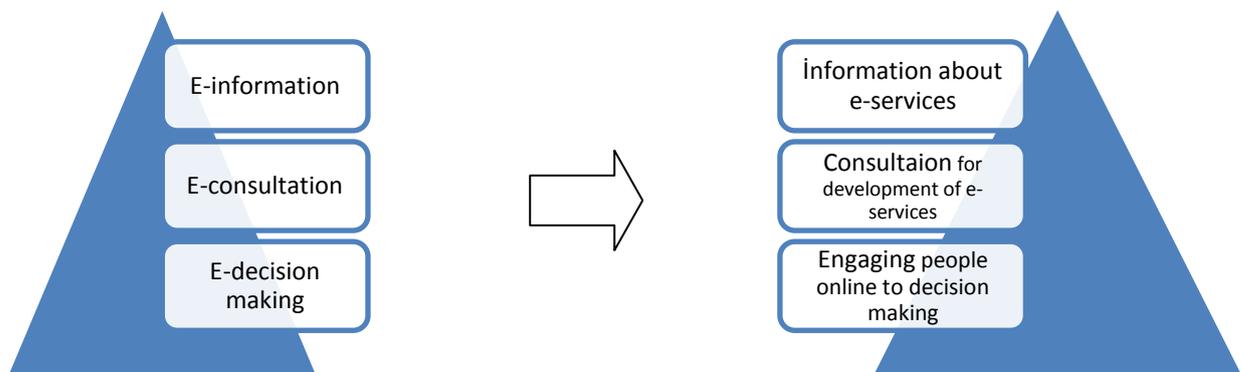
Scoring is as follows for the 10 score assessment:

- 1-4 - non-transparent
- 5-7 - relatively transparent
- 8-10 - sufficiently transparent

Scoring is as follows for the 8 score assessment:

- 1-3 - non-transparent
- 4-5 - relatively transparent
- 6-8 - sufficiently transparent

The assessment also scored the level of public participation that is based on the UN three-tier model of e-participation<sup>45</sup>. The assessment used only first two tiers (e-information and e-consultation), as the third tier (e-decision making) is yet to be developed in Azerbaijan.



**Picture 6: Model of e-participation**

### Questions to assess participation of e-services

	Name of the e-service	Score NO - 0 YES - 1
1	Does the e-service section of the agency’s website provide information on the name and essence of the e-service, and list of required documents?	
2	Has the e-service provider uploaded electronic versions of the relevant documents (application, forms and etc.) on the e-service	

<sup>45</sup> <http://unpan3.un.org/egovkb/en-us/About/Overview/E-Participation>

	section?	
3	Are there supporting administrative regulations available on the website in e-services section?	
4	Does the e-service provider create user friendly environment for e-services (video reels, user manual or instructions, frequently asked questions and answers sections)?	
5	Are the users informed on proceedings through various communications (telephone, post, e-mail)? (Notification or confirmation of receipt)?	
6	Is giving one's opinion about provision of a service easy? For example, is feedback about the service quality requested in the course of providing service through the public agency's website?	
7	Is giving one's opinion about provision of a service easy? For example, is feedback about the service quality requested in the course of providing service through the single e-portal?	
8	Do administration agencies regularly assess the quality of their services, including people's satisfaction with the service quality?	
9	Do administrative agencies conduct user satisfaction surveys to find out needs and demands of their users?	
10	Are regular reports on the work and its results prepared, in relation to provision of e-services (monthly or quarterly)? (Number of users, ratio of applicants through traditional means and those who use electronic formats, changes and results of inquiries)?	

The scoring system is as follows:

- 1-3 - low level of e-participation
- 4-6 - satisfactory level of e-participation
- 7-8 - good level of encouragement, in terms of public participation
- 9-10 - excellent level of encouragement, in terms of public participation

Questions used for the monitoring were first sent to all involved public institutions by post, along with a request for an interview. In general, we have contacted 16 public institutions within the framework of this monitoring; of which 13 public institutions participated in face-to-face interviews; 2 agencies provided response to our questions in writing (Ministry of Interior Affairs and State Property Committee) and finally the State Customs' Committee was contacted by phone and informed the team that the services were not provided in an electronic format. The information collected through the interviews was further verified, based on monitoring of a website of a public institution and the E-government Portal. To validate findings, consultations were conducted with the State Agency for Citizens' Services and Social Innovations and Ministry of Communication and High Technologies. The current assessment and the monitoring report were based on the information obtained during this process.

The work development of the monitoring report was divided in the following order: Analysis of the current legislation regarding e-government - Yusif Agayev, lawyer; monitoring on websites of the relevant institutions - Nikita Gurbatov, Transparency International (TI) IT specialist; organization of interviews and drafting of the report - Mahammad Muradov, Coordinator of "Increasing transparency in public services"; overall editing - Rena Safaraliyeva, TI Azerbaijan executive director. The monitoring activity took place from September 2013 to September 2014.

## VI. MONITORING RESULTS: ASSESSMENT OF THE INFRASTRUCTURE

### NOTION OF E-INFRASTRUCTURE

The notion of electronic government infrastructure is broad and also includes human capital, high speed internet, PC per capita rate, mobile phones' spread rate and even uninterrupted access to electric power. However, this report will focus exclusively on the major infrastructure components. Public agencies in Azerbaijan when rendering e-services to legal entities and individuals require paper based documents: national ID cards, medical certificate of health, documents testifying to legal status, registration certificates for commercial legal entities and individuals and their ID data, as well as title documents for real estate. This requirement to submit paper based documents is one of the obstacles to development of e-services. This is why integration of data bases of various public agencies is of special importance. Secure data exchange between various information systems will eliminate the need for paper based documents and will enable a full cycle from e-application to e-delivery. This first monitoring prioritized three information data bases: personal data, business data and real estate data base. Monitoring attempted to find answers to the following questions:

1. Overall, are personal data base, commercial data base and registry of real estate in existence? If yes, is information contained in these three data bases exchanged with other public agencies in an online regime? Is there a legal framework obligating exchange of e-information?
2. If exchanged, what is the infrastructure supporting the exchange?
3. If exchanged, are there open specification standards for the information exchange?
4. Is there infrastructure to ensure secure storage of business and personal data?
5. Is there online payment system in place?
6. Is there single sign-on function in place?
7. Are there e-identification tools in existence?

#### 1. Electronic data bases or information systems

*Even if personal and business data e-registries have been formalized in Azerbaijan, the e-registry of real estate is in the process of formation as of date of this report.*

##### 1.1. Personal data base

At the moment the Information Computation Centre under MTNT keeps a registry state information resources and personal data information systems. In total there 223 systems, of which 75 systems store state information and 148 store personal information. According to the law<sup>46</sup>, failure to register information system eligible for state registration is subject to a fine from 300 to 500 Manats. Three information data bases: personal data, business data and real estate data base are vital for development of e-services and therefore, existence and operability of these data bases are assessed in this report. Delivery of e-services requires establishing the applicant's identity. In Azerbaijan, personal data on citizens is collected mainly by four public agencies; Ministries of Interior Affairs; Health; Justice and State Migration Service.

##### 1.1.1. E-IAMAS information system

IAMAS (stands for inter-agency information searching system) is owned by the Ministry of Internal Affairs and contains data on national identification cards of citizens, as well as of passports, visas and other documents required of foreigners who have crossed the borders,

<sup>46</sup> E-government bulletin November 2014, [www.e-gov.az](http://www.e-gov.az)

biometric information, as well as information on transport vehicles. IAMAS is a special purpose data base and public agencies can use data from this data base within their authorities<sup>47</sup>.

#### **1.1.2. Single migration data base**

This data base is owned by the State Migration Service and contains mostly data on foreigners and persons without citizenship – residents and visitors, as well information on their registration in the place of residence.

#### **1.1.3. Automated registration and information system of civil acts**

This data base is owned by the Ministry of Justice and contains information on the civil status of the citizens in the single window format. This data base comprises more than 15 million acts of the civil status for the 75 years. Alongside with this, the Ministry has electronic bank of documents processed by over 120 notary public offices of the country<sup>48</sup>.

#### **1.1.4. Electronic system on health of citizens**

This information system stores e-data on health of citizens in Azerbaijan Republic, however, only data on newly born children is stored electronically. In future, data on health of all citizens of Azerbaijan will be digitized.

#### **1.1.5. Population register**

The government understands the need to combine fragmented personal data owned by the Ministry of Internal Affairs, State Migration Service, Ministry of Justice and Ministry of Health into a single automated system. Therefore, in order to create a single detailed and reliable data base of the Azerbaijan population, in 2004 the president signed a decree ordering establishment of a State Registry of Azerbaijan population under Ministry of Justice. This work was performed under auspices of the UN in 2006-2012<sup>49</sup>. This Registry contains information on the citizens of Azerbaijan, persons without citizenship and foreign residents living in Azerbaijan, under 18 line items, including, inter alia, dates of birth and death, pin codes, names of parents, pin codes of parents, etc. The project incorporated all of the information from the automated registration and information system of civil acts described above. Also, under the project each individual received a unique registration number – a pin code. The legislation understands the pin code as non-alienable individual seven digit number that allows identifying a person, even if the name is changed<sup>50</sup>. For example, the Ministry of Health submits information on a newly born baby directly to the registry which immediately issues an individual code and makes a record in the registry. In the result of exchange of information between Ministries of Health and Justice over 168 thousand newly born babies were entered the registry, each with their own pin code<sup>51</sup>.

### **1.2. Electronic data base of commercial information**

*The commercial data is well digitalized in Azerbaijan and consists of three electronic data bases.*

#### **1.2.1. AVIS (Automated system for tax management)**

The system to improve the taxation mechanisms was established in 2006. The aim of the AVIS system is to establish a swift system of tax management in order to improve the revenue

<sup>47</sup> The decision No 5 of Cabinet of Ministers dated 12 January 2012, [www.cabmin.gov](http://www.cabmin.gov)

<sup>48</sup> [www.justice.gov.az](http://www.justice.gov.az)

<sup>49</sup> UNDP Azerbaijan Project Evaluation Report, "Establishment and Development of the State Register of Population of the Republic of Azerbaijan" 2006-2012,

<https://erc.undp.org/evaluationadmin/downloaddocument.html?docid=5908>

<sup>50</sup> The Law on Population Registry dated 21 April 2006

<sup>51</sup> [www.justice.gov.az](http://www.justice.gov.az)

collection part of the budget<sup>52</sup>. This system contains data base of tax payers (both legal entities and individuals), and also allows registering new tax payers and recording taxes paid (both simplified and profit tax based systems).

### **1.2.2. Information system of import-export operations**

This system is managed by the State Customs' Committee and comprises data on import-export operations of legal entities and individuals.

### **1.2.3. Centralized credit registry**

This structure was established in 2005 under the National Bank to comprise data on credit history of the loans extended by banks to legal entities and individuals. In 2013, 43 banks used data from this registry through altogether 2,306,480 requests. This registry has data on 1,952,996 debtors<sup>53</sup>.

## **1.3. Real estate registry**

*Registration and management of real estate is on, under the project of National Space implemented with the support from the World Bank. Information on real estate and land cadastre are in the process of being digitalized.*

This registry is being created by the State Property Committee and State Land and Mapping Committee with the support from the World Bank. National space information registry is being created in line with the European Commission directive entitled INSPIRE (infrastructure for spatial information in the European community). This directive aims to organize a data base of the space within the EU. This data is comprised of 17 layers, including real estate, evaluation of the real estate, address registry, legal registration of real estate, water resources, forest and land cadastres, registries of communication lines, rail road's and electric network. Overall, this work all over the country is in process and is planned to be finalized by 2020<sup>54</sup>. At the moment national registration system and single corporative computer system has been created. The country has 3 main information systems with regards to registration of real estate and land cadastre.

### **1.3.1. Information resources on land allocated to legal entities and individuals**

This information resource belongs to the State Land and Mapping Committee and this data base shall be integrated to the e-government portal as per the Cabinet of Ministers decree. Digitalization of this resource is not completed.

### **1.3.2. Registration, entry into the cadastre and management of real estate systems**

This system belongs to the State Registry of Real Estate and this data base shall be integrated to the e-government portal as per the Cabinet of Ministers decree. Digitalization of this resource is in process. The work for 5 districts of Baku has been finalized as well, including real estate and address registry of Sumgait registry of real estate and its digital map is ready under this project and similar work is planned to have been accomplished for the cities of Ganja and Sheki in 2 years. Baku real estate is planned to be digitalized by the end of 2015<sup>55</sup>.

### **1.3.3. Address information system**

This system belongs to the State Registry of Real Estate and this data base shall be integrated to the e-government portal as per the Cabinet of Ministers decree. Digitalization of this resource is

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<sup>52</sup> [www.cybernet.az](http://www.cybernet.az)

<sup>53</sup> 2013 Annual report of Central Bank, [www.cbar.az](http://www.cbar.az)

<sup>54</sup> [www.emdk.gov.az](http://www.emdk.gov.az)

<sup>55</sup> E-government bulletin March 2014, [www.e-gov.az](http://www.e-gov.az)

in the process. So, 1,235 streets and avenues for the city of Baku have entry address, as well as starting and ending coordinates of 409 streets located; as for Sumgait entry address for 70 streets established<sup>56</sup>.

## 2. Exchange of data between information systems

*If personal data is exchanged between public agencies to a certain degree, information on real estate is practically not exchanged. Public agencies do not use sufficiently business data from AVIS information system of Ministry of Taxes in the provision of e-services.*

### 2.1. Exchange of personal data

Personal data is mostly exchanged. The data held by the Ministry of Internal Affairs in IAMAS information system, is exchanged with other public agencies. For example, the State Students Admission Commission does not require hard copy of the national ID from applicants for universities but derives this data from YAMAS. Ministry of Tax for the purpose of registration individual entrepreneurs derives data from IAMAS system of the Ministry of Interior Affairs for Azerbaijan nationals and from the system on Single Migration Information System of the State Migration Service for foreigners and persons without citizenship. However, the data collected by the Ministry of Justice on civil status of citizens is not available to other agencies within the electronic services framework.

### 2.2. Electronic exchange of business data

Business information exchange here stands for tax payer identification number and business registration certificates. The advantage of the AVIS system of the Ministry of Tax is its full integration with electronic data bases of other public agencies and smooth collection of data. The AVIS system is integrated into electronic systems of the following public agencies, especially at registration of legal entities<sup>57</sup>.

- Ministry of Internal Affairs
- State treasury of the Ministry of Finance
- State Statistics Committee
- State Customs' Committee
- State Social Protection Fund
- National Bank and other banks

The Central Bank and 40 banks using XOKHS (Online Payment System for Small Payments) exchange information with the Ministry of Taxes. In the result, the Ministry of Taxes is able to freeze tax debtors' accounts. The main problem, however, is that many legal entities and individuals applying for e-services of State Procurement Agency, State Land and Mapping Committee, Ministry of Labor and Social Protection of Population are requested to submit a hard copy of tax payer identification number, business registration certificate, etc. This shows public agencies do not use business data during e-services provision to businesses and citizens.

### 2.3. Exchange of real estate data

At this stage exchange of real estate data, including the address data is not possible, apart from notary public that is able to extract (non)-encumbrance certificates from the resource of the State Property Committee.

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<sup>56</sup> E-government bulletin March 2014, [www.e-gov.az](http://www.e-gov.az)

<sup>57</sup> Report on Registration of Business in Azerbaijan, IFC, [www.ifc.org](http://www.ifc.org)

### 3. Legal framework for exchange of electronic data

*Even if there is no Law on Information Systems and Data Bases, exchange of electronic data between various public agencies is regulated by Statutes on E-government Portal<sup>58</sup> and Cabinet of Ministers' decree<sup>59</sup>. Also, exchange of information is regulated by bilateral agreements. There are no legal provisions obligating public agencies to exchange personal, business and real estate data when rendering e-services.*

One of the main problems in this sphere is lack of the law regulating exchange of electronic data between public agencies. To this end, the ASAN and the MCIT are currently working on developing a draft law on information resources. The draft Law on Information Systems and Data Bases sets forth provisions for formation of data information resources and systems; management; ensuring its security; as well as regulates mutual relations in exchange of information between public agencies<sup>60</sup>. In general, the above decree and statutes lay foundation for legal framework for exchange of e-information. Also, each information system has its own statutes. There is a dedicated Cabinet of Ministers decision to regulate joint use of information from the IAMAS system by public agencies<sup>61</sup>. Also, exchange of information by public agencies is regulated through bi-lateral agreements. For example, exchange of information between Ministry of Tax, the Central Bank and banking system is based on a collective agreement on exchange of electronic data<sup>62</sup>. There are no legal provisions obligating public agencies to exchange personal, business and real estate data when rendering services.

### 4. Technical infrastructure of the information exchange

*Even if the country has constructed a secure data exchange system, the level of exchange of information between public agencies is not satisfactory, which impedes development of e-services. In other words, e-services cannot progress from the stage of e-information provision and e-application to e-service delivery.*

In order to integrate information systems of public agencies and to secure data exchange between information systems, the Ministry of Communication and High Technologies has constructed an X-road system with assistance from Best Solution – a company from Estonia. As a structure, X - Road model consists of a central, monitoring, security, and adaptation servers, in addition to a certificate centre. X-road model enables secure data exchange, while maintaining autonomy of data systems held by various public institutions<sup>63</sup>. Secure data exchange enables high quality e-services that are rich in content.

The Cabinet of Ministers 2014 decree (referred to above), approves technical requirements for information systems and databases and e-services. According to the decree, 65 information resources in Azerbaijan have to be integrated into the e-government portal. As of the date of this report, 50% of these resources have been integrated already. However, today public agencies do not make much of the X-road system. Secure data exchange between information systems of various public agencies is ensured by Special Communication and Information Agency under Special State Security Service. The Agency ensures secure exchange of information through the network ([www.azstate.net](http://www.azstate.net)) and use fibro-optic cables for turnover of e-documents<sup>64</sup>. According to the Presidential decree of 5 February 2013, the Agency shall provide

<sup>58</sup> Statutes on E-government Portal approved by the Presidential decree dated 5 February 2013, [www.president.az](http://www.president.az)

<sup>59</sup> Cabinet of Ministers' decree No 118 dated 1 May 2014, [www.cabmin.gov.az](http://www.cabmin.gov.az)

<sup>60</sup> A Draft Law on Information Systems and Data Bases Has Been Prepared, [www.az.trend.az](http://www.az.trend.az), 13 August 2014

<sup>61</sup> Cabinet of Ministers' decree No 5 dated 12 January 2012, [www.cabmin.gov.az](http://www.cabmin.gov.az)

<sup>62</sup> E-exchange between banks, [www.taxes.gov.az](http://www.taxes.gov.az)

<sup>63</sup> Development of monitoring methodology for e-governance in Azerbaijan, [www.osce.org](http://www.osce.org)

<sup>64</sup> [www.gov.az](http://www.gov.az)

various public institutions with fibro-optic cables in order to integrate them into the single e-government portal. Limited use of existing technical infrastructure leads to contradictory panorama of e-services organization.

With some public agencies applicants are required to produce different paper based certificates and documents to obtain services. For instance, the Ministry of Labor and Social Protection of Population, in order to provide e-service on “Receipt of applications and documents for assignation of unemployment status and allowance,” requires the following set of documents from applicants: a certificate that the applicant is not a recipient of a pension, a certificate that the applicant is not engaged in entrepreneurship, and a copy of a certificate on average salary for the past 12 months. Instead of making it “difficult” for the applicant, the Ministry can itself make inquiries to obtain such information from the Ministry of Taxes and Social Protection Fund data bases.

On the contrary, the Ministry of Taxes, enables any individual during online registration as tax payer with the Ministry of Taxes (citizen of Azerbaijan or non-citizen resident) can enter his pin code that will be verified through personal data base held by Ministry of Internal Affairs of State Migration Service accordingly. Also, the Ministry of Taxes initiated cooperation on verification of e-declaration among electronic databases held by a number of respective public institutions. The information entered by the taxpayer in e-declarations is verified with the databases held by the State Social Protection Fund and the State Customs’ Committee through AVIS (Automated Tax Management System) and taxpayers are notified in case of discrepancies. As seen, different approaches are used when spending and raising public money.

## 5. Open specification standards

*Currently, there are no unified standards in Azerbaijan for data exchange among data systems.*

Semantic and syntactic interoperability among data systems is essential to be established for smooth data exchange. The notion of semantic and syntactic harmonization is discussed in more details below.

**Semantic harmonization** – is one of the main elements in ensuring mutual functioning of data systems. It also enables data systems to understand the transferred information in the same manner<sup>65</sup>. One of the main problems in Azerbaijan, in terms of semantic harmonization, is that first names, patronymic and last names are often spelt differently in various data systems, which create difficulties in verification across data systems. Therefore, it is important for each institution to record information on individuals in their respective sections of the national personal data registry under their personal identification number (pin)<sup>66</sup>, which are the last three digits of person’s national ID cards.

**Syntactic harmonization** – Syntactic integration of databases (systems) is possible through use of formats and protocols that are commonly accepted by service providers<sup>67</sup>. In France, in order to facilitate data exchange among data systems in public management, the following formats are used: UTF8 for encoding letters; Arial, Courier, Times New Roman and Verdana fonts; GIF, PNG, JPEG, TIFF, and DNG for picture files; MP3 for audio files; MPEG2 for videos; DWG

<sup>65</sup> European Interoperability Framework (EIF) for European Public Services 2010, [www.gemalto.com](http://www.gemalto.com)

<sup>66</sup> Interview with Vugar Abdullayev, advisor to director of Information Commutation Centre under Ministry of Telecommunication and High Technologies, 7 December 2013

<sup>67</sup> A Model-Driven Approach to Enhance Tool Interoperability using the Theory of Models of Computation, Papa Issa Diallo, Joel Champeau, and Loic Lagade, [www.gemoc.org](http://www.gemoc.org)

direct and PDF for technical drafts; and ZIP (not RAR) to compact documents<sup>68</sup>. So far, such standards have not been developed and adopted in Azerbaijan. One of the main tasks in e-government creation is related with this. Use of formats and protocols that are certified by ISO and other standardization entities is recommended when adopting such standards.

The Cabinet of Ministers 2014 decree (referred to above), approves technical requirements for information systems and databases and e-services. This decree sets forth some standards for information exchange. Thus, information system integrated into e-government portal shall use SOAP protocol (Sample Object Access Protocol) when sending an information inquiry. The volume of this inquiry shall not exceed 10 kilobyte<sup>69</sup>. However, these standards do not meet all requirements for overall information standards. The information exchange standards shall be regulated by dedicated legal acts. These standards shall be open for all interested stakeholders and available online.

## 6. E-safe system

*Infrastructure to ensure secure storage of e-documents exists in Azerbaijan.*

E-safe system allows secure storage of documents (diploma, personal information, financial documents) of citizens and business entities. Information resources of public agencies of Azerbaijan Republic are protected by Special State Protection Service. According to the presidential decree<sup>70</sup>, responsibility and measures to be taken to ensure security of the e-government portal are delegated to the Special State Protection Service.

## 7. E-payment system

*E-payment is made through the APUS system established by the National Bank, however, centralized e-payment system is not integrated into the e-government single portal. Also, private companies offer on-line payment mechanisms.*

Before creation of the E-government Portal, the e-payments were made through the National Bank established a centralized payment system (APUS)<sup>71</sup>. The following institutions are known to have joined the APUS system: Ministry of Taxes, Main Police Department of the Ministry of Internal Affairs, Customs' Committee and utility providers: Azerenergy OJSC, Azersu OJSC, Azerigas of the SOCAR, and Baku Electric Network OJSC. These institutions have transferred their subscription databases to the KOMIS, where each subscriber is registered with a unified code. All payments with the unified subscriber code at banks or pay points are registered by the KOMIS. Members of the general public may also enter the KOMIS' website and make payments, using their subscriber codes. However, one of the main requirements of e-governance creation is to enable payments by physical and legal persons, through an e-government portal. Currently, though the E-government Portal has all the technical capacity in place, few agencies, such Ministry of Taxes, State Social Protection Fund, Azersu and Azerenergy enable users to perform payment of fees and fines, whereas most other agencies (Ministry of Internal Affairs, Customs' Committee, Migration Service, Baku Electric Network) require payments to be made through their individual websites or directly through APUS. At the moment, e-government portal accepts fees for utilities, taxes and other state dues, whereas fines imposed by the Ministry of Internal Affairs and dues collected by the State Migration Service cannot be paid through the single portal.

<sup>68</sup> France Refrentiel General d'Interoperabilite (RGI) 2009, [www.references.modernisation.gouv.fr](http://www.references.modernisation.gouv.fr)

<sup>69</sup> The Cabinet of Ministers decree No 118 dated 1 May 2014

<sup>70</sup> Presidential decree No 813 dated 5 February 2013, [www.president.az](http://www.president.az)

<sup>71</sup> [www.apus.az](http://www.apus.az)

According to the presidential decree dated 11 February 2014, introduction of ASAN-payment system was delegated to the Agency on Citizens' Services and Social Innovations. According to the new provisions, photos or videos of violation of traffic rules will be sent to e-mails or mobile telephones of the perpetrators with the help of new technical tools and respective fines will be paid through mobile phones. At the same time, the country has private e-payment tools, such as web-based Azeri Card, Golden Pay, Easy Pay; and payment kiosks such Milli On and E-manat.

## 8. Single Sign on system

*Single Sign-On function was made possible with creation of single e-government portal. However, once registered at the portal, users have to re-register to be able to use services of the Ministry of Taxes, which shows that information system of this agency is not harmonized with the technical requirements of the portal.*

This system enables users to access various and autonomous e-services of public institutions, through online registration. Once logged-in, a user can use unlimited number of services. Currently, the E-government Portal enables such facility to a certain degree, i.e. it allows access to e-services of various agencies but not to their websites. However, once registered at the portal, users have to re-register to be able to use services of the Ministry of Taxes, which shows that information system of this agency is not harmonized with the technical requirements of the portal.

## 9. Electronic identification

*Electronic identification in Azerbaijan uses two technical tools: smart card based e-signature and SIM-card based e-signature. Both the Ministry of Communication and High Technologies and Ministry of Taxes issue their own e-identification tools. MCNT tool is mostly used by citizens and officials, whereas the Ministry of Taxes targets the business sector. Also, in contrast to many other countries, in Azerbaijan electronic signature is not compulsory and therefore, not widely spread.*

Electronic identification in Azerbaijan uses two technical tools: *smart card based e-signature* and *SIM-card based e-signature*, issued respectively by MCIT and Ministry of Taxes.

**Smart-card based E-identification.** Smart-card based e-identification is used in Estonia, Belgium, Netherlands, etc.<sup>72</sup>. These cards, featuring a photo of its owner, have personal data and a chip, are used as personal identity cards, electronic identification and e-signature at the same time. In some countries, the cards also contain biometric data and finger prints, medical information, etc. and can additionally serve as a health card. The cards can also be tied to a bank account and serve as means of payment. Use of smart card based e-identification tool in many other countries, including Azerbaijan, requires card readers.

In Azerbaijan smart-card based E-identification is referred to as "e-signature" and these terms will be used intermittently in this report. The authority to issue e-signatures have been entrusted with the Ministry of Communication and High Technologies, based on the Decree of the President of the Republic of Azerbaijan on "Implementation of e-signatures," in accordance with the Law of the Republic of Azerbaijan on "E-signature and e-document." The Certificate Services Centre, which was officially launched in September of 2011, within the framework of the MCIT, issues e-signatures. In Azerbaijan today e-signature is not integrated into national identity cards. E-signatures are issued to persons under three categories, with a 3 year validity

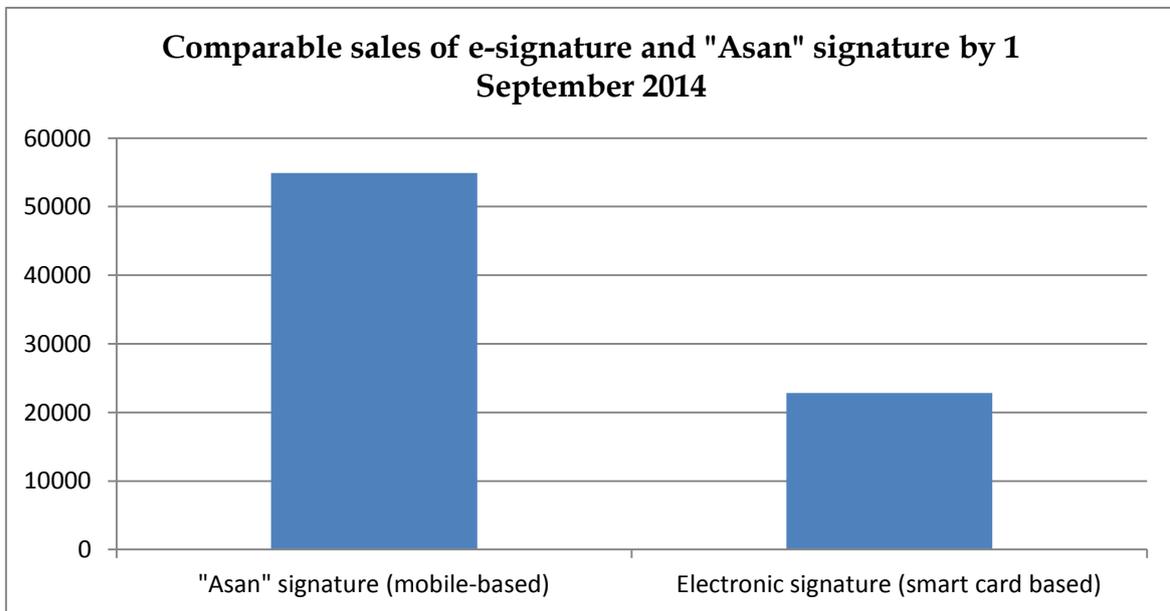
<sup>72</sup> The Complicated rise of electronic identity card in Europe, [www.en.myeurop.info](http://www.en.myeurop.info)

period: members of the general population, legal and natural persons engaged in entrepreneurship, and public servants. Service fees are respectively 18, 36, and 72 manats<sup>73</sup>.



**Picture 7. Smart card base signature**

By 1 September, 2014 Azerbaijan had over owners of e-signature certificates, of which 22,845 issued by Ministry of Communication and 54,919 mobile signatures (ASAN signature) by Ministry of Taxes<sup>74</sup>.

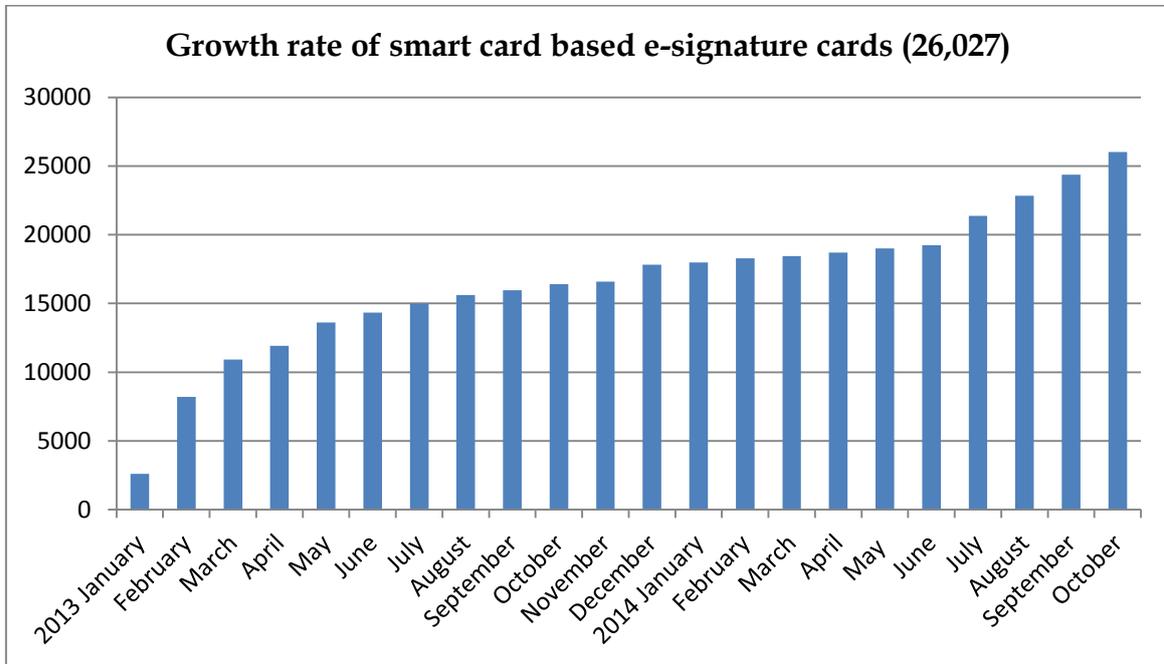


**Diagram 7**

<sup>73</sup> [www.e-imza.az](http://www.e-imza.az)

<sup>74</sup> [www.e-gov.az](http://www.e-gov.az)

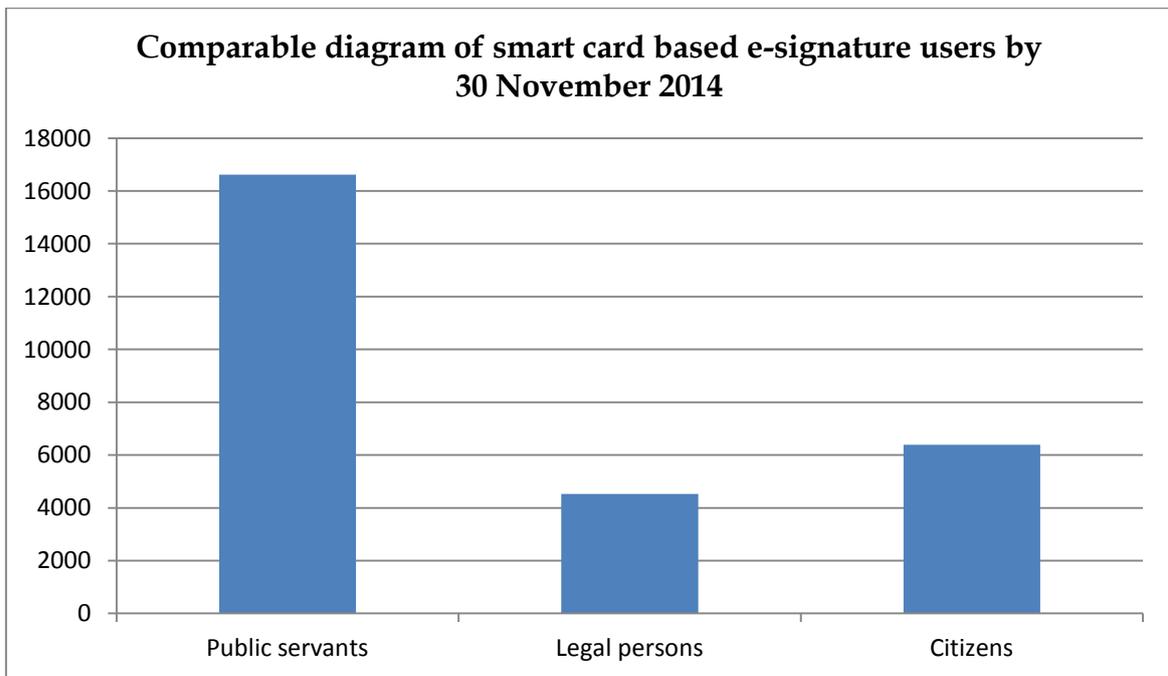
By 30 November 2014 the number of e-signature holders in Azerbaijan was over 27,536 with the monthly growth rate of nearly 1,200 users<sup>75</sup>.



**Diagram 8**

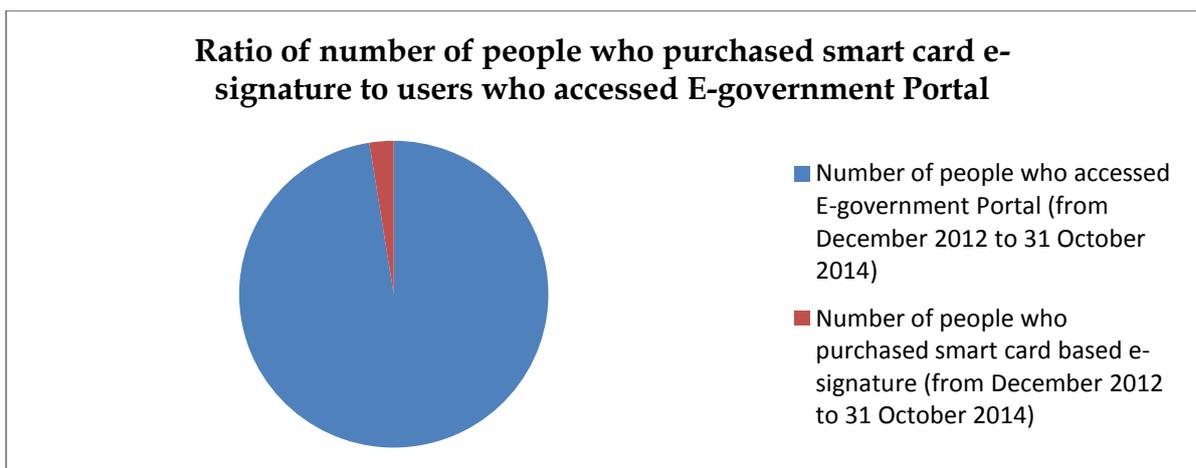
It should also be taken into consideration that more than 17 thousand of these e-signatures belong to public servants, 1,500 to legal entities and only around 6,000 to the general population.

<sup>75</sup> E-government bulletin, December 2014, [www.e-gov.az](http://www.e-gov.az)



**Diagram 9**

For comparison, Belgium of 10 million residents covered 90% of its population with e-identification, including e-signature in 2004-2009<sup>76</sup>, whereas Azerbaijan of 9 million people raised about 85,000 owners of e-signature and ASAN-signature combined within the past two years. Even if the cost of smart card supporting e-signature dropped in May 2014, this did not affect the increase in demand. In July-September 2014 the number of e-signature holders increased by 5,000 which can be explained by introduction of online registration of employment contracts by the Ministry of Labor and Social Protection of Population. The low growth of smart card based e-identification in Azerbaijan contrasts with active use of e-single government portal that has 1.5 million users in 2013-2014.



**Diagram 10.**

<sup>76</sup> Identity Card Program in Belgium, [www.gemalto.com](http://www.gemalto.com)

**SIM-card based e-identification** was first introduced in Estonia and spread by Estonian company in Azerbaijan<sup>77</sup>, which is thus the second country in the world to use this tool. SIM-card based identification does not require a card reader. Instead it uses a mobile identification chip (SIM card). It has the function of e-signature. In Azerbaijan SIM-card based E-identification is referred to as “mobile” signature or “Asan” signature<sup>78</sup> and these terms will be used intermittently in this report. “Asan” signature is issued by the Certification Service under the Ministry of Taxes.

“Asan” signature enables users to register for e-services and issue e-signatures on documents. To enable this feature, a chip (sim card) needs to be inserted into a relevant mobile device. The chip card includes a cryptographic key, which makes it impossible to make any changes on the document. To obtain a chip card, users first need to approach national mobile operators AZERCELL or ASAN Services Centers no 1, 2, or 3. In general, “Asan” signature service is available for 18 manats to the general population, public servants and physical and legal persons who engage in entrepreneurship activities. Each transaction using ASAN signature is charged extra 0.03 manats. In the period of July 2013 to August 2014, 55 thousand Asan-signatures sold and 3.5 million transactions were conducted<sup>79</sup>. The E-government portal can be entered using iPads and smart phones as well. To enter the E-government portal, users need to download a specific password-recognition application from the Apple Store. The code needs to be copied by the smart phone or the iPad in order to complete authentication.

N	Monitoring of e-government infrastructure components in e-government service delivery	Assessment method	Points
1	<b>Authentic sources (databases or information systems)</b> stand for a register with basic data on a person or business, which the government is obliged to use in communication with citizens and businesses. This refers to data collections held and maintained by public authorities, in which the identity attributes of a clearly defined subset of entities is managed, and to which a particular legal or factual trust is attached (i.e. which is generally assumed as being correct). This includes population registers, tax registers, company registers, etc. The use of authentic sources allows citizens and businesses to provide data only once, whilst it can be used multiple times by government <sup>80</sup> .		<b>0,33</b>
1.1	Does the electronic registry (information system) of personal data exist?	YES = 1 / NO = 0	1
1.2	Does the electronic registry (information system) of real estate and other property exist?	YES = 1 / NO = 0	0
1.3.	Does the electronic registry (information system) of commercial legal entities and individual entrepreneur’s data exist?	YES = 1 / NO = 0	1
1.4	Can public agencies jointly use the personal data registry (information systems) while providing e-services?	YES = 1 / NO = 0	1
1.5.	Can public agencies jointly use the registry (information	YES = 1 / NO = 0	0

<sup>77</sup> B.E.S.T Solutions, [www.bestsolution.az](http://www.bestsolution.az)

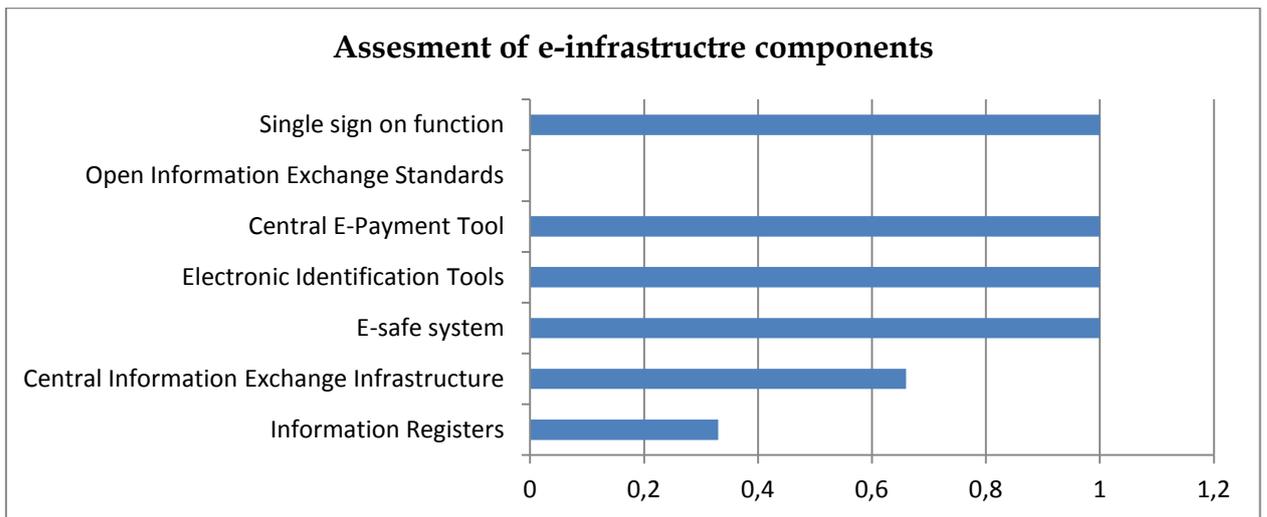
<sup>78</sup> The Azerbaijan word “asan” means “easy” and is a good marketing term, whereas “mobile” signature is a technical term

<sup>79</sup> [www.azercell.com](http://www.azercell.com)

<sup>80</sup> Method paper 2010: Preparing the 9-th Benchmark measurement for European Commission, June 2010

	systems) of real estate (including cadastre, address, geometric data) while providing e-services?		
1.6	Can public agencies jointly use registry (information system) of commercial legal entities and individual entrepreneur's while providing e-services?	YES = 1 / NO = 0	0
1.7	Is there a legal basis that obliges administrations to use data from personal data registry (information system)?	YES = 1 / NO = 0	0
1.8.	Is there a legal basis which provides for use of electronic real estate (information system) for public institutions in order for them to provide e-services?	YES = 1 / NO = 0	0
1.9	Is there a legal basis that obliges administrations to use data from registry (information system) of commercial legal entities and individual entrepreneur's?	YES = 1 / NO = 0	0
<b>2.</b>	<b>E-identity</b> allows for electronic identification and signature in an e-government.		<b>1</b>
2.1	Does state provide an electronic identification framework for public e-services to citizens?	YES = 1 / NO = 0	1
2.2	Does state provide an electronic identification framework for public e-services to businesses?	YES = 1 / NO = 0	1
2.3	Does the e-identification contain an electronic signature for citizens?	YES = 1 / NO = 0	1
2.4	Does the e-identification contain an electronic signature for businesses?	YES = 1 / NO = 0	1
2.5	For how many of the public e-services can citizens use the common e-identification solution?	0 %-50%-0 51%-100%-1	1
2.6	For how many of the public e-services can businesses use the common e-identification solution?	0 %-50%-0 51%-100%-1	1
2.7	How many of the e-services providers are using an e-identification framework?	0 %-50%-0 51%-100%-1	1
<b>3.</b>	<b>Secure e-delivery</b> stands for a secure delivery infrastructure for exchange of documents and data among public institutions, the business sector and members of the general population.		<b>0,66</b>
3.1	Does a country have a central solution for data exchange?	YES = 1 / NO = 0	1
3.2	How many of the e-service providers are using the common data exchange solution?	0 %-50%-0 51%-100%-1	1
3.3	For how many of the public e-services is the common data exchange solution used?	0 %-50%-0 51%-100%-1	0
<b>4</b>	<b>Single Sign-On (SSO)</b> is a property of access control of multiple, related, but independent software systems. With this property a user logs in once and gains access to all systems without being prompted to log in again at each of them. Single logout provides synchronized session logout functionality across all sessions.		<b>1</b>
4.1	Does your country have Single Sign-On functionality for accessing multiple e-Government services and/or websites?	YES = 1 / NO = 0	1
<b>5</b>	<b>E-Safe</b> is a secure storage spaces for documents and alike		<b>1</b>

	and the secure, following formal delivery of information from/to businesses or citizens in their communication with government organizations. The e-Safe enables citizens and/or businesses to store legally valid, digital documents of any kind: certificates, diplomas.		
5.1	Does your country provide an 'e-Safe' (secure storage of e-documents) to citizens?	YES = 1 / NO = 0	1
5.2	Does your country provide an 'e-Safe' (secure storage of e-documents) to businesses?	YES = 1 / NO = 0	1
6	<b>Open standards</b> according to the European Interoperability Framework, the word "open" is here meant in the sense of fulfilling the following requirements: The standard is adopted and will be maintained by a not-for-profit organization, and its ongoing development occurs on the basis of an open decision-making procedure available to all interested parties (consensus or majority decision etc.). The standard has been published and the standard specification document is available either freely or at a nominal charge. It must be permissible to all to copy, distribute and use it for no fee or at a nominal fee. The intellectual property - i.e. patents possibly present - of (parts of) the standard is made irrevocably available on a royalty-free basis. There are no constraints on the re-use of the standard.		0
6.1	Does your country have a (legal/policy) framework in order to stimulate the use of open standards?	YES = 1 / NO = 0	0
7	<b>Electronic payment</b> allows for payments in an electronic format, among public institutions, members of general population, commercial physical and legal persons.		1
7.1	Is it possible in your country to pay electronically for public services?	YES = 1 / NO = 0	1
7.2	Does your country have a common (country-wide) generic e-Payment solution available for usage in different e-Government services?	YES = 1 / NO = 0	1
<b>E-infrastructure Index Maximum 7</b>			<b>7/5</b>



**Diagram 11.**

## CONCLUSION

Monitoring revealed that basic components of e-government, such as e-signature, e-payment system, and central secure data exchange infrastructure and e-storage system are established. Alongside with this, the following are main problems for development of e-services:

1. Real estate registry, including address registry and cadastre, are not digitalized so far, and in the result, this data is not exchanged with other public agonies in the framework of e-service delivery.
2. Data on business legal entities and individual entrepreneurs of the Ministry of Taxes is not used by other public agencies in the framework of e-service delivery.
3. Open Specification standards to regulate exchange of information between various public agencies have not been prepared.
4. Public agencies do not make a full use of central secure data exchange infrastructure at exchange of information.

The current infrastructure allows:

- VII. Avoid requesting the hard copy of the following documents by public agencies at e-service delivery: national ID card, Tax Payer Identification information, registration certificates of business legal entities and individual entrepreneurs; this data can be derived from IAMAS system of the Ministry of Interior and AVIS system of the Ministry of Taxes;
- VIII. Use government online payment tools to pay the service fee, whenever applicable;
- IX. Receive documents and application forms with e-signature;
- X. To elevate the e-services to at minimum the third level of e-application;
- XI. To fully automate any service that is not dependent on any other public agency;
- XII. Integrate all e-services into the single e-government portal;

## VII. MONITORING RESULTS: ASSESSMENT OF E-SERVICES

Different scaling systems were used for services aimed to provide data.

### **1. Maturity (technical development):**

Services aimed to provide data and receive applications for personal documents and public services are scored on the three tier level (informative; unilateral interactive and bilateral interactive); fourth tier (fully digitalized transaction) is applied to services which have transactional, decision-making and e-service delivery components. Fifth tier model is not applied.

**2. Level of public participation:** The assessment also scored the level of public participation that is based on the UN three-tier model of e-participation. The assessment used only first two tiers (e-information and e-consultation), as the third tier (e-decision making) is yet to be developed in Azerbaijan. The scoring system is as follows:

- 1-3 - low level of e-participation
- 4-6 - satisfactory level of e-participation
- 7-8 - good level of encouragement, in terms of public participation
- 9-10 - excellent level of encouragement, in terms of public participation

**3. Level of transparency:** The third aspect of the assessment looked at the **transparency of services**. Transparency is understood as transparency in e-services. It does not assess the overall transparency of a given public agency. According to the methodology below, e-services are assessed with regards to the contribution to reduce the corruption through increasing transparency. The assessment looks at interactive communication and e-communication, availability of tools, cashless payment communication, inter-operation of data bases. Maximum score for paid services is 10, while for services that do not require a fee, maximum score is 8 (respectively, questions 9 and 10 above are not applicable to these services).

Scoring is as follows for the 10 score assessment:

- 1-4 - non-transparent
- 5-7 - relatively transparent
- 8-10 - sufficiently transparent

Scoring is as follows for the 8 score assessment:

- 1-3 - non-transparent
- 4-5 - relatively transparent
- 6-8 - sufficiently transparent

Name of the e-service, provider and content	Technical assessment	Level of public participation	Level of transparency
<p>Name of the provider: State Social Protection Fund</p> <p>Name of the e-service: Providing pensioners with information</p> <p>Content of the e-service: Individualized information on the content of the e-service, date of assignment, amount and type of the pension.</p>	<p>3/3 - Bilateral interactive</p> <p>Users can access individual data, held in the public database. The e-service has been integrated to the E-government Portal. Guidelines for the e-service developed.</p>	<p>10/8 - good</p> <p>The agency has a telephone based 190 hotline facility (internal dial number 4) to collect feedback and or complaints on the operation of the e-services. Feedback mechanism is also available through e-mail announced on the website (<a href="mailto:info@sspf.gov.az">info@sspf.gov.az</a>). Members of the general public can also communicate their complaints or opinions to the E-government Portal through email. Satisfaction survey to measure quality of the service is not conducted on this e-service.</p>	<p>8/8 - sufficiently transparent</p> <p>The e-service is not susceptible to corruption.</p>
<p>Recommendation</p>	<p>To conduct user satisfaction surveys</p>		
<p>Name of the e-service provider - Ministry of Health</p> <p>Name of the e-service: provision of information in the e-health card</p> <p>Content of the e-service: provision of the information in the e-health card obtained by the users (illness background, currently used medication, vaccination, medical insurance and etc.). So far, e-health cards are used only for newly born.</p>	<p>3/3 - Bilateral interactive</p> <p>Users can access individual data, held in the public database. The e-service has been integrated to the E-government Portal.</p>	<p>10/5 - satisfactory</p> <p>The agency has a telephone based 431-38-39 hotline facility to collect feedback and or complaints on the operation of the e-services. Satisfaction survey to measure the quality of the service is not conducted on this e-service. No user manual or video is available. Analytical reports on this service and its results are not provided.</p>	<p>8/8 - sufficiently transparent</p> <p>The e-service is not susceptible to corruption.</p>
<p>Recommendation</p>	<ul style="list-style-type: none"> <li>• To conduct user satisfaction surveys</li> <li>• To prepare a bulletin on the number of users and its growth rate per reporting period</li> </ul>		

<p>Name of service provider: Ministry of Health</p> <p>Name of the e-service: Provision of information through the electronic registry of medical certificates on birth</p> <p>Content of the e-service: members of the general public are provided with access to the database, based on an inquiry, and they can obtain copies of birth certificates for their new-born children)</p>	<p>3/3 – Bilateral interactive</p> <p>Users can access individual data, held in the public database. The e-service has been integrated into the E-government Portal.<sup>81</sup> However, guidelines for the e-service have not been developed yet.</p>	<p>10/5 – satisfactory</p> <p>The agency has a telephone based 431-38-39 hotline facility to collect feedback and/or complaints on the operation of the e-services. Satisfaction survey to measure the quality of the service is not conducted on this e-service. No user manual or video is available. Analytical reports on this service and its results are not provided.</p>	<p>8/8 - sufficiently transparent</p> <p>The e-service is not susceptible to corruption.</p>
<p>Recommendation</p>	<ul style="list-style-type: none"> <li>• To prepare legal regulation for the service</li> <li>• To conduct user satisfaction surveys</li> <li>• To prepare a bulletin on the number of users and its growth rate per reporting period</li> </ul>		
<p>Service provider: Ministry of Education</p> <p>Name of the service : Provision of pupils with information on their current educational achievements</p> <p>Service content: Another name used for the e-service is parental control system. Parents can use this e-service to obtain information on current educational achievements of their children. The e-service is used for 43 schools, located in both urban and rural areas.</p>	<p>3/3 – Bilateral interactive</p> <p>Parents can use this e-service to obtain information on current educational achievements of their children. The e-service has guidelines. However, these guidelines are located on the www.portal.edu.az and cannot be found at the Ministry’s website. The service has not been integrated to the E-government Portal and therefore, does not support e-signature.</p>	<p>10/3 – poor</p> <p>No online help mechanisms are available. No user manual or video is available. Analytical reports on this service and its results are not provided. Satisfaction survey to measure the quality of the service is not conducted on this e-service.</p>	<p>8/5 - good (less susceptible to corruption)</p> <p>The service has not been integrated to the E-government Portal and therefore, does not support e-signature.</p>

<p>Service provider: Ministry of Internal Affairs</p> <p>Name of the service: Ordering a combination of numbers or letters on state registration plates of means of transportation</p> <p>Service content: This service establishes rules for ordering a combination of numbers or letters on state registration plates of means of transportation.</p>	<p>3/2 - Unilateral interactive</p> <p>The electronic service section provides information about the procedures and documents required. The e-service has guidelines. Despite the fact that guidelines include application forms, such forms have not been uploaded directly to the e-service section. Furthermore, there are no e-application and e-payment tools. The electronic service has not been integrated into the E-government Portal and hence does not support e-signature.</p>	<p>10/3 - poor</p> <p>There is information about the service and guidelines, but the e-service has not passed to the bilateral interaction level.</p>	<p>10/1- non-transparent</p> <p>The service supports no e-application, no e-payment tools, and no e-signature.</p>
<p>Recommendations:</p>	<ul style="list-style-type: none"> <li>• To place on the website in a visible manner the guidelines that is included into application forms.</li> <li>• To create online application tools and to allow selecting car plate numbers online.</li> <li>• To derive information on car registration and technical inspection thereof from IAMAS system rather than request hard copies of these documents from users.</li> <li>• To integrate the service into the E-government Portal and support it with e-signature.</li> <li>• To create tools to collect state fee online.</li> <li>• Design complaints and feedback forms and place them on the website.</li> <li>• Conduct customer satisfaction survey.</li> <li>• Publicize monthly and quarterly usage statistics.</li> </ul>		
<p>Service provider: Ministry of Internal Affairs</p> <p>Name of the e-service: Receipt of applications and documents for changing of identity cards for citizens</p> <p>Service content:</p>	<p>3/2 - unilateral interactive</p> <p>The e-service is restricted and provides information about the service, documents required and procedures. It has guidelines. In addition, the application form is located</p>	<p>10/3 poor</p> <p>The e-service provides information only and has not passed to the bilateral interactive</p>	<p>10/1 non-transparent</p> <p>Even if there is a section on the website, the service supports no e-application, no e-</p>

<p>This e-service establishes guidelines for receipt of applications and documents for changing of identity cards for citizens.</p>	<p>on the website. There are no tools for e-application and online payment. Users are required to visit local police stations, in order to change their identity cards. The e-service has not been integrated into the E-government Portal and does not support e-signature.</p>	<p>level.</p>	<p>payment tools, and no e-signature.</p>
<p>Recommendations:</p>	<ul style="list-style-type: none"> <li>• To enable submission of applications and scanned copies of documents required for changing identity cards.</li> <li>• To support e-signature and integrate it into the E-government Portal.</li> <li>• To enable online payments for the general public.</li> <li>• To send electronic notifications to the citizens whose identity cards are about to expire.</li> <li>• To stop the practice of requested national ID and use the fin code instead to verify in the IAMAS system.</li> </ul>		
<p>Service provider: Ministry of Internal Affairs</p> <p>Name of the e-service Provision of information on measures related with administrative violations of traffic regulations and payment of fines</p> <p>Service content: The e-service provides information on provision of information on measures related with administrative violations of traffic regulations and payment of fines.</p>	<p>4/4 fully automated</p> <p>The e-service provides users with access to the database, where they could obtain information on fines. Most importantly, e-payments are possible. The main problem is that only one part of the service has been integrated to the E-government Portal – “notification on measures taken in relation with violation of traffic regulations.” Payment of fines can be paid through the “Government Payment Portal,” located on the MIA website. Therefore, we concluded that this service has not been fully integrated to the E-government Portal. Consequently, e-signature allows for receiving information on fines. However, it is not possible to pay fines, using e-signatures.</p>	<p>10/6 satisfactory</p> <p>There is no public accountability in terms of the number of users, their ratio to the number of persons who pay fines using traditional methods, or the rate of increase in terms of usage. At the same time, satisfaction surveys are not carried out.</p>	<p>10/9 sufficiently transparent</p> <p>The e-service is less susceptible to corruption.</p>

Recommendations:	<ul style="list-style-type: none"> <li>• To integrate payment of fines into the E-government Portal</li> <li>• To enable submission of complaints and proposals in an online format.</li> <li>• To conduct regular satisfaction surveys for the general public.</li> <li>• To publicize monthly and quarterly usage statistics.</li> </ul>		
<p>Service provider: Ministry of Internal Affairs</p> <p>Name of the e-service: Receipt of applications and documents for issuing of drivers' licenses</p> <p>Service content: This e-service establishes guidelines for receipt of applications and documents for issuing of drivers' licenses.</p>	<p>3/2 unilateral interactive</p> <p>The e-service has satisfies with provision of information on procedures, also has application form to be printed and filled in by hand and guidelines in the e-service section. There are no online payment tools. The e-service has not been integrated into the E-government Portal.</p>	<p>10/3 -poor</p> <p>The e-service has satisfies with provision of information on procedures, but e-application form is not ensured.</p>	<p>10/1 - non-transparent</p> <p>The e-service is more susceptible to corruption. Even if there is section on the website, the service supports no e-application, no e-payment tools, and no e-signature.</p>
Recommendations:	<ul style="list-style-type: none"> <li>• To create e-application tools.</li> <li>• To stop the practice of requesting hard copy documents from applicants, i.e. to extract health data from the data of Ministry of Health; to extract personal data from IAMAS; to extract data on passing exams for a driver's licenses from the Ministry's data base.</li> <li>• To enable online payments for the general public.</li> <li>• To support e-signature and its integration into the E-government Portal.</li> </ul>		
<p>Service provider: Ministry of Internal Affairs</p> <p>Name of the e-service: receipt of applications and documents for changing of national passports</p> <p>Service content: this e-service is related with submission of applications and documents for changing of ordinary passports for citizens.</p>	<p>3/2 unilateral interactive</p> <p>This e-service is intended for information purposes. The e-service has guidelines, and the application for has been located on the website. However, the service does not enable submission of scanned copies of documents. At the same time, there are no provisions for online payment. The website indicates that documents are received by local police stations from 09:00 to 18:00 during work days of the week and from 09:00 to 13:00 on Saturdays. This means that</p>	<p>10/3 poor</p> <p>Information about the service and guidelines exist, but the service is not bilaterally interactive.</p>	<p>10/1 non-transparent</p> <p>Even if there is a section on the website, the service supports no e-application, no e-payment tools, and no e-signature.</p>

	documents are not received in an electronic format, as the name suggests.		
Recommendations:	<ul style="list-style-type: none"> <li>• To enable submission of scanned copies of documents.</li> <li>• To integrate the e-service into the E-government Portal, which would eliminate the requirement for submission of a copy of identity card to the MIA</li> <li>• To enable online payment of the state duty</li> <li>• To send an automated notification to the person on close expiry date of his/her ordinary passport or identity card (e-mail, sms or other electronic means).</li> <li>• To enable submission of complaints and proposals in an online format.</li> <li>• To conduct regular satisfaction surveys for the general population.</li> <li>• To publicize monthly and quarterly usage statistics.</li> </ul>		
<p>Service provider: Ministry of Labor and Social Protection of Population</p> <p>Name of the e-service: Job searches through employment authorities</p> <p>Service content: this service provides an opportunity to find employment.</p>	<p>4/1 - informative</p> <p>Even if there is an e-service, it is not active online. If in the past it provided access to the database of job vacancies, maintained by the Employment Department of the Ministry of Labor and Social Protection of Population, at the moment the access is available only to the Ministry's employees. At the moment, citizens have to go in person to Baku and local centers and write an application to receive the status of unemployed. Only after this an applicant is offered job vacancies and sent to state, municipal and private entities for interview.</p>	10/2 - poor	8/2 non-transparent The e-service is more susceptible to corruption
Recommendations:	<ul style="list-style-type: none"> <li>• To upload job application forms and labor contracts on the website.</li> <li>• To provide the user with contact information of the institution, to which he/she could apply.</li> <li>• To provide the user with the opportunity to apply for jobs with application forms that they would fill out online.</li> <li>• To provide private companies and organizations with the opportunity to place vacancy advertisements on the websites which they would fill out online.</li> <li>• To update vacancy announcements on a regular basis and send regular email notifications to users on updates.</li> </ul>		

	<ul style="list-style-type: none"> <li>To publish the number of persons, if possible names of persons who find jobs through the website, on a regular basis. This would contribute to accountability of the service.</li> <li>To create a discussion page which would contribute to the development of the e-service and upgrade the content, based on feedback received from users.</li> </ul>		
<p>Service provider: Ministry of Labor and Social Protection of Population</p> <p>Name of the e-service: Receipt of applications and documents for assignation of unemployment status and allowance</p> <p>Service content: this service is intended to provide citizens with comprehensive information on an electronic format, on assignation of unemployment.</p>	<p>4/1 informative</p> <p>Even if there is an e-service, it is not active online.</p> <p>The e-service has guidelines. However, there is a discrepancy in regards to the name and content of the e-service, as mentioned in the guidelines. The Law on Employment requires applicants to visit employment offices, in order to get registered. There is a legal barrier for implementation of the e-service.</p>	10/2 poor	<p>8/2 non-transparent</p> <p>The e-service is susceptible to corruption</p>
Recommendations:	<ul style="list-style-type: none"> <li>To upload the guidelines for this e-serve onto the e-services section of the website.</li> <li>To amend the Law on Employment to enable provision of this service online.</li> <li>To ensure e-application in practice.</li> <li>To ensure rendering the service online.</li> <li>To adjust the guidelines of the service to its name.</li> </ul>		
<p>Service provider: Ministry of Taxes</p> <p>Name of the e-service: Online registration of legal entities and individual entrepreneurs</p> <p>Service content: this services provides mechanisms to online registration of legal entities and individual entrepreneurs</p>	<p>4/4 fully automated</p> <p>Online registration process for legal entities and individual entrepreneurs is possible; Legal entities who use e-signature of Ministry of Communication and High Technology cannot create other legal entities online, whereas legal entities who use ASAN signature can create legal entities. Awareness raising videos have been uploaded on the website. Users receive an online notification on the process as well. Users receive such decisions online.</p>	10/9 excellent	<p>8/8 sufficiently transparent</p> <p>The e-service is not susceptible to corruption</p>

Recommendations:	<ul style="list-style-type: none"> <li>To create tools to enable legal entities who use e-signature of Ministry of Communication and High Technology create other legal entities online.</li> </ul>		
<p>Service provider: Ministry of Taxes</p> <p>Name of the e-service: Submission of e-declarations, including submission of simplified tax declaration; and payment of taxes and other budgetary dues</p> <p>Service content: this service allows the tax payers to submit e-declarations and pay taxes and other budgetary dues online.</p>	<p>4/4 fully automated</p> <p>Even if the service has been integrated into the E-government Portal, this is the only service that requires a repeat registration.</p>	<p>10/9 excellent</p> <p>At the same time, satisfaction surveys are not carried out to measure the needs and requirements of users.</p>	<p>10/10 transparent</p> <p>The e-service is not susceptible to corruption.</p>
Recommendations:	<ul style="list-style-type: none"> <li>To conduct satisfaction surveys to measure the needs and requirements of users.</li> </ul>		
<p>Service provider: State Land and Mapping Committee</p> <p>Name of the e-service: Receipt of applications and documents for preparation of land cadastre information and provision of cadastre services</p> <p>Service content: Applicants can request preparation of land cadastre information and provision of cadastre services</p>	<p>3/3 bilateral interactive</p> <p>Guidelines are available for this service. The service has been integrated into the E-government Portal and supports e-signature. The agency accepts scanned documents. The data base does not allow data exchange with information systems of other public agencies, for example, Ministry of Taxes.</p>	<p>10/6 - satisfactory</p> <p>No statistics on e-users are available. There is no public accountability in regards to the number of users who benefit from the e-service; also no data on the user's growth rate is available. At the same time, satisfaction surveys are not carried neither the needs and requirements of users are measured.</p>	<p>10/8 - sufficiently transparent</p> <p>The website offers online payment system which however is not integrated into the e-government portal.</p>
Recommendations:	<ul style="list-style-type: none"> <li>To integrate online payment system into the e-government portal.</li> </ul>		

	<ul style="list-style-type: none"> <li>To make guidelines or instructions on how to use online payment system available on the website of the agency.</li> <li>To adopt and publicize standard state fees for the services, for example, to introduce a fixed fee for residential and agricultural lands.</li> <li>To publicize monthly and quarterly usage statistics.</li> <li>To conduct satisfaction surveys to measure the needs and requirements of users.</li> </ul>		
<p>Service provider: State Statistics Committee</p> <p>Name of the e-service: Submission of statistical reports</p> <p>Service content: users can submit statistics reports</p>	<p>4/4- fully automated</p> <p>The e-service has been integrated into the E-government Portal and supports e-signatures.</p>	<p>10/5 – satisfactory</p> <p>Satisfaction surveys are carried out to measure the quality of e-service. Users can not provide feedback through e-government portal. There is no public accountability in regards to the number of users who benefit from the e-service.</p>	<p>10/8 – sufficiently transparent</p> <p>It is not possible to main contact with the service provider via e-government portal.</p>
<p>Recommendations:</p>	<ul style="list-style-type: none"> <li>To ensure verification of the information on number of employers and their salaries with the Ministry of Taxes and the SSPF instead of demanding this data from users, legal entities that have fewer than 10 employees.</li> <li>To create tools for users to provide feedback from the e-government portal.</li> </ul>		
<p>Service provider: Ministry of Communication and High Technologies</p> <p>Name of the e-service: (1) ordering landline telephone installation; (2) receipt of applications and documents for changing of phone numbers and ownership</p> <p>Service content: users of these services can apply to order landline telephone be installed and to have</p>	<p>(1) 4/4 – fully automated</p> <p>(2) 4/4 – fully automated</p>	<p>(1) 10/7 – good</p> <p>(2) 10/7 – good</p> <p>Satisfaction surveys are not carried out to measure the quality of e-service, there is no public accountability in regards to the number of users who benefit from the e-service.</p>	<p>(1) 10/10 – sufficiently transparent</p> <p>(2) 10/10 – sufficiently transparent</p> <p>This e-service is not susceptible to corruption.</p>

the phone number of owner changed.			
Recommendations:	<ul style="list-style-type: none"> <li>To arrange user satisfaction surveys.</li> <li>To publicize number of users and their growth.</li> </ul>		
<p>Service provider: State Urban Planning and Architecture Committee</p> <p>Name of the e-service: Receipt of applications and documents for issuing special permits (licenses) to legal and natural persons for designing construction projects for buildings and facilities under I and II categories, in accordance with state standards</p> <p>Service content: users can submit documents to seek for construction projects permission</p>	<p>4/3 - bilateral interactive</p> <p>The e-service provides for submission of scanned copies of relevant documents, as well as bank transfers. However, bank transfers are not possible through the website. Although electronic application is possible through the website, visiting the public institution is required. In general, no one has used this service yet. The e-service has been integrated into the E-government Portal.</p>	<p>10/5 - satisfactory</p> <p>At the same time, satisfaction surveys are not carried out to measure the quality of e-service. There is no public accountability in regards to the number of users who benefit from the e-service or their growth.</p>	<p>10/5 - relatively transparent</p> <p>No online payment tools exist.</p>
Recommendations:	<ul style="list-style-type: none"> <li>To make possible payment of the 1,100 AZN fee online.</li> <li>To introduce the online application form for construction licenses (to be filled in online).</li> <li>To derive information on state registration of business legal entities from the data base of the Ministry of Taxes.</li> <li>To arrange user satisfaction surveys.</li> <li>To publicize number of users and their growth.</li> </ul>		
<p>Service provider: State Procurement Agency</p> <p>Name of the e-service: providing information on the planned tenders for the state procurement purposes</p>	<p>4/2 - unilateral interactive</p> <p>Guidelines regulating this service are available, attachments no 1, 2 and 3 required for tender invitation, are uploaded on the website in PDF format. However, there are no tools for e-application for tender</p>	<p>10/3 - poor</p> <p>There are no e-application tools.</p>	<p>10/2 - non-transparent</p> <p>In addition to lack of e-application tools, there are respectively</p>

Service content: users can obtain information on the tenders within the state procurement process.	participation.		no online payment tools.
Recommendations:	<ul style="list-style-type: none"> <li>To create online application tools.</li> <li>To introduce the online payment tools for participation in tenders</li> <li>To derive information on financial reports of companies and the status of registration with the Ministry of axes, as well as financial capacities from the data base of the Ministry of Taxes and respective banks.</li> </ul>		
Service provider: State Property Committee	(1) 4/3 – bilateral interactive (2) 3/3 - bilateral interactive	(1) 10/8- good (2) 10/8- good	(1) 10/8 – sufficiently transparent. (2) 10/8 – sufficiently transparent.
Name of the e-service: Receipt of applications and documents for issuance of title documents	The first e-service is not fully complete. The second service is automated to the level of e-application and was assessed on the 3 score scale.	Video clip or instructions to help users to get familiar with the service are not available. At the same time, satisfaction surveys are not carried out to measure the quality of e-service. The good aspect of these services is that monthly users' rate is given on the website.	Tools for e-application and e-payment are available; however, users need to upload scanned copies of documents; national ID (for citizens) and registration certificates (for legal entities). Whereas this information can be obtained respectively from IAMAS system of the Ministry of Interior and AVIS system of the Ministry of Tax.
Service content: users of these services can apply in order to: (1) obtain paper based title documents for real estate and (2) (non)-encumbrance certificates			
Recommendations:	<ul style="list-style-type: none"> <li>To integrate the data base of the Committee into the respectively IAMAS system of the Ministry of Interior and AVIS system of the Ministry of Tax.</li> <li>To conduct customer satisfaction survey</li> <li>To conduct survey to inquire into needs and requirements of customers.</li> </ul>		
Service provider: Ministry of Labor and Social Protection of Population	4/4 – fully automated	10/7 – good	8/8 – sufficiently transparent
Name of the e-service: registration	The e-service is the most frequently used e-service in Azerbaijan. By 1 October 2014, 1,043,712	The guidelines for the service are not available	This e-service is not

of labor contracts and informing the employers  Service content: users (legal entities) can register their employees' labor contracts online	contracts were registered via this service <sup>82</sup> . The main problem is that only one day is given to make changes in the registered contracts. Upon expiry a paper based letter shall be written to the Ministry. Only after permission from the Ministry changes will be possible to be made.	in the e-service section. Satisfaction of customers is not measured.	susceptible to corruption.
Recommendations:	<ul style="list-style-type: none"> <li>• To register request for changes in the contracts and make response of the Ministry electronically.</li> <li>• To conduct satisfaction survey.</li> </ul>		
Service provider: State Social Protection Fund  Name of the e-service: Online submission of reports on deductions on mandatory social insurance  Service content: users (legal entities and individuals) can submit reports on mandatory social deductions and pay online	4/4 fully automated  The e-service is fully automated; however, it is not integrated into the e-government portal.	10/6 - satisfactory  Satisfaction of customers is not measured.	10/8- sufficiently transparent  Note: the status of mandatory social insurance, i.e. chronology of payments is not quite clear. Thus, users can not see their deductions made in chronological order; their purpose, residual balance and information on percentage are not available.
Recommendations:	<ul style="list-style-type: none"> <li>• To integrate the service into the e-government portal.</li> <li>• To conduct customer satisfaction survey.</li> <li>• To conduct survey to inquire into needs and requirements of customers.</li> <li>• Regardless of the mode of payment, chronological order of deductions, their purpose, residual balance and information on percentage shall be visible to users in an e-window.</li> </ul>		
Service provider: State Social Protection Fund  Name of the e-service: online registration of the insured	4/4 fully automated  The e-service is fully automated; thus in October 2014 the number of its users reached 17,788 <sup>83</sup> and is the 6-th most popular e-service.	10/8 - good  Satisfaction of customers is not measured.	8/8- sufficiently transparent  This e-service is not susceptible to corruption.

<sup>82</sup> [www.e-gov.az](http://www.e-gov.az), October 2014 bulletin

<sup>83</sup> [www.e-gov.az](http://www.e-gov.az), November 2014 bulletin

Service content: users can perform online registration of the insured in the mandatory state social insurance system by legal entities.			
Recommendations:	<ul style="list-style-type: none"> <li>To conduct satisfaction survey.</li> </ul>		
<p>Service provider: State Migration Service</p> <p>Name of the e-service: Receipt of applications and documents for granting citizenship of the Republic of Azerbaijan</p> <p>Service content: users can apply to obtain for citizenship of the Republic of Azerbaijan</p>	4/3 bilateral interactive	<p>10/6 - satisfactory</p> <p>Guidelines for the service are not available in the e-services section of the website. Satisfaction of customers is not measured.</p>	<p>10/6- relatively transparent</p> <p>Online payment tool is available. The e-service is not integrated into the e-government portal. Many documents that are required in scanned form can be extracted from information systems of other agencies.</p>
Recommendations:	<ul style="list-style-type: none"> <li>To upload guidelines for the service in the e-services section of the website.</li> <li>To integrate the e-service into the e-government portal.</li> <li>To conduct survey to inquire into needs and requirements of customers.</li> <li>To bring the service to 4th level (to deliver decision electronically).</li> </ul>		
<p>Service provider: Ministry of Justice</p> <p>Name of the e-service: Receipt of applications and documents for registration of civil acts (issuing death, birth, marriage, divorce certificates)</p> <p>Service content: users can apply with a request to registration of civil acts (issuing death, birth, marriage, divorce certificates)</p>	<p>3/3 unilateral interactive</p> <p>The documents can be obtained in person pursuant to e-application.</p>	<p>10/7 - satisfactory</p> <p>No video reels or instruction manuals to help the users are available.</p>	<p>10/8 - sufficiently transparent</p> <p>Online payment tool is available. Many documents that are required in scanned form can be extracted from information systems of other agencies.</p>
Recommendations:	<ul style="list-style-type: none"> <li>To conduct customer satisfaction survey.</li> </ul>		

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|  | <ul style="list-style-type: none"><li>• To regularly publish reports on the number of users.</li><li>• To prepare manual how to use the service.</li></ul> |
|--|--|

N	Name of the e-service (30 services)			
	<i>SOCIAL PROTECTION OF POPULATION</i>	Technical assessment	Level of public participation	Level of transparency
	<b>1. Ministry of Labor and Social Protection of Population</b>			
1.1.	Receipt of applications and documents for assignation of unemployment status and allowance	4/1 informative	10/2 poor	8/2 non-transparent
1.2	Job searches through employment authorities	4/1 informative	10/2 poor	8/2 non-transparent
1.3.	Registration of labor contracts and informing the employers	4/4 fully automated	10/7 good	8/8 sufficiently transparent
	<b>2. State Social Protection Fund</b>			
2.1	Online registration of the insured	4/4 fully automated	10/8 good	8/8 sufficiently transparent
2.2	Providing the pensioners with information	3/3 e-application and e-information reception	10/8 good	8/8 sufficiently transparent
2.3.	Online submission of reports on deductions on mandatory social insurance	4/4 fully automated	10/6 satisfactory	10/8 sufficiently transparent
	<b>CIVIL REGISTRATION</b>			
	<b>3. Ministry of Internal Affairs</b>			
3.1.	Receipt of applications and documents for changing of national passports	3/2 unilateral interactive	10/3 poor	10/1 non-transparent
3.2.	Receipt of applications and documents for issuing of driver's licenses	3/2 unilateral interactive	10/3 poor	10/1 non-transparent
3.3.	Receipt of applications and documents for changing of identity cards of citizens	3/2 unilateral interactive	10/3 poor	10/1 non-transparent
3.4.	Ordering a combination of numbers or letters on state registration plates of means of transportation	3/2 unilateral interactive	10/3 poor	10/1 non-transparent
3.5	Provision of information on measures related with administrative violations of traffic regulations and payment of fines	4/4 fully automated	10/6 satisfactory	10/9 transparent
	<b>4. Ministry of Health</b>			
4.1.	Provision of information on e-health cards of citizens	3/3 e-application and e-information reception	10/5 satisfactory	8/8 sufficiently transparent
4.2	Provision of information from the electronic registry of medical certificates on birth	3/3 e-application and e-information reception	10/5 satisfactory	8/8 sufficiently transparent
4.3	Provision of information from the	3/0	10/0	8/0

	electronic registry of medical certificates on death			
	<b>5. Ministry of Justice</b>			
5.1	Issuing of documents on registration of registered civil status (death, birth, marriage, divorce certificates)	4/0	10/0	8/0
5.2.	Receipt of applications and documents for registration of civil acts (issuing death, birth, marriage, divorce certificates)	3/3 e-application	10/8 good	10/8 Sufficiently transparent
	<b>6. Ministry of Education</b>			
6.1	Provision of pupils with information on their current educational achievements	3/3 e-application and e-information reception	10/3 poor	8/5 relatively transparent
	<b>7. State Migration Service</b>			
7.1	Receipt of applications and documents for granting citizenship of the Republic of Azerbaijan	4/3 e-application	10/6 satisfactory	10/6 relatively transparent
	<b>PROPERTY ISSUES</b>			
	<b>8. Ministry of Communication and High Technologies</b>			
8.1	Receipt of applications and documents for landline telephone installation	4/4 fully automated	10/7 good	10/10 sufficiently transparent
8.2	Receipt of applications and documents for change of phone numbers and their subscribers names	4/4 fully automated	10/7 good	10/10 sufficiently transparent
	<b>9. State Land and Mapping Committee</b>			
9.1	Receipt of applications and documents for preparation of land cadastre information and provision of cadastre services	3/3 e-application	10/6 good	10/8 sufficiently transparent
	<b>10. State Registry of Real Estate</b>			
10.1	Receipt of applications and documents for issuance of title documents	3/3 e-application	10/8 good	10/8 sufficiently transparent
10.2	Receipt of applications and documents for issuance of (non)-encumbrance certificates	4/3 e-application	10/8 good	10/8 sufficiently transparent
	<b>SERVICES FOR BUSINESSES</b>			
	<b>11. Ministry of Taxes</b>			
11.1	Receipt of electronic tax declarations and payment of taxes and other budgetary dues through the internet	4/4 fully automated	10/9 Excellent	10/10 sufficiently transparent
11.2	Online registration of individual entrepreneurs	4/4 fully automated	10/9 Excellent	8/8 sufficiently transparent
11.3	Online registration of legal entities	4/4	10/9	8/8

		fully automated	Excellent	sufficiently transparent
	<b>12. State Customs' Committee</b>			
12.1.	Receipt of electronic customs' declarations for customs clearance of goods and means of transportation	4/0	10/0	10/0
	<b>13. Public Procurement Agency</b>			
13.1.	Provision of information on planned tenders under public procurement	4/2 unilateral interactive	10/3 poor	10/2 non-transparent
	<b>14. State Statistics Committee</b>			
14.1.	Submission of online statistics reports	4/4 fully automated	10/7 good	10/8 sufficiently transparent
	<b>15. State Committee for Urban Building and Architecture</b>			
15.1.	Application for construction permits	4/3 e-application	10/5 satisfactory	10/5 relatively transparent

## VIII. FINDINGS AND RECOMMENDATIONS: E-GOVERNMENT INFRASTRUCTURE

<p>1. Strategic and conceptual plan with regards to electronic services is in the process of formation. Thus, if Azerbaijan 2020 Look into Future Plan envisions electronization of all public services, it is clear that a precise strategic plan is lacking. In other words, there is no clear plan to envision the stages of transfer to electronic services, the stage of the services development, etc.</p>	<p>To prepare a conceptual plan of development of electronic government by 2020. The plan shall set forth stages of development and have measurable indicators of success. The draft State Program on Development of E-services shall be adopted. The e-registry of public services rendered by all public agencies, including online and offline services shall be created<sup>84</sup>.</p>
<p>2. The financial support of electronic government is not clearly determined. The state budget does not provide funding to public agencies with the purpose of electronic services development. Therefore, creation of services is funded by public agencies from their administrative budgets. In the result public agencies that have extra budgetary funds are in a position to better develop electronic services, than those agencies without access to such funds, whereas creation of information systems is a costly endeavor. Some of the e-services require cooperation among several public institutions, which requires both financial and technical capacity.</p>	<ol style="list-style-type: none"> <li>1. To ensure that budgets allocated for public institutions include budget lines on development of e-services.</li> <li>2. Priority in allocation of funds from the state budget should be aimed at developing shared e-services that require participation of several agencies.</li> </ol>
<p>3. Barriers to development of information systems and resources Insufficient cooperation between several public agencies in provision of some e-services (that require references from other agencies to deliver a service) has resulted in the situation when most e-services have stuck at the application stage; moreover, most e-services send scanned version of paper based documents. In other words, services are not completed online even though paper documents are not used. In order to elevate electronic services to new quality level, it is important to develop information systems and ensure smooth information exchange.</p>	<ol style="list-style-type: none"> <li>1. It would be expedient to put together a list of priority information systems and resources being developed to be funded by the state budget in priority order.</li> <li>2. Therefore, it is recommended to include into the priority list the establishment and development of information systems on personal data, business, real estate, land cadastre, as well as information exchange among state agencies.</li> <li>3. Alongside with this information, electronization of the state archive, courts, movable property and health data shall not be neglected.</li> </ol>
<p>4. Existing barriers to smooth exchange of</p>	<p>It is recommended:</p>

<sup>84</sup> P residential decree No 262 dated 11 September 2014

<p>information Today Azerbaijan has developed to a certain degree the database of personal and business data which has a direct impact on the quality of e-services; however, the data base of real estate has not been completed yet, neither full exchange of data from business database (AVIS) is ensured within the e-government framework.</p> <p>Data System (X-road System) for secure data exchange among public institutions has been established. Public agencies use this tool to a certain extent by joining the e-government portal. However, at these stage public agencies when rendering e-services, especially those that are targeting citizens, make a very limited little use of this information exchange tool. Alongside, with the Data System, public agencies AZSTATE data exchange system created by Special State Security Service as their communication network.</p> <p>It should also be noted that unified data exchange standards (general format and standards), to which public institutions would refer to, has not been developed.</p>	<ol style="list-style-type: none"> <li>1. To expedite development of the data base of real estate and land cadastre, as well as exchange of the information with other public agencies;</li> <li>2. At the same time, Ministry of Labor, State Property Committee, Land and Mapping Committee, State Procurement Agency start use of business data from AVIS information system of Ministry of Taxes;</li> <li>3. To expand use of the X-road system channels, as this is a secure data exchange infrastructure;</li> <li>4. To develop standards (formats and protocols) for data exchange based on EU experiences, especially, Estonia, Germany and France.</li> </ol>
<p>5. The practice of using different program languages in creation of information systems by various public agencies continues. This creates additional technical problems for harmonization of various information systems. The created X-road system allows overcoming this barrier. Technical requirements for information systems and e-services integration to the e-government portal have been adopted<sup>85</sup>.</p>	<p>It is very important that public agencies pay more attention to implementation of this decree to ensure interoperability (working together) of different information systems.</p>
<p>6. The public agencies in Azerbaijan perceive e-government in a narrow sense as a tool to combat petty corruption, while e-government is one of the main instruments to ensure rationalization and structural transparency of and quick service delivery by the public administration system.</p>	<p>The tender process of public agencies shall be automated and become more transparent. The State Agency for Public Procurement shall utilize e-tenders and promote organization thereof by other public agencies.</p> <p>Alongside with this, information and communication technologies shall be widely used in order to ensure financial transparency of public agencies. Creation of electronic Integrative Financial</p>

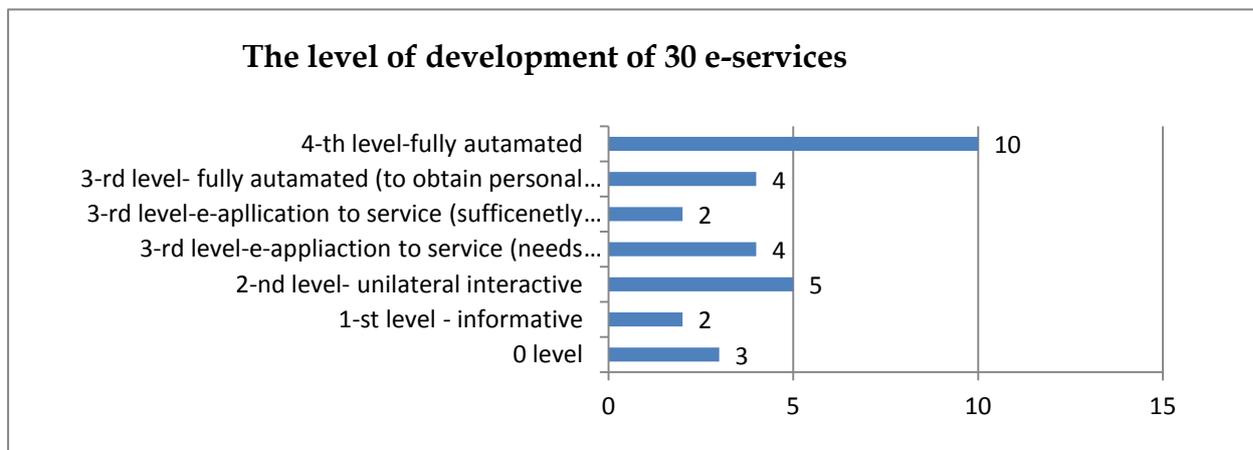
<sup>85</sup> Cabinet of Ministers decree No 118 dated 1 May 2014

	Management Tool shall become the government's policy priority. This is also good field for cooperation with local IT businesses.
<p>7. The e-government portal is perceived only as a platform to deliver e-services.</p> <p>The e-government portal shall be one of the main tools to deliver the e-government policy and strategy.</p>	The portal shall additionally offer the laws by sector (e-qanun), government's orders, decrees, court decisions, execution of the state budget, and contact details of public officials.
<p>8. Further development of e-service delivery to business shall be ensured.</p> <p>The e-services on licenses and permits for businesses stay at the level of provision of information on respective procedures, in other words, these services are not automated. To illustrate, despite existing legal provisions, customs' clearance is not included into the e-environment.</p>	<ol style="list-style-type: none"> <li>1. The website <a href="http://www.icazeler.gov.az">www.icazeler.gov.az</a> shall offer a simplified list of documents required to obtain licenses and permits, introduce tools for online payment of state fees, as well as issue those licenses and permits online.</li> <li>2. Reforms to ensure acceptance and clearance of customs' tax declarations online should be expedited.</li> </ol>
<p>9. Delivery of socially important e-services to citizens is not well developed neither broadly used.</p> <p>Currently, the number of e-signature holders in Azerbaijan is less than 80,000 (or 1% of the total population), of which only 5,000 is the share of citizens. The main reason is that e-signature cards are less important in daily lives of citizens.</p> <p>As seen, unlike business, citizens do not wish to use social services that require e-signature. First, obtaining an e-signature is a procedure that requires some efforts and finances. Second, social services have stuck at the information stage and therefore, obtaining those services is not worth the effort and money. In other words, citizens make a rational choice. In order to increase the number of e-service users in Azerbaijan, national ID cards of new generation is planned<sup>86</sup>. The national IDs to be issued will have e-signature certificates incorporated, which will allow multiple use of e-signature.</p>	<ol style="list-style-type: none"> <li>1. It is advised to introduce a single multi-function electronic identification card. The new generation of national ID cards shall be multifunctional (serve as health card, pension card, drivers' license, bank card).</li> <li>2. Social allowances, targeted social aid, determination of the disability degree, foreign passport, personal ID card, looking for a job, getting a license for some services (for example, taxi service), registration of acts of civil status - all these shall be automated.</li> </ol>
10. Human resources problem in development of electronic services	It is recommended to ensure exchange of experience between local IT specialists and

<sup>86</sup> Presidential order No 893 dated 28 November 2014

<p>Improvements in quality of e-services are possible with a skilful team of IT professionals. At the moment, utilizing international experience helps to meet this gap. Good relationships have been established with Korea, one of the leaders in the sphere of e-government. Korean Development Agency (KOICA), organizes training programs for local specialists.</p>	<p>prioritize training abroad for local IT specialists under various inter-governmental assistance programs.</p> <p>The concept of e-government should be introduced into curriculum of state universities. The best scenario would be to establish E-government Academy.</p>
<p><b>11.</b> Further development of legal framework is needed. Concretely, there is no law in force on information systems and data bases, apart from several government decrees.</p>	<p>To expedite the process of adoption of the law on data resources.</p>

## IX. FINDINGS AND RECOMMENDATIONS: E-SERVICES



**Diagram 11.**

Current situation	Recommendations
<p><b>1. 3 of the 30 e-services do not exist in the electronic environment</b></p> <p>Receipt of electronic customs' declaration on customs' clearance of goods and means of transportation (State Customs Committee) 4/0            Provision of information through the electronic registry of medical certificates on death (Ministry of Health) 3/0            Issuing of registration documents of already registered civil status (4/0)</p>	<p style="text-align: center;"><b>State Customs' Committee            Ministry of Justice            Ministry of Health</b></p> <p>To ensure that these services are provided in an online format.</p>
<p><b>2. 2 of the 30 e-services are included into the e-environment and remain at the first or informative level, i.e. respective application forms have not been yet uploaded; neither e-application under these two services is available.</b></p> <p>Job searches through employment authorities (Ministry of Labor) (4/1 )            Receipt of applications and documents for assignation of unemployment status and allowance (Ministry of Labor) (4/1)</p>	<p style="text-align: center;"><b>Ministry of Labor and Social Protection of Population</b></p> <p>Job searches through employment authorities:</p> <ol style="list-style-type: none"> <li>1. First of all, uploading job application forms and labor contracts on the website;</li> <li>2. Providing the user with contact information of the institution, to which he/she could apply;</li> <li>3. Providing the user with the opportunity to apply for jobs with application forms that they can fill in online;</li> <li>4. Providing private companies and organizations with the opportunity to place vacancy advertisements on the websites to be filled in online;</li> <li>5. Updating vacancy announcements on a regular basis and sending regular e-mail notifications to users on updates;</li> </ol>

	<p>6. Publishing the number of persons, if possible names of persons who have found jobs through the website, on a regular basis;</p> <p>7. Create a discussion page, which would contribute to the development of the e-service and upgrading the content, based on feedback received from users.</p> <p>8. Adjusting the name of the service with its content as per the guidelines of receipt of applications and documents for assignation of unemployment status and allowance;</p> <p>9. Developing a proposal to amend the Law on Employment, which would provide for submitting applications in e-format;</p> <p>10. Abolishing the requirement to visit employment offices for registration;</p> <p>11. Obtaining the information on salaries during the previous 12 months and pensions from SSPF; and entrepreneurship activity of applicants from the Ministry of Taxes.</p>
<p><b>3. 5 out of the 30 e-services are at the second or one-side interactive level. These e-services have uploaded application forms on their websites. These forms shall be printed out, filled in by hand and submitted to an agency in person.</b></p> <p>Issuing driver's license (MIA) (3/2)  Ordering a combination of numbers or letters on state registration plates of means of transportation (MIA) (4/2)  Application and reception of documents to change national passport (MIA) (3/2)  Receipt of applications and documents to change identity cards of citizens (MIA) (3/2)  Organization of e-procurement (State Procurement Agency) (4/2)</p>	<p style="text-align: center;"><b>Ministry of Internal Affairs</b></p> <p>1. Application forms for e-services are currently hidden inside regulation for each service; forms shall be visible and given on websites separately;</p> <p>2. Enabling users to send scanned copies of required documents (such as military certificate, civil status acts, etc.);</p> <p>3. Enabling tools for e-payment of the state fees;</p> <p>4. Automated notification of the person on approaching expiry date of his/her national passport or identity card (by e-mail, mobile message or other electronic means).</p> <p style="text-align: center;"><b>State Procurement Agency</b></p> <p>Organization of e-tenders, including e-application for tender and online payment tools</p>
<p><b>4. 4 of the 30 e-services are at the third or two-side interactive level. In other words, these services allow online application. Decision is not delivered online, neither online document is provided.</b></p> <p>Receipt of applications and documents for granting citizenship of the Republic of Azerbaijan (State Migration Service) (4/3)</p>	<p style="text-align: center;"><b>State Migration Service  State Committee for Urban Building and Architecture  State Property Committee</b></p> <p>Ensuring full completion of the services in an online format</p>

<p>Receipt of applications and documents for permits for construction of buildings (State Urban Planning and Architecture Committee) (4/3)</p> <p>Receipt of applications and documents (non)-encumbrance certificates for real estate from the state registry (State Property Committee) (4/3)</p>	
<p><b>5. 4 of the 30-e-services allow obtaining personal information online pursuant to online application.</b></p> <p>Providing pupils with information on their current educational achievements (Ministry of Education) (3/3)</p> <p>Providing information from health e-card (Ministry of Health) (3/3)</p> <p>Providing information to pensioners (SSPF) (3/3)</p> <p>Providing information from the e-registry on birth medical certificates (Ministry of Health) (3/3)</p>	<p>By their nature, these services do not require making decisions or issuing documents; are fully automated and reached maximum of their development.</p>
<p><b>6. 3 of the 30 e-services are on the 3rd level – e-application level. These services are sufficiently automated.</b></p> <p>Application for issuing documents on registration of civil status (Ministry of Justice) (3/3)</p> <p>Receipt of applications and documents for preparation of land cadastre information and provision of cadastre services (State Land and Mapping Committee) (3/3)</p> <p>Receipt of applications and documents for abstracts for real estate (State Property Committee) (3/3)</p>	<p>These services do require making decisions or issuing documents; however, by their nature, the process requires personal contact and cannot be automated up to the 4th level.</p> <p style="text-align: center;"><b>State Land and Mapping Committee</b></p> <ol style="list-style-type: none"> <li>1. To integrate online payment tool to the single e-government portal;</li> <li>2. To provide users with cadastre information (not the land technical passport itself) online.</li> </ol>
<p><b>7. 10 e-services are at the level 4. This means, that a user makes on-line application, receives a decision online and pays online a service fee or a fine, whatever applicable.</b></p> <p>Receipt of e-declarations and payment of taxes and other budgetary dues through the internet to Ministry of Taxes (4/4)</p> <p>Online registration of commercial legal entities (Ministry of Taxes) (4/4)</p> <p>Online registration of individual entrepreneurs (Ministry of Taxes) (4/4)</p> <p>Receipt of applications and documents for landline telephone installation, changing of</p>	<p style="text-align: center;"><b>Ministry of Taxes</b></p> <ol style="list-style-type: none"> <li>1. To conduct satisfaction surveys regarding the e-service to inquire into needs and requirements of users;</li> <li>2. To disclose the number of users of e-services, as well as their proportion to the number of traditional users;</li> <li>3. To create online tools to set up legal entities for e-signature user of Ministry of Communication and High Technologies;</li> <li>4. In cooperation with banks, to render a pre-filed service for simplified tax payers, i.e., simplified tax shall be calculated by the</li> </ol>

<p>phone numbers and ownership (Ministry of Information and High Technology) (4/4)  Submission of statistic reports (State Statistics Committee) (4/4)  E-registration of labor contracts (MLSP) (4/4)  Payment for mandatory social insurance (SSPF) (4/4)  Online registration of the insured (SSPF) (4/4)  Payment of fines for violation of traffic regulation(MIA) (4/4)</p> <p>Order for installation of new telephone line (MTNT) (4/4)</p>	<p>Ministry of Taxes rather than by the tax payer. Upon confirmation from the tax payer, the tax shall be paid automatically.</p> <p style="text-align: center;"><b>State Statistics Committee</b></p> <p>Information on number of employees and salaries shall be requested from Ministry of Taxes and State Social Protection Fund instead of collecting this data from legal entities.  Note: It is possible to receive quarterly information on legal entities with fewer than 10 employers from the data base of Ministry of Tax.</p> <p style="text-align: center;"><b>State Social Protection Fund</b></p> <p>To clearly show payment of mandatory social protection tax in chronological order. This system shall be introduced promptly.</p> <p style="text-align: center;"><b>Ministry of Labor and Social Protection of Population</b></p> <p>At the moment to change information on labor contracts already registered, an employer shall write a paper based letter to the Ministry. Instead, instrument for electronic notification of changes shall be introduced.</p>
<p><b>8. The below 8 services are not integrated into the single e-government portal.</b></p> <p>Receipt of applications and documents for granting citizenship of the Republic of Azerbaijan (State Migration Service);  Providing pupils with information on their current educational achievements (Ministry of Education);  Issuing registration documents on registered of civil status (Ministry of Justice);  Receipt of applications and documents for changing of national passports (MIA);  Receipt of applications and documents for changing of identity cards of citizens (MIA);  Issuing of driver’s licenses (MIA);  Ordering a combination of numbers or letters on state registration plates of means of transportation (MIA);  Receipt of electronic Customs declaration on customs formalization of goods and means of transportation (State Customs Committee);</p>	<p>These services shall be integrated into the single e-government portal.</p>

<p>Provision of information through the electronic registry of medical certificates on death (Ministry of Health).</p>	
<p><b>9. Transparency of the following services differs as shown below:</b></p> <p><b>- Non-transparent services:</b></p> <p>Receipt of electronic customs' declaration on customs formalization of goods and means of transportation (State Customs' Committee) (10/0)</p> <p>Provision of information through the electronic registry of medical certificates on death (Ministry of Health) (8/0)</p> <p>Providing with registration documents of registered acts of civil status (Ministry of Justice) (8/0)</p> <p>Issuing of driver's licenses (MIA) (10/1)</p> <p>Ordering a combination of numbers or letters on state registration plates of means of transportation (MIA) (10/1)</p> <p>Receipt of applications and documents for changing of national passport (MIA) (10/1)</p> <p>Receipt of applications and documents for changing of identity cards of citizens (MIA) (10/1)</p> <p>Organization of e-tenders (State Procurement Agency) (10/2)</p> <p>Searching for a job with the help of employment agencies (MLSPP) (8/2)</p> <p>Receipt of applications and documents to obtain status of an unemployed and award unemployment allowance (MLSPP) (8/2)</p> <p><b>- Relatively transparent services:</b></p> <p>Receipt of applications and documents for granting citizenship of the Republic of Azerbaijan (State Migration Service) (10/6)</p> <p>Issuing of permits for construction of buildings (SUPAC) (10/5)</p> <p>Provision of pupils with information on their current educational achievements (Ministry of Education) (8/4)</p> <p><b>- Sufficiently transparent services are:</b></p> <p>Provision of information on health e-cards of citizens (Ministry of Health) (8/8)</p> <p>Receipt of applications and documents for preparation of land cadastre information and provision of cadastre services (SLMC) (10/8)</p> <p>Provision of information through the electronic</p>	<p>Transparency is measured on a scale from 10 to 0 or 8 to 0 depending on the nature of the service.</p>

<p>registry of medical certificates on birth (Ministry of Health) (8/8)</p> <p>Provision of information on measures related with administrative violations of traffic regulations and payment of fines (MIA) (10/9)</p> <p>Submission of e-tax declarations (Ministry of Taxes) (10/10)</p> <p>Application for issuing documents on registration of civil status (Ministry of Justice) (10/8)</p> <p>Online registration of commercial legal entities (Ministry of Taxes) (8/8)</p> <p>Online registration of individual entrepreneurs (Ministry of Taxes) (8/8)</p> <p>Receipt of applications and documents for telephone line installation (MCNT) (10/10)</p> <p>Receipt of applications and documents for changing of phone numbers and ownership (MCNT) (10/10)</p> <p>Submission of statistical reports (State Statistics Committee) (10/7)</p> <p>E-registration of labor contracts (MLSP) (8/8)</p> <p>Payment for mandatory social insurance (SSPF) (10/8)</p> <p>Online registration of the insured (SSPF) (8/8)</p> <p>Providing information to pensioners (SSPF) (8/8)</p> <p>Receipt of applications and documents (non)-encumbrance certificates for real estate from the state registry (State Property Committee) (10/8)</p> <p>Receipt of applications and documents for abstracts for real estate (State Property Committee) (10/8)</p>	
<p><b>10. Regulation has not been prepared to support the following e-services:</b></p> <p>Provision of information through the electronic registry of medical certificates on death (Ministry of Health)</p> <p>Receipt of electronic customs' declaration on customs formalization of goods and means of transportation (State Customs' Committee)</p>	<p style="text-align: center;"><b>Ministry of Health State Customs' Committee</b></p> <p>To develop regulation to support the indicated e-services.</p>
<p><b>11. There is inconsistency between the name and the content of the e-service in the respective regulation.</b></p> <p><b>Name of the service:</b></p> <p>Reception of applications and documents to obtain status of an unemployed and award of unemployment allowance.</p>	<p style="text-align: center;"><b>Ministry of Labor and Social Protection of Population</b></p> <p>To bring in line the name and the content of the e-service in the respective regulation.</p>

<p><b>Content of the service in its regulation:</b></p> <p>This service is designed to provide unemployed citizens with comprehensive information on how to apply to obtain status of an unemployed and award of unemployment allowance.</p>	
<p><b>12. A small portion of e-services are accountable.</b></p> <p>In other words, it is not known how many people monthly used e-service, what is the growth rate of users in the reported period, their proportion to traditional (off-line) users, how many users are citizens or legal entities. The Ministry of Communication prepares a monthly bulletin and provides statistics for 20 most frequently used services; still statistics shall be prepared and be available for all services.</p>	<p><b>Ministry of Communication and High Technologies</b></p> <p>To publish statistics on every e-service, including the number of users and their percent as compared to traditional (off-line) users.</p>
<p><b>13. E-Participation was assessed on the 10-score scale.</b></p> <p>The best agency to ensure e-participation with the score of “excellent” is Ministry of Taxes (10/9) Whereas others are assessed as “good” State Social Protection Fund (10/8) State Property Committee (10/8) Ministry of Justice (10/8) Ministry of Communication (10/7) State Statistics Committee (10/7)</p> <p>The low level of participation is seen in the e-services of the Ministry of Interior Affairs (10/3) and State Procurement Agency (10/3), and the rest have a moderate level of e-participation.</p> <p>No regular online satisfaction surveys in order to identify needs and requirements of e-service users, as well as to assess the quality of the service are conducted. Only the Ministry of Taxes, through its online office (“karguzarlıq”) section, offers a general satisfaction survey on the Ministry’s functions.</p>	<p><b>All agencies</b></p> <ol style="list-style-type: none"> <li>1. Conducting regular online satisfaction surveys in order to identify needs and requirements of e-service users, as well as to assess the quality of the service.</li> <li>2. To introduce hotlines, as well as tools to enable users to give their opinion via online tools.</li> </ol>
<p><b>14. There are no online tools to receive e-certificates and documents or this is impossible in practice, for example:</b></p> <p>National passports, national ID cards, driver’s licenses, car number plates by the Ministry of Interior; Abstracts and (non-) encumbrances certificates from the Registry of the State Property</p>	<p><b>All public agencies, including: Ministry of Interior Ministry of Tax State Social Protection Fund Ministry of Labor and Social Protection</b></p> <p>To organize special postal service for citizens, so that citizens could receive for a fee (or free of charge) respective documents</p>

<p>Committee;  Registration certificates of individual entrepreneurs and legal entities by Ministry of Taxes;  Insurance card by the State Social Protection Fund;  Civil status acts by the Ministry of Justice, etc.</p>	<p>and certificates by post.</p>
<p><b>15. The country has government payment portal under the Central Bank (apus.az), however, it is not integrated into the single e-government portal.</b></p>	<p style="text-align: center;"><b>Central Bank  Ministry of Communication and High Technologies</b></p> <p>To integrate government payment portal into the e-government portal</p>