**Feasibility Study to Define Institutional Capacities of Civil Registration Offices in Tajikistan**

Study 1.1

The document discusses findings of the Feasibility Study on civil acts registration system in the Republic of Tajikistan. It provides information about methodology, descriptive information of the existing system and proposes alternative as of August 2016

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Innovations and Reforms Center

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The Feasibility Study is commissioned by the UNDP Office in the Republic of Tajikistan and Implemented by the IRC

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# List of Abbreviations

Abbreviations used in this document have the following meanings:

|  |  |
| --- | --- |
| **MoJ** | Ministry of Justice of the Republic of Tajikistan |
| **UNDP** | United Nations Development Programme |
| **SDC** | Swiss Development Cooperation |
| **MFA** | Ministry of Foreign Affairs of the Republic of Tajikistan |
| **MoI** | Ministry of Interior of the Republic of Tajikistan |
| **HR** | Human Resources |
| **IT** | Information Technologies |
| **ICT** | Information and Communication Technologies |
| **CAR System** | Civil Acts Registration System |
| **CAR division** | Civil Acts Registration division of the Ministry of Justice |
| **CAR Office/s** | Civil Acts Registration Office/s - Civil Acts Registration Sector/s, Jamoat/s, Consular Service/s |
| **CAR Sector/s** | Civil Acts Registration Sector/s |
| **CAR Law** | Law "on State Registration of Acts of Civil Status" |

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# Management Summary

In summer 2016 Innovations and Reforms Centre (IRC) started to conduct the Feasibility Study to Define Institutional Capacities of Civil Registration Offices in the Republic of Tajikistan. The Feasibility Study is commissioned by the UNDP Office in the Republic of Tajikistan and implemented with the financial support of the Swiss Development Cooperation in the Republic of Tajikistan. This Feasibility Study is expected to lay the foundation to reforming civil registration system in the Republic of Tajikistan to better serve its objectives as a registrar of important facts for the state, persons and delivery of vital statistics.

The purpose of the study is to assess the existing potential and challenges in the Civil Registration Offices (CRO) in terms of introducing an electronic system of civil registration. The study shall address: 1) technical aspects of the CROs, including human resources and financial capacities, and 2) the most optimal model for civil registration service provision. The outcomes of this study shall help the decision makers to understand the feasibility of introducing an electronic system of service provision to the civil registration system, its technical and financial impact, and to see what the potential of this service delivery process reform has.

The key objective of the research was to identify the existing system, analyse key issues faced by the system and assess technical, human and financial resources, the existing legislative base and the software put in place by the EU/EPOS project, and to understand whether the electronic system is feasible in the current reality of the Republic of Tajikistan. A qualitative approach was taken in the course of the Feasibility Study. Various instruments were used to obtain information: analysis of secondary data, thematic questionnaires, and interviews with key informants and observation of the existing system – infrastructure and use of the already developed electronic system.

Results of the Feasibility Study are timely and useful considering the planned reformation of the civil registration system. More and more countries are shifting towards electronic civil registration systems, which eases access to data, reduces duplications and fraud, and enhances customer service improvements, as well as improved vital statistics for better planning. At the same time, the Republic of Tajikistan has made some preliminary steps in implementing e-governance, including the civil acts registration system and thus, the study shall help in planning the next steps in this process. The Republic of Tajikistan plans to reform its civil registration system and therefore, having a preliminary assessment of the existing capabilities, as well as the expectations for the future is essential for government to make well thought out decisions.

The findings of the Feasibility Study indicate that:

* Civil acts registration process, even though in the legislation is coordinated by the Ministry of Justice of the Republic of Tajikistan, is dispersed among several institutions not necessarily under the immediate subordination of the Ministry of Justice – specifically CAR offices (under the Civil Acts Registration division of the Ministry of Justice), Jamoats (under the subordination of local governments) and Consular Services (under the subordination of the Ministry of Foreign Affairs);
* There is a lack of uniformity in service provision as defined by the CAR Law and as implemented in practice; different offices interpret the Law in different manners and their implementation substantially differs either based on their understanding of the Law or traditional viewpoints, on how the implementation shall take place;
* Civil acts records highly depend on the good will of applicants. Applying penalties for not registering vital facts in a timely manner does not serve as an adequate motivation for applicants to apply for registration; therefore resulting in deficiencies in vital statistics as well as risking problems with documenting in the future;
* Government, through several strategic programs and discussions in the course of the Feasibility Study, has showed willingness to shift to e-governance, however it lacks financial capacities to implement the system independently without external financial support;
* In terms of information and communication technology readiness the study has identified that the current processes, infrastructure and architecture are characterized by low readiness with regards to electronification and automation. However, taken together with other factors such as political will, already spent financial and human resources, experience which has already been gained through the EPOS project, and experience gained by the staff of the civil acts registration division, its structural units in the piloting phase, it provides a good point of departure for further development of the electronic system.

# Introduction

The purpose of the study was to assess the state of the civil acts registration system in the Republic of Tajikistan, provide descriptive information on technical, human, financial and policy aspects, carry out analysis of challenges faced by the system, assess the general enabling environment for e-governance in the country and based on this, provide conclusions and recommendations on the way forward for the system’s development.

Key questions to answer as a result of the study are: whether shifting to the electronic system of civil acts registration is technically, financially and politically feasible and whether the benefits it will bring will exceed the costs related to it. Thus, the study carries two key objectives – to provide descriptive information about the *status quo* and an analysis on the way forward for such a system. The current Feasibility Study intends to look deeper into the current situation, provide a detailed description of the existing model, assess alternative models which can improve the civil registration system and identify gaps between “what is” and “what shall be”.

The report is based on the findings as of August 2016 (inclusive) and thus, developments since the August 2016 are not reflected in the document.

The civil acts registration system in the Republic of Tajikistan has been identified as one of the areas in need of reforming. All key stakeholders agree that a functional civil acts registration system is a precondition for providing efficient essential services, maintaining secure documents, implementing a population identification system, compiling a voters’ list, promoting service quality and having accurate vital statistics.

In 2014, understanding the challenges, the civil acts registration system faces in the Republic of Tajikistan, the Government approved and adopted the 2014-2019 Civil Registry System Development Programme. The program reflects upon the challenges of the existing CAR system in the Republic of Tajikistan and offering measures to address them.

In the summer 2015 the Swiss Agency for Development and Cooperation (SDC) and the United Nations Development Programme (UNDP) commissioned an inception survey, which acted as a first step in a wider-scale project to support the civil registration system in the Republic of Tajikistan. The survey identified that the system faces system-specific (infrastructure, human resources, legislation and procedures, etc.), as well as country inherent (public transport, internet, uninterrupted electricity, etc.) challenges.

In December 2015 an agreement was signed between the Ministry of Justice of the Republic of Tajikistan and the United Nations Development Programme (UNDP) on the implementation of the project “Civil Registration System Reform Project in Tajikistan”. The project intends to support the Government of the Republic of Tajikistan in implementing the civil registry system reform. The project implementation period covers years 2015-2023.

To better understand the situation and design ways forward for the system, this current Feasibility Study was carried out, which applied various methods and instruments using qualitative research methods to meet its objectives. A qualitative approach was taken due to the nature of the information involved in the study and the depth of analysis which was required. Specifically, the study used questionnaires, analysis of secondary data, stakeholder discussions, and direct observation on the process to assess the situation.

All key stakeholders were involved in the course of the study and provided information on practice, as well as insight on their attitudes towards the current system and possible electronification (the detailed list of informants is provided in Annex 1). In total three field missions were held prior to drafting this document (the final version) and the research team had an opportunity to talk to representatives of the system at different levels, as well as directly observing the process.

The details of the Study are provided in the following chapters. It begins with the methodology and fieldwork report summary which addresses specifics of the instruments utilised in the course of the Study, including discussion on why these instruments were considered reasonable for the implementation of the Study. Then the document moves to general information discovered in the course of the Study – factual parts on how things are organised in the system, enabling environment in the country and an analysis of the challenges which have been identified. Once the current system is described fully, the document provides an overview of the proposed electronic alternative. This part provides minimum functional requirements defined for the electronic civil registration system, challenges it is expected to address, benefits it is expected to bring to the CAR system as well as the Republic of Tajikistan and its residents in general, projected costs associated with implementing this alternative.

# Methodology and Fieldwork Report

## *Methodology*

The Study applied qualitative research methods and instruments in order to obtain descriptive information about the *status quo* of the system, as well as the general environment, and challenges currently faced by the system. One of the key reasons why qualitative research methods were applied was the need for in-depth analysis of the challenges faced by the system, as well as the root causes of the challenges which could better be identified through qualitative means. Different instruments were applied for the purposes of the study.

A set of instruments was developed to use for the study: questionnaires to obtain information available in the system, interviews to verify data and get deeper into topics of particular importance, direct observation on the process – to obtain the first-hand experience of how things work in practice, secondary data analysis, which enabled the researchers to understand different perspectives from already available reports.

The project team elaborated questionnaires to obtain necessary data from various areas of the civil acts registration system the CAR division of the MoJ, the Human Resource Department of the MoJ and the ICT unit/team of the CAR division and the MoJ, as well as the EPOS project team. The questionnaires carried two main purposes – to obtain information from the primary sources of information, as well as to obtain feedback on how persons responsible for filing the questionnaires understood questions – providing insight about seriousness of intentions towards reforms within the system, as well as competences.

A detailed questionnaire was elaborated and translated in the Tajik and Russian languages (see Annex 2 for the questionnaires). Taking into consideration that it was expected that many questionnaires would be returned in the Tajik language and considering that the final report is expected to be drawn-up in English, in order to reduce the margin of error caused by the translation, data analysis was planned to be carried out in Russian and findings reported in English. (Questionnaires are provided in Annex 2)

Besides questionnaires, the study used face-to-face interviews with different participants of the process, as well as key stakeholders either directly participating, affecting or being affected by the CAR system. The interviews allowed to get deeper into discussion, understand concerns the system participants had and to specify questionnaires and verify data obtained through disseminated questionnaires. Such interviews took place during three missions of the project team, as well as via Skype (with EPOS team – two Skype conversations).

To further get a sense of the situation in the civil acts registration system, the project team carried out on-site visits for selected sites and conducted process observation. On-site visits could enable understanding of physical infrastructure, as well as what can be points of interest in terms of the electronic system – queues, division of tasks, speediness of services rendered. At the same time it could provide opportunity to observe technical skills of the employees of the CAR system, purely in terms of typing, knowing that have been using the software developed by the EPOS project team. In addition, the project experts intended to see how the software developed by the EPOS project team works, which could help understanding its functionality, user friendliness and capabilities.

Finally, taking into consideration the existing legislation, as well as preliminary documents prepared for the purposes of e-governance and electronic civil acts registration system, the analysis of secondary materials could provide a good insight of what has already been studied, what has been missing, what information could be used for efficiency. It could also provide an opportunity to obtain information and various perspectives particularly on issues which were not in the direct focus of the study.

## *Fieldwork report*

Pre-designed questionnaires were sent to the respondents through the UNDP Office in the Republic of Tajikistan during July-August 2016. The initial questionnaire targeted the Civil Acts Registration division of the MoJ of the Republic of Tajikistan and questions, which targeted the CAR sectors specifically, were singled out (in total 11 questions). The CAR division was provided with an instruction, how to fill in the questionnaires and asked to send only singled out questions to the CAR offices. At the end, the CAR division sent the entire questionnaire to the CAR offices, resulting in delays and 73 separate questionnaires were in need of aggregation from the project team prior to its analysis. The main part of the questionnaires had to be been filled in manually in the Tajik language. Information was missing in many cases, parts of the information were provided incorrectly – numbers not adding up, wrong answers to questions, thus leaving room for error where particularly statistics was the case. Where data was missing, which was the case in the majority of questionnaires, the IRC project team had to fill it out during the third mission to the Republic of Tajikistan.

Interviews were held with mid and high level managers, officials and staff during the three missions which were carried out in the first few months of the study. The meetings ranged from general discussion on the issues related to civil acts registration system to more in-depth discussions about practical cases of problematic issues identified in the course of working in or with the system. Visits to five CAR sectors took place during the first visit, allowing the team to observe how applicants received services, listening to the employees of the CAR sectors to hear directly from them the challenges and difficulties they face in the course of carrying out their functions, seeing infrastructure and their work with the software developed in the course of the EPOS project. These visits also served as an opportunity to understand the competence of the employees of the CAR sectors in the civil acts registration sphere. These meetings provided an opportunity to go in depth about questions, which the project team had on the civil acts registration practice vs. normative functions. Moreover, it provided for an opportunity to engage stakeholders in the process, create grounds for their involvement from early on, to hear about their fears towards the reform and about their understanding of the system from various angles. Meetings with the high-level officials, like the Deputy Minister of Justice of the Republic of Tajikistan was important to understand government’s objectives, as well as obtain the vision political decision-makers have towards the project and the system as such.

During the second mission’s direct observation of the software which was developed in the course of the EPOS project was carried out in order to understand how the system works, what functionalities the system currently has and how user friendly it is. Besides software capabilities, the team also had opportunity to obtain first-hand information on the technical parameters of the system and its development potential. The project ICT experts also had opportunity to have discussion with the EPOS project team on the software, ICT infrastructure and human resource capability of bringing the civil acts registration system to life in the Republic of Tajikistan.

The third mission was an opportunity to discuss preliminary findings with different stakeholders, clear all possible misunderstanding that might have been caused by misinterpreting questionnaires, feedbacks from different stakeholders, as well as receive a feedback from all relevant stakeholders, what they considered as deficiencies of the report to expand on those issues more. During the third mission, a workshop was organized by the team of the project "Support to Civil Registration Reform in Tajikistan" in order to present the first draft of the Feasibility Study report to the project's partner organizations.

The project team also carried out a desk research of secondary materials; laws, strategy documents, reform plans, as well as reports compiled on issues related to the civil acts registration system or the enabling environment were analysed.

As a result of these activities this report was prepared, which provides information reflecting the state of play as of August 2016 (inclusive) and does not cover period beyond the date.

# General Information

**1.1 Organisational Structure and Management of the Civil Acts Registration System in the Republic of Tajikistan**

In the Republic of Tajikistan the Ministry of Justice of the Republic of Tajikistan is responsible for the civil acts registration system (CAR Law, Article 9). According the Statute of the MoJ (Resolution № 587 (28/12/2006) of Government of the Republic of Tajikistan), one of the objectives of the MoJ is to regulate the work and increase effectiveness of the civil acts registering offices. To fulfil this objective, the MoJ carries out the following functions: organises and supervises the work of the civil acts registering offices, checks, analyses and generalises their work; ensures, that civil acts registration books are maintained in adequate environment; takes other measures to increase legal counselling and service level rendered to persons and organisations by the employees of the civil acts registration offices; in cases envisaged in the legislation the MoJ develops and approves normative-legal acts, which regulate work of the civil acts registration bodies (Part II of the Statute, paragraph 6).

According the Statute of the MoJ, the Ministry carries its functions through its structural units (Part III of the Statute, paragraph 14). Its functions in the civil acts registration sphere, the MoJ carries out through the Civil Acts Registration division. The CAR division supervises and controls the work of civil acts registration offices (CAR Law, article 9). According the Statute of the CAR division (Decree №503 (01/11/2006) of Government of the Republic of Tajikistan), the division is a legal entity, which has its seal, stamp, letterhead and independent balance sheet.

Main objectives of the CAR division are as follows: ensure timely, full and correct registry of civil acts, improve work of the CAR offices; support regulating the new rituals related to the civil acts registration; coordination and control of work carried out by the CAR bodies. The CAR division implements its functions through a central apparatus, 3 regional units - Sughd, Khatlon and GBAO, 2 marriage houses - the city of Dushanbe and the City of Khujand marriage houses, 2 divisions in Kurgan-Tube and Khujand city and 66 town/district CAR sectors.

According the CAR Law (Article 6), the civil acts registration is carried out by:

* CAR sectors – in the city and the district; state registration of marriages can be performed also in the palaces and houses of marriage;
* Jamoats – in boroughs and villages;
* Consular Services of the Republic of Tajikistan - outside the Republic of Tajikistan, in foreign countries.

According to the standard statutes of the CAR sectors and the marriage houses[[1]](#footnote-1), CAR sector and marriage houses are under the CAR division subordination. Their work is coordinated and controlled by the CAR division and 3 regional units - Soghd, Khatlon and GBAO civil acts registration units.

Jamoats represent structural units of local government bodies – Hukumats; in total there are 427 jamoats and 405 of them are authorized to carry out civil acts registration.

Table 1 – Number of CAR sectors and jamoats in the city of Dushanbe and regions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Administrative-territorial Unit** | **CAR number** | **Marriage House number** | **Jamoat number** | **Supervision Unit** |
| City of Dushanbe | 4 | 1 |  | Supervised by the CARD of the MoJ |
| Districts under Regional Subordination | 13 |  | 115 |
| Soghd Region | 18 | 1 | 106 | Supervised by the Soghd CAR division of the MoJ |
| Khatlon Region | 25 |  | 142 | supervised by the Khatlon CAR division of the MoJ |
| GBAO | 8 |  | 42 | supervised by the GBAO CAR division of the MoJ |
| **Total** | **68** | **2** | **405** |  |

Consular services are under the subordination of the Ministry of Foreign Affairs of the Republic of Tajikistan. In total 18 consular services function outside the Republic of Tajikistan and all of them carry out registration of civil acts of the citizens of Tajikistan residing outside the republic of Tajikistan.

The CAR Law states that the MoJ, through the CAR division responsible for supervising the work of all CAR offices, including the Jamoats and Consular Services in the field of civil acts registration. Thus, jamoats and consular offices are under dual subordination – structurally they are subordinated to Hukumats and the MFA accordingly, while methodological guidance and oversight in the field of the civil acts registration is provided by the MOJ.

Graph 1. Organisational chart of the civil acts registration system in the Republic of Tajikistan follows:

Ministry of Justice

Civil Acts Registration division

3 Regional Civil Acts Registration Units

68 town/district Civil Acts Registration Sectors

2 Marriage Houses

405 Jamoats

18 Consular Services

Hukumats

Ministry of Foreign Affairs

The structure of the central apparatus of CAR division is as follows:

* management (head and a deputy head);
* unit, issuing copies of documents and correcting civil acts records;
* financial-economic sector;
* human resource management sector.

The Minister of Justice appoints and dismisses the head of the CAR division. According to the CAR division statute, the head manages the work of the division and is responsible for fulfilling its objectives; presents the draft normative acts on civil acts registration to the MoJ; appoints and dismisses employees of the central apparatus, regional units, as well as in the City of Dushanbe, town and district CAR sectors; manages the division budget, etc. (statute of CAR division, paragraphs 10 and 11). According to the division roster, the Head of the division has one deputy, who the same time acts as the head of the unit issuing copies of documents and correcting civil acts records.

The CAR division statute does not provide separately topics/functions, which fall under the competence of the CAR division structural units, however the CAR statute allows for easy separation of functions enlisted in it according to units. The unit for issuing copies of documents and correction of civil acts records carries all functions related to the management, control, service provision and archive maintenance of the CAR system. Specifically: it carries out overall management and control of the work performed by the CAR offices; takes measures to perfect the work of CAR offices, checks their work and gives them appropriate instructions; maintains the CAR archive, oversees the work of CAR archives; studies statistical data; generalises and disseminates positive practices from the work of CAR offices; provides clarification to population on the rules and terms of the civil acts registration; issues ruling on nullifying civil acts records; reviews applications made by applicants on the change of name/patronymic/family name; makes corrections/changes/additions to the copies of the civil acts records based on the CAR offices notifications; issues copies of certificates and reference letters. The list is not exhaustive, however it covers the majority functions the CAR division has and provides opportunity to clearly see the scope of work of its unit.

It shall also be noted that the civil acts registration archive is located in the CAR division, where the copies of civil acts records from the CAR offices of the city of Dushanbe, districts under the republican subordination and Khatlon region are kept. This archive is not a separate structural unit of the division or the division’s unit. The unit responsible for issuing the copies of documents and checking the civil acts records, is also responsible for maintaining the archive.

Competences of the financial-economic and human resource management sectors of the CAR division are related to financial and human resource issues.

As noted above, 3 regional units are under the subordination of the CAR division - CAR units of Soghd, Khatlon and GBAO; they coordinate and control work of the respective civil acts registration offices –CAR sectors, marriage houses and jamoats.

Like the CAR division, Soghd and GBAO CAR units host civil acts registration archives, where the copies of civil acts registered by the respective civil acts registration offices are stored. These CAR archives do not represent separate structural units of Soghd and GBAO CAR units. The respective regional unit is responsible for the maintenance of the archive. At the same time, regional CAR units issue copies of certificates and reference letters, make corrections/changes/additions to copies of the civil acts records, and carry out other functions envisaged by the law with regards to the CAR services.

It shall also be noted there is no unified central civil acts registration archive in the Republic of Tajikistan.

Despite the fact that the CAR division of the MOJ is responsible for supervising civil acts registration processes carried out in the jamoats and consular services, in practice the double subordination creates challenges.

Management and oversight on the work of jamoats is carried out by the CAR sector of the respective city/district. According to the CAR Law, jamoats are responsible for providing the respective CAR sector with monthly reports on their work (article 7). According to the typical statute of the CAR sector, the sector carries out its work in close cooperation with local government bodies - consults jamoats on the CAR related issues, carries out joint informative-educational meetings with local population on the civil acts registration issues, ensures correcting any imprecision in the civil acts records registered by jamoats, etc. However, not all CAR sectors and jamoats have uniform cooperation in all towns and districts, depending on personal factors and relationships.

Coordination of work performed by consular services in the field of civil acts registration is not carried out effectively by the responsible body – the MoJ. According to the CAR Law, original records and copies of the civil acts registered by the consular services shall be sent to the CAR archive annually (Article 83). In practice, consular services do not present the civil acts records and reports to the CAR division; for example, in the years 2012-2013 only two consular services had sent reports and attached civil acts records; no other documents have been presented to the CAR division since then. The CAR division does not have a direct communication with consular services, does not consult, provide information on legislative and/or practical novelties, etc. on the CAR issues. In practice cooperation between the CAR divisions/units/sectors and consular services is limited to requesting information related to applicants, checking validity of issued documents, requesting a copy of the certificate, a copy of a civil acts records or the respective reference letters.

The CAR division does not manage to oversee the work of jamoats and consular services, as these two are subordinated to different institutions, receive remuneration from them and thus leaving the division with no real power to exert supervision over the functions of these two institutions. This is particularly relevant, as for instance approximately 70 per cent of birth, death, establishment of paternity and marriage registrations is carried out by jamoats and appropriate supervision of service and registration quality is essential.

Taking into consideration the abovementioned key findings for the effective functioning of the CAR system, in particular in the light of the reform, are provided below:

**Finding 1**

Organisational structure of the CAR division of the Ministry of Justice and functions of its structural units hinder successful attainment of objectives assigned to them. Specifically, the division does not have roles and functions, which are necessary for the service development and quality control. The Unit for the registration of copies of documents and verification of civil acts records is responsible for operating activities, for the service delivery and carrying out of daily routine, as well as service development, coordination and support of district units, control of their work. Under such circumstances, work related to service rendering and the daily routine consumes 90% of their time, leaving issues like the study of practice, data collection on difficulties in rendering services, problem analysis, drafting of recommendations and guidelines, communication with district units on service improvement and implementation of the uniform practice is left without attention.

**Recommendation 1**

It is recommended to have a specialised unit in the structure of the division, which will be tasked with the continuous service improvement and implementation of correct and uniform practice across the country. The unit shall systematically research the existing practice, account for and analyse challenges, which occur in practice, develop recommendations and guidelines for district units, as well as initiate legislative/procedural and other relevant changes. It is also recommended to separate control and consultative functions within the division, as it creates conflicts of interest in the course of the control and can adversely affect the process, as well as its outcomes.

**Finding 2**

Insufficient information in the CAR system about the capabilities of electronic system as well as no clear vision – what challenges shall be resolved with the electronic system on the operating level. This is one of the weaknesses which can negatively affect successful development of the CAR electronic system. At the level of the senior management of the MoJ there is a vision on the electronic system at the conceptual level, however at the mid. Management and expert level – where functional requirements, as well as technical requirement of such system shall be developed – competence and readiness is missing. People working in the CAR division know the existing practice and how to work under the existing legislation, competences in developing an electronic system, initiating business process optimisation and the respective functional requirements of the electronic system is lacking. At the same time, the organisation has an experienced person in the IT development field, who tries to provide balance and compensate for this weakness and define functional requirements. However it is impossible for this person to completely substitute the role of the one defining the “order” which shall be fulfilled by the team responsible for the “business.” Thus, the current situation presents challenges in terms of defining specifics of general objectives and conceptual vision, its reduction to new business processes and their transformation/translation into the functional requirements of the new electronic system.

**Recommendation 2**

After making the decision on implementing the CAR electronic system, prior to starting its implementation, it is recommended to include a project work team with competences required for defining detailed functional requirements and the respective terms of reference. These two shall be performed after studying and analysing the CAR system and challenges and regarding the vision of the reform. This competence can be added either by adding person (group of persons) to the project team or by hiring a company, who can render service, however be responsible for transferring knowledge and relevant instruments to the CAR division staff, to ensure that they can perform similar activities independently in the future.

**1.2 Services and Functions within the Civil Acts Registration System**

This chapter discusses functions and services in the civil acts registration system, as well as provides some statistical data and service delivery process.

According to the CAR Law, 7 types of civil acts are subject to the state registration: birth, establishment of paternity, marriage, divorce, change of the name/patronymic/surname, adoption of a child, death (Article 3). Registration of these civil acts and issuance of certificates is the core functions of the civil acts registration bodies.

Besides 7 types of civil acts, functions of the civil acts registration also cover: making relevant changes/amendments/corrections in the civil act (record), recovering and annulling civil act (record), reissuing certificate and corresponding references confirming the civil acts registration.

In carrying out these functions, CAR bodies render services to customers – citizens of the Republic of Tajikistan, stateless persons and aliens. Therefore, each function is a specific service, which the state renders to a customer or applicant.

CAR Sectors carry out registration of all types of civil acts, as well as make relevant changes/amendments/corrections in the civil act (record), recovery and annulment of civil act (records), re-issue certificates and corresponding references. Marriage houses carry out only marriage registrations and thus, issue copies of marriage certificates. As noted above, CAR sectors and marriage houses carry out their functions on the territory of the Republic of Tajikistan on the city and district level.

Jamoats register only 4 types of civil acts - birth, death, marriage and establishment of paternity, while Consular Services register 7 types of civil acts, as well as make relevant changes/amendments/corrections in the civil act (record), recovery and annulment of civil act (records), re-issue certificates and corresponding references. Consular Services have the same functions and render the same services outside the territory of the Republic of Tajikistan, as the CAR sectors within the country. With regards to Jamoats, they carry out their functions on the territory of the Republic of Tajikistan on the town/village level.

CAR sectors and Jamoats render services only to customers registered/residing within the territory under their jurisdiction (respective city district, borough or village); while Consular Services render services to the citizens of the Republic of Tajikistan living outside of Tajikistan, in the country under their jurisdiction.

Table 2. Information on the services rendered by the CAR offices:

|  |  |  |  |
| --- | --- | --- | --- |
| **Functions / Services** | **CAR Offices** | | |
| **CAR Sector** | **Jamoat** | **Consular Service** |
| * Birth * establishment of paternity * marriage * divorce * Change of name/patronymic/ surname * Adoption of a child * Death * Make relevant changes/amendments/corrections in the civil act (record) * Recovery of civil act (records) * Annulment of civil act (record) * Re-issue certificate and corresponding references   (CAR Law, Article 7.1) | * Birth * Establishment of paternity * Marriage * Death   (CAR Law, Article 7.2) | * Birth * establishment of paternity * marriage * divorce * Change of name/patronymic/ surname * Adoption of a child * Death * Make relevant changes/amendments/corrections in the civil act (record); * Recovery of civil act (records) * Annulment of civil act (record) * Re-issue certificate and corresponding references   (CAR Law, Article 8) |
| **Territory covered** | **In the Republic of Tajikistan**  **Towns and Districts** | **In the Republic of Tajikistan**  **borough and village** | **Outside the Republic of Tajikistan, in other countries** |

It shall be noted that in practice Jamoats carry out primary registration of birth and death, while CAR sectors carry out delayed birth and death registration (for over one year) and refuse the primary registration of these acts, as they consider it is only the Jamoats’ function.

The CAR Law does not envisage such division of functions between the CAR bodies (CAR sector and Jamoats); nor does the CAR statute recognize statement with such content, however in practice this is an established and working practice. Based on data provided below one can clearly observe that 77-80% of birth acts and 97% of death acts in the Republic of Tajikistan are registered by Jamoats, which is a rather high figure.

Civil acts registration is one of the core functions for jamoats and consular services, however in practice it seems that these two organisations do not view these services as their “core” functions as compared to other functions they have. Their attitude towards civil acts registration services resembles each other, when they consider it as a function of another institution imposed by them as a secondary function.

Table 3. Statistical data on civil acts registration in 2014-2015

|  |  |  |
| --- | --- | --- |
| **Types of Civil Acts** | **2014** | **2015** |
| Birth | 303,432  (71,598 - delayed registration) | 294,629  (59,315 - delayed registration) |
| Death | 33,225  (1,015 - delayed registration) | 33,568  (969 - delayed registration) |
| Marriage | 95,478 | 77,020 |
| Divorce | 9,132 | 8,356 |
| Establishment of paternity | 33,251 | 29,221 |
| Change of name/ patronymic/surname | 37,505 | 26,349 |
| Adoption of a child | 1,296 | 871 |
| **Total per year:** | **513,319** | **470,014** |

The presented statistics covers only data on civil acts registered by CAR sectors and Jamoats; with regards to the Consular Services, the CAR division does not possess statistical data on civil acts registered by them during 2014-2015.

If we judge based on the statistics for the past two years, the CAR system renders half a million services a year and serves almost the same number of persons, making it one of the biggest public service deliverers in the Republic of Tajikistan.

At the same time, in 2015 civil acts registration statistics were lower by 8% as compared to the 2014 statistics – the table clearly shows the reducing trend according to all civil acts, except the death acts.

According to the CAR Law, the CAR division on the one hand is the system coordinator, while on the other hand the service provider. The CAR division issues copies of certificates and references based on data, stored in the division archive. Like the CAR division, Khatlon, GBAO units also issue copies of CAR certificates and reference letters based on data stored in their CAR archives.

The CAR division issues copies of certificates and references based on data, stored in the division archive. Like the CAR division, Khatlon, GBAO units also issue copies of CAR certificates and reference letters based on data stored in their CAR archives.

Similarly, the CAR division and regional CAR units participate in rendering certain services, for example: registration of name/patronymic/ family name change, restoration and annulment of civil acts record, making addition/correction/change to the civil acts record. The CAR division and regional CAR units also participate in the workflow process at the stage of review and/or decision-making’ as a result, service is rendered by a CAR sector.

**1. 3 CAR service delivery process**

As highlighted above, civil acts registration bodies render services to customers residing/registered only on the territory under their jurisdiction. The CAR Law imposes territorial restriction – all civil acts are registered either according to the place of residence of an applicant and/or according to the place, where the fact has taken place.

Workflow in the CAR offices is carried out manually. Civil acts records are made in two copies; thus, during the registration process, a person authorised to register civil acts has to fill in both copies. Unlike the civil acts record, which is only filled-in in the state language, CAR certificats are bi-lingual – Tajik and Russian. At the same time, the CAR unit maintains a ledger – for incoming and outgoing correspondence, used/issued letterheads (by the types of civil acts), settled receipts, etc. Employees of CAR offices besides the civil acts records, have to fill-in at least three different ledgers in the course of rendering a specific service.

In order to receive service, the customer shall address a relevant CAR unit, fill-in an application form and present all documents necessary for the service. As a rule, samples of filled-in application forms are provided in the CAR sectors and Jamoats. However a large number of customers find it hard to fill forms in and consequently use paid services, which implies filling-in such forms by a CAR unit employee in exchange for a fee. In order to receive a service an applicant is required to present necessary documents, among them those documents which have been issued by the CAR system and data from which is stored within the system. For example CAR certificates, references: One of the reasons why such documents are requested is to simplify the service provision process for the service-provider by accessing data/documents from other CAR sectors and archives in an easier manner.

In the course of rendering the CAR services (to make decisions or in the course of the workflow), the CAR offices require verification/request of data/documents from other CAR offices and/or from CAR archives; this happens quite often[[2]](#footnote-2). At the same time there are services, where more than one CAR office participates in rendering them[[3]](#footnote-3). According to the current legislation, information request/exchange between CAR offices happens in writing, where the postal service is used. However, taking into consideration that postal services are rather inefficient, customersinterested in receiving a timely service are forced to participate in the process of requesting-exchanging the data/documents between the CAR offices, which in principle are wrong from document/data security, as well as from the service quality standpoint. It shall also be noted, that without he customer participation, terms defined by the law for the service provision would be even lengthier, as it takes rather long for the postal correspondence to reach its destination and in practice, it gets lost quite frequently.

In the majority of CAR sectorswhere the number of staff allow,), the functions among employees are divided according to the types of services; for example: one employee is responsible only for birth and paternity registration, the second – for marriage and divorce registration, the third – for the registration of change in name/patronymic/family name and making changes/corrections/additions to the civil acts records, and so on. Such division of work functions is caused by the fact that work is carried out manually on paper – by writing things in the civil acts records books, certificates and ledgers. The civil acts record books and ledgers are common across the respective CAR units. Such division of work functions is one of the main causes of delays in processing acts and long queues, as demand on all services are not uniform. This is confirmed by the statistics above.

**1.4 Other functions of CAR units**

It shall be noted that the functions of CAR units are not limited to the above listed functions. CAR units carry out other functions – some are directly related to the civil acts registration process and other parts areadministrative.

According to the CAR sector statute and as a result of studying the existing practices, the CAR sector functions include:

* Governance and control of Jamoats on the territory under the CAR sector jurisdiction on matters related to the civil acts registration; carrying out meetings and seminars for the Jamoat secretaries;
* Maintenance of the CAR sector archive – maintaining the CAR sector civil acts records books, the storage and update of first copies of the civil acts records;
* Presenting the city/district statistical bodies with the second copies of the 4 types of civil acts; sending the second copies of the remaining types of the civil acts to the archives of the CAR division or regional CAR units;
* Sending data on the registered civil acts to the respective state bodies in pre-defined intervals;
* Reviewing and responding to citizens’ appeals and requests;
* Carrying out informative meetings with the population on CAR issues;
* Preparation of periodic reports and presenting it to the CAR division (four types of reports).

Jamoats are presenting the respective CAR sector civil acts records registered by themperiodically providing reports on work carried out by them, implementing informative meetings with the population on the CAR issues.

Like jamoats, functions of consular services in the civil acts registration sphere include periodic reporting and sending copies of the registered civil acts records to the CAR division. However, as already noted, consular services do not send reports and the second copies of the civil acts records to the CAR division.

## 1. 5 Cooperation of CAR bodies with other state bodies

In the course of carrying out their functions, CAR offices cooperate with other state bodies – provide data on registered civil acts,issue documents, and provide other useful information upon request. In return, the CAR bodies also receive and if needed, request information from relevant state bodiesspecifically:

* Passport-registration offices – upon request, CAR sectors provide birth data of respective persons (with a copy of the birth act), list of deceased personsand data of those persons who changed name/family name /patronymic, marriage and divorce information. It shall be noted that communication between CAR sectors and passport-registration bodies takes place on a daily basis. If needed, CAR sectors request information from passport-registration bodies on a person’s identity and citizenship;
* Healthcare bodies – send data (list) to CAR sectors on children, born in the healthcare establishments and at home, medical certificates on prenatal death; maternity houses send for the registration of abandoned children; healthcare establishments send information on children who have died in the respective establishment, while CAR sectors ensure, that the received data is verified/compared against registered civil acts records – birth, death, carry out birth and death registration through procedures, established by the Law;
* City/district statistical offices – CAR sectors send monthly statistics on birth, death, marriage and divorce acts records (second copies);
* Military commissariat – based on request, CAR sectors provide data on birth, changes made to civil acts and send information on deceased persons monthly;
* Social protection and pension bodies – CAR sectors provide monthly information on deceased persons;
* Units of the Ministry of Internal Affairs – CAR sectors send monthly data on deceased persons (the list), as well as information on changes made to the civil acts records;
* Ministry of Foreign Affairs – based on request, CAR sectors provide data on the registration of respective civil acts, issued certificates/references, and other necessary data. Through the Ministry of Foreign Affairs, citizens of the Republic of Tajikistan living abroad request CAR certificates, diplomatic representations and consular offices of other countries request verification of validity of certificates/references presented by the citizens of Tajikistan, CAR bodies of other countries request data/copies of civil acts records, which are needed to carry out specific work, etc.
* Prosecution – based on request, provide information on marriages of citizens of Tajikistan to an alien, data on registered births, etc.
* Court – based on request, CAR sectors provide data on respective civil acts records (materials from the civil acts records);
* Women’s affairs committee(s) – CAR sectors provide monthly statistical data on the registered birth, paternity, marriage, divorce and death.

The majority of the listed functions implemented by CAR sectors in cooperation with other state bodies’ representative services arerendered to other public bodies. Information/documents presented by CAR sectors to the relevant state bodies are essential to the latter to carry their functions appropriately. In turn, CAR sectors also receive services from other state bodies, for example: healthcare bodies, passport-registration services, etc.

## 1.6. Human Resources

This chapter discusses the state of human resources in the civil acts registration system.

1) **Human resources in the civil acts registration offices of the Ministry of Justice of the Republic of Tajikistan**

3 regional (Soghd, Khatlon, GBAO), 68 city/town civil acts registration offices (CAR units) and 2 marriage houses (city of Dushanbe and city of Khujand marriage houses) in total have 507 employees. 351 employees (out of 507) carry civil acts registration functions; from them 175 are public servants appointed through the competition, while 176 are contract based employees recruited directly by the CAR Division (as compared to the public servants, which are recruited based on the open competition) for a specified duration. Besides public servants there are 156 technical personnel working in the system, which usually undertake the following functions: bookkeeping, security, clearning, filling in electronic application forms. They are appointed by the heads of CAR sectors and they receive salary from revenues generated for additional paid services.

With regards to public servants, the CAR Law requires them to be employed based on an open competition.

To date, persons employed in the CAR system have different professional backgrounds. According to the CAR Law, a person, appointed as the head of the CAR sector shall have a higher legal education.However, this norm does not yet work in practice. A majority of employees of CAR sector are women.

Table 4: number of human resources by administrative-territorial units

|  |  |  |
| --- | --- | --- |
| **Administrative-territorial Unit** | **Public Servants** | **Technical Personnel** |
| CAR division of MOJ | 21 | 9 |
| CAR Sectors of City of Dushanbe | 29 | 20 |
| Districts of Republican Subordination | 56 | 17 |
| CAR Unit and sectors of Soghd Region | 93 | 57 |
| CAR Unit and sectors of Khatlon Region | 114 | 53 |
| CAR Unit and sectors of GBAO | 38 | 0 |
| **Total:** | **351** | **156** |

For the purposes of this study, it was essential to understand what the state of technical skills among employees was. However, information on this was not obtained from the Ministry. However, during the two missions carried out by the research team in the civil acts registration offices it was identified, that technical skills are rather basic. It shall also be noted that their technical skills mainly cover the use of the EPOS software and the majority of CAR offices (at least those which have received computers in the framework of the project) have undergone training in using the software.

With regards to the qualifications development of employees working in the civil acts registration system of the Ministry of Justice, this is a function of the Institute of Advanced Training, under the management of the Ministry. This Institution is responsible for training employees of the civil acts registration system according to the pre-approved plan. During the course of a year, in total 6-7 courses are planned with a duration of 6-10 days. Themes of the trainings cover legislation of civil acts registration system as well as discussions on practical cases. It shall be noted, that the institute does not have courses to develop technical skills of the employees and no increase in their budget is planned for the coming year to develop any new programs.

**Human Resources in Jamoats**

As already noted, in the Republic of Tajikistan a total 405 jamoats are authorised to carry out civil acts registrations and this function is implemented by one person - a Jamoats secretary regardless of the size of territory and population the jamoat covers. The verified data on the technical skills of the Jamoat secretaries is not available. However, in the course of the study it was identified that the majority of Jamoats have no computers. In addition, the computers acquired in the framework of the EPOS project were not envisaged for Jamoats.

As noted above, it is Jamoats that carry out registration of birth (78-80%) and death (97%) acts[[4]](#footnote-4), as well as marriage registration and establishment of paternity.

The CAR system’s Jamoats have frequent staff turnover, including for secretaries. Changes in human resources are related to changing the heads of local government bodies, as well as other factors. Frequent changes in human resources also affect the quality of work – errors, imprecision, incompletely filled out civil acts registered by Jamoats are rather frequent. However, it is not only staff turnover that negatively affects the work quality; Jamoats bear a rather heavy burden in registering civil acts, while having only one person responsible for this function and is alos responsible for addressing other duties given by the immediate supervisor.

In the discussions with stakeholders everyone agreed that jamoat secretaries lack competence in the field of civil acts registration. Thematic training is missing and is characterised with high turnover, thus reducing the effect of any trainings or experience development undertaken.

**Human Resources in consular Services**

The Republic of Tajikistan has consular offices in 18 countries. As a rule, civil acts registrations are performed by consuls. The Ministry of Justice does not coordinate their work and the MFA training on civil acts registration does not fall under the competence of the Institute of Advanced Training. Challenges with coordination and cooperation are identified by the employees in the Civil Acts Registration division. They do not manage to obtain information on registrations carried out by consular offices or other matters which might be encountered in practice.

**IT Team**

The IT team discussed in this part refers to the IT related human resources in the civil acts registration system, implying the Ministry of Justice (MoJ), its structural units related to the civil acts registration process, as well as services used by the MoJ from the outside team.

Information on the IT team was obtained through a pre-designed questionnaire from the Ministry of Justice of the Republic of Tajikistan as well as the EPOS project, formerly financed by the EU and currently supported by UNDP. From responses to the questionnaire it was identified that the system does not have a separate IT unit within its organisational structure. During the interviews it was identified that the MoJ and the Civil Acts Registration division share one person, who is responsible for information technology services and who serves in both entities on a part-time basis. Thus, currently the civil acts registration system does not have an in-house IT team in place. The system however uses the services of an outsourced team, which was set up under the framework of the EU funded EPOS project and, in the course of the study, is supported by the UNDP project (EPOS team). It is worth noting that the person responsible for IT services in the Ministry of Justice and the Civil Acts Registration divisions is also a member of the *EPOS team*. The *EPOS team* has worked on the development of specific CAR software, which is currently undergoing piloting in the civil acts registration system.

**Graph 2. The IT team structure related to the civil acts registration system**

**The Ministry of Justice of the Republic of Tajikistan**

1 person responsible for the IT\*

Civil Acts Registration division

1 person responsible for the IT\*

EPOS Project

**The UNDP Project**

1Team leader (no background in ICT international expert)

1 Lead system developer (international expert)

3 softwaredevelopers

1 assistant (no background in ICT)

Currently, taking into consideration the limited use of information technology in the civil acts registration system, confined mainly to the piloting of the software created in the course of the EPOS project, the need for a highly sophisticated IT team structure may not be necessary as the existing team, mainly comprised of one person shared by the MoJ, the Civil Acts Registration division and the *EPOS team* seems to be sufficient. However, regarding the fact that one person in the system is employed as the sole IT team member in the MoJ, the Civil Acts Registration division and also as a member of the *EPOS team* makes the IT team structure of the civil acts registration system susceptible to certain risks, particularly if the implementation of the electronic system of civil acts registration is decided upon; in particular:

* the IT team of the civil acts registration system is highly person-dependent.If one person, currently the same person in charge of the MoJ and the Civil Acts Registration division IT, makes a decision to leave , the MoJ and the Civil Acts Registration division are left with noone responsible for the IT in the system; this decision will also affect the EPOS team, as this same person, is also part of the EPOS team membership.
* in essence the EPOS team is developing software specifically for the civil acts registration system, where this latter is the recipient of the service – thus, shall be providing its requirements and receiving the end product, judging its adequacy to the initial requirements; sharing this team member with the MoJ and the Civil Acts Registration division creates a possible conflict of interest, where the recipient of services and one of the service providers’ developers is one in the same person.

This being said, the EPOS team represents a skilled and highly motivated team of IT professionals, who already have accumulated a couple of years’ experience in working on the civil acts registration system in the Republic of Tajikistan. However, it shall also be noted that the team is not the in-house team for the civil acts registration system and hence, cannot be directly considered as the team within the structure. Also, it shall be underlined that the team leader and the lead system developer represent international experts, therefore raising questions with regards to the sustainability of the outsourced IT team for the civil acts registration system due to the relatively high costs associated with sustaining international experts.

If the electronic system of civil acts registration, which satisfies the minimum requirements provided below under the title ‘*Description of the alternative – minimum requirements the electronic alternative shall satisfy to be worth implementing*’, it is expected to be implemented and rolled out to the entire civil acts registration system. The IT team currently available will not suffice and certain additional qualifications will be required either in-house or in the outsourced team. In particular, during the interviews with the IT team related to the civil acts registration system (within the MoJ, Civil Acts Registration division and the *EPOS team*), it was identified, that certain difficulties were present during the IT tendering process. Taking into consideration that the development and the rollout of the electronic civil acts registration system will require complex tendering for various hardware and software, having designated experienced team members responsible for the tendering procedures can be considered vital. In addition, looking at the current number and positions, as well as the division of functions of the IT team members related to the civil acts registration system in general, additional competencies and key roles (particularly with regards to expanding the team with focal positions) will be essential in the following directions:

* Hardware and network infrastructure planning, tendering, building and maintenance
* Partially on IT project management
* Software testing

**Findings**

Taking into consideration the state of the job market in the Republic of Tajikistan, it is impossible to source and sustain competent IT personnel on the wages offered by the Ministry of Justice and by the government sector in general. The uniform approach towards remuneration in the public sector in the Republic of Tajikistan does not address the current needs and this is most vividly felt with regards to human resources with ICT competence.

**Recommendation**

A unified, standardized approach to remuneration in public service exists almost in every country. However, there are precedents where due to practical challenges and needs, legislation envisages approaches different from standard practice. It is recommended to envisage the possibility of such approaches, as the CAR system will constantly face the risk of losing trained ICT staff once the donor funded projects are over.

## 1.7. Physical Environment

This section looks at two parts of the physical environment: a) office buildings and equipment and b) IT infrastructure. Both of them are essential for the proper functioning of the current system, as well as providing insight about possible future developments in the system.

*State of the Office Buildings*

To date, out of 73 civil acts registration offices under the Ministry of Justice of the Republic of Tajikistan, only 18 are located in buildings owned by the Ministry of Justice – 17 of them are newly built/renovated Justice Centres (“Markazi Adliya”) and 1 is existing district CAR buiding; 6 CAR offices were given under ownership marriage halls in their respective districts; approximately 7 CAR office buildings have been renovated; part of CAR offices are located in the buildings of local government bodies – Hukumats.

Among these are dedicated buildings for CAR offices, yet some buildings are shared with other state institutions. Several CAR offices pay rent for the space they occupy at the expense of revenues from additional services. Several CAR offices are located in residential buildings.

 Overall, it shall be said, that working conditions in the majority of CAR offices is rather poor:

* CAR offices are located in buildings where the space allocated is not sufficient for their employees, or for the provision of adequate services to applicants;
* Offices are not furnished (but for exceptional cases, where CAR offices or Jamoat are sitting in the administrative building of the Hukumat);
* CAR offices are not equipped with sufficient office inventory – tables, chairs, cupboards and other needed furniture;
* Civil acts archives are not kept in proper, safe conditions, the rules of keeping and arranging archives are not observed;
* Offices are not equipped with relevant technical devices – e.g. computers, printers. Therefore, at this stage employees cannot fulfil part of their work requirements, such as responding to received correspondence, preparing letters requesting information from other agencies, drafting messages and reports and other types of work, using the computers;
* Service providers do not have service vehicles, or the relevant financial resources to travel to the remote villages to meet with the population and provide them with consultancy services.
* It shall also be noted that almost all CAR offices experience difficulties with adequate working space, where several employees occupy rather small rooms and receive applicants simultaneously. They have no waiting space for applicants and thus, citizens have to queue in a rather uncomfortable environment. On the other hand, some CAR offices have a rather large space for marriage registration rituals. This extra space is however not used to improve working conditions.
* For proper work of CAR offices, utilities and other bills are paid by offices themselves from revenue received through additional services. However, in many cases when revenues are insufficient to cover costs, some employees and heads of CAR offices have to cover costs from their own pockets.

The majority of buildings where CAR units are located are not secured. There are a few exceptions where CAR offices are placed within the administrative buildings of Hukumats. In such cases general security is arranged by the Hukumats.

Jamoats are usually located in the buildings of local self-governments. A small number of them have dedicated buildings and a majority of them, along with other state institutions, are located in buildings owned by local self-governments. Their working conditions are rather difficult, particularly from the civil acts registration standpoint as, unlike other CAR units, Jamoats currently do not directly benefit from the fees received for rendering paid services, as none of the amount is left to them.

**Findings**

Implementation of the electronic system of civil acts registration, besides other improvements, as a rule aims to streamline the service delivery process, reducing queues and number of citizen visits to the administrative bodies, which in overall results in better access to services.

All mentioned issues are important for the reality of Tajikistan and in this case one of the aims of implementing the electronic system is streamlining the service delivery, reduction of queues and increase in access to services.

Unfortunately for today, the existing physical infrastructure, its internal planning and space division for employees does not allow for the full benefits of the electronic system.Specifically, it hinders the process of allowing customers to go through the service promptly and experience the radical improvement an electronic system can offer. Thus, at least, some minimum changes in infrastructure are essential.

**Recommendation**

It is obvious that due to the economic situation in the Republic of Tajikistan it will be unrealistic to discuss recommendations on fully renovating or radically reconstructing the entire infrastructure. However it is desired to consider planning of the office space and relocating employees in the existing space, so that employees receiving applications are separately seated, in response to the possible new business processes.

*IT Environment*

In order to assess the technical capacity of the civil acts registration system, understanding the IT infrastructure within the Ministry and the civil acts registering offices is of great importance. For this reason, the IT readiness assessment was carried out; factual information about the state of the IT system is provided in this chapter, while evaluation and conclusions are drawn in the discussion part – under issues identified.

In the framework of the EU funded project, territorial offices were equipped with computers – specifically 100 notebooks with Windows 7/8were given to the civil acts registration offices; a majority of offices have one computer at the moment of the study, however there are caseswhere offices have two or three computers in place. Looking at this number and comparing it to the staff working in the civil acts registration offices, it can be said that approximately 30% of users are equipped with computers.

Currently CAR Division possesses two physical servers (supporting a Win 2008 R2 operational system), one of which is used for databases (POSTGRESQL) and the other hosts other systems, AD, Antivirus, Mail, along with the application server. As confirmed with the questionnaires, virtual servers are not used and the Ministry does not have its own data centre (for data processing), or other relevant infrastructure. These servers are physically placed in the Tajik Telecom office. Business applications (EPOS) is not isolated from the user management system (active directory, and other services); thus, if one of the services fails, this can have implication on other services and poses a threat for business continuity for the proposed electronic system’s minimum requirements for which is provided below. The new proposed electronic system, taking into consideration its critical role in the functioning of the civil acts registration and vital statistics requires high availability of the solution to be ensured. Therefore, clustering for all critical services and a second back-up data facility shall be considered in the later phase of the electronic system implementation. This shall be considered in the architecture planning process for the electronic system, if decided upon.

Territorial offices are connected to the server (telecom) through the allocated VPN line; out of 68 regional offices, 60% are connected with the DSL line, and 40% - 4G modems.

The existing civil acts registration information system has been developed in the framework of the EU funded project EPOS on the basis of DHIS2. With the use of this system, representatives of territorial offices register acts issued by district offices, as well as 4 types of acts registered by Jamoats – birth, marriage, death and paternity, in the system. Information is inputted to the system as text and the respective civil acts are not scanned and attached to the record. The system has a limited validation mechanism and electronically born documents are not created meaning the process of act registration is not automated. The system provides automation in only a portion of business processes in civil acts registration. For instance there is no electronic registration processing of documents, printing of registered certificates, etc. In addition, the system currently does not support exchange of information through electronic services. Users enter the system through username and password, after which they gain access only to their environment – they cannot access information entered by another user. Therefore, acts to be registered cannot be compared to the acts which have already been entered elsewhere. This means that sharing between different offices is not permitted by the system. In addition integration and information sharing with other systems is not permitted (even though the need for such sharing was identified during meetings carried out in the course of the study). Despite the fact that information is inputted in the system, business processes are not automated, and offices carry out act registration post factum, after they have already registered a paper based act e.g. they collect acts and input them in the system periodically. Thus, the current software allows for digitization only, which comprises a small and less expensive part of the overall CAR electronic system. For this reason, building a new system, as compared to developing further the existing software would incur a nearly similar cost in monetary terms.

**Findings**

The study has identified that there is an insufficient, however valuable physical IT infrastructure provided to the system in the course of the EPOS project. In terms of computers, almost a third of employees of the civil acts registration offices are equipped with notebooks. These are pros in terms of an electronic system, as it provides opportunities to build upon the existing base of computer equipment. However, besides the fact that not all employees of the CAR offices are equipped with computers, none of the Jamoat secretaries have been provided with the computers. Jamoat secretaries are essential actors in the civil acts registration process as they register an overwhelming majority of four types of civil acts. In terms of servers, two physical servers are in place which even though satisfying the current system requirements, they are however insufficient in terms of the planned electronic system of civil acts registration.

**Recommendations**

It is recommended to carry out ICT hardware and physical infrastructure planning based on the decision on electronic system of civil acts registration. If the decision to carry on with the electronic system as provided in the minimum requirements defined under this document is made, then there will be a need to equip all employees, as well as outside actors (Jamoat secretaries), participating in the civil acts registration process to be equipped with computer equipment, so that they are enabled to register civil acts electronically, rather than what is currently taking place – inputting already registered civil acts in the system post-factum, thus doubling work for employees of the system. Incorporating Jamoat secretaries in the electronic system and equipping them with relevant hardware will be an essential decision for electronic system, as an overwhelming majority of four most in demand civil acts are registered by them. Thus having them included in the system is essential for ensuring that all documents in the civil acts registration system are electronically born. With regards to the consular services, taking into consideration that they already are exchanging information with the Ministry of Foreign Affairs using computers, they might be better off.

It is also recommended that back up servers are available and disaster recovery appropriately planned, taking into consideration, that if the system moves to electronic civil acts registration, critical quantity, as well as content will be stored on the servers, thus requiring assurances, that data is protected against different natural or man-made hazards.

## 1.8. External environment

*Political will*

It is widely accepted, that in order to carry out significant changes in the public sector, particularly at the national level, when planned changes affect many influential stakeholders and hundreds of public servants with high resistance towards changes, success of the reform depends on strong political will and change initiators needed to dedicate particular attention to this issue.

In order to evaluate the readiness and the level of political will of the government of the Republic of Tajikistan to fundamental governance reforms, a review of only government programs, the reforms strategy and multi-page action plan is not sufficient. These documents of course, play their role and need to be taken into consideration.However, they represent only part of the many wider factors which need to be regarded. It is important to take into consideration the general political context, timing when such documents were created and their relation to the political calendar. Moreover, it is important to understand the relevant actors, stakeholders participating in the decisions relating to change – their capabilities and possible undeclared aims. Reformers’ political will far exceeds that of the decision-makers’ to see positive and tangible changes. In other words, reformers’ political will implies readiness to dedicate resources – spend time, money and if needed, even political capital. Such readiness can best be observed on particular decisions and steps, which have already been taken.

Taking this into consideration, in order to understand readiness towards civil acts registration reform and implementation of e-governance in this field, all relevant accessible written and oral sources were studied, based on which conclusions and assumptions which were made; the analysis covered:

* Strategic documents
* Attitudes of middle and high level decision-makers
* E-governance projects and other similar initiatives
* Allocated/identified financial resources

In January 2014 the Government of the Republic of Tajikistan adopted a decree, which approved the Civil Acts Development Program 2014-2019. The main objective of the program is to create an enabling environment for the development of civil acts registration offices and to develop quality services for citizens based on modern international practices. The program outlines that one of the main means of system development is through the use of ICT and stresses the necessity of creating a unified electronic system. Despite the fact that the program’s realisation may fall behind schedule, the process has accelerated substantially since 2016 and positive trends can be observed which is significantly supported by the SDC funded project implemented by the UNDP.

On December 30, 2011 the government of Tajikistan adopted a decree approving the Concept of Developing E-governance in the Republic of Tajikistan. The concept is a rather wide-spanning document and refers to the gradual development of e-governance in 2011-2020. Development is envisaged in three stages. The final stage which is planned for 2015-2020 envisages automation of public services for citizens and organisations. It also envisages receiving e-services from government and private organisations for state needs. What is also rather important in the context of civil acts registration system, is the third stage of the program which envisages formation of a national identification system.

As with the civil acts development program, the e-governance program has also fallen behind schedule and is not going according to plan. However, it shall be said, that fragmentally one can observe the use of ICT by government institutions and precedents of establishing E-governance have been set. Here the consular department of the Ministry of Foreign Affairs, Passport Office of the Ministry of Internal Affairs, border control has a unified network and information system is planned. These precedents allow for certain evaluations - where political will and other factors such as financial resources were mobilized, and certain steps were taken in the direction of implementing the ICT based projects in practice.

Another important factor is the position of different level decision-makers towards the civil acts registration system, as well as towards e-governance in general. According to the Ministry of Justice Leadership systems reform is inevitable and the only means of reform is its electronification and automation., the Ministry is expecting recommendations from international experts on legal issues and the leadership has assured that they will do everything in their competence, to adopt all necessary legislative changes for establishing e-governance in the system. E-governance is considered to be irreversible and there is unanimity among government on this issue. Delays related to the implementation of the program are mainly related to the lack of finances. One issue which was unanimously identified as a priority during the meetings is the formation of a unified register and unified identification system. All parties agree that without a properly functioning civil acts registration system, formation of a population registry is practically impossible.

When it comes to assessing political will based on the readiness to finance the reform, in this direction significant weaknesses can be observed. As it was noted above, one of the key reasons for setbacks in implementing the reform programs is the lack of finances; however, with regards to the civil acts registration system a positive step is seen in the agreement signed between the government and UNDP, envisaging an allocation of 10 million USD for the system’s reformation.

Recent experience shows that ICT/e-Governance is no longer a luxury reserved only for rich countries. It is obvious that the implementation of ICT/e-Governance requires resources and an enabling environment, however ICT is not the final accord in this development, but rather one of the best steps, and in some cases the only step, for achieving full development.

E-governance is a strong and effective means for fast changes, radical improvement and increased efficiency. It can directly affect cost reduction, streamlining of service rendering and increasing access to services – which is of critical importance in developing countries, particularly for citizens living far from towns. Another important factor for e-governance is its indirect effects, including greater transparency and accountability in public decision making. It is a powerful way to fight corruption, and has the ability to stimulate the emergence of local e-cultures, and the strengthening of democracy.

*Electricity*

The Electricity system of the Republic of Tajikistan is characterised by severe electricity shortages in the winter periods due to increased demand for heating purposes and low river levels restricting the generation of electricity from hydro-plants.[[5]](#footnote-5) According to the World Bank, the long-term view on the stability of the electricity supply remains on securing hydropower, maximizing its value and rebuilding regional energy trade.

Stable electricity supply is one of the important enabling factors for the development of electronic governance. Eliminating electricity shortages requires investing in procurement and maintenance of power generators, which is a rather expensive undertaking, especially in the light of financial constraints in the Republic of Tajikistan. Therefore, the World Bank’s view is a promising development for electronic CAR system in medium and long-term perspective.

## 1.9. Issues identified in the course of the study

*State of the IT and IT readiness in general*

*Software developed in the framework of the EPOS project*

Discussion in this part is based on the comparison with the electronic alternative and its minimum requirements as set out below under the subheading ‘*Description of the alternative – minimum requirements the electronic alternative shall satisfy to be worth implementing’.*

The current system is running on a small load and it has only a few users with limited activity. The operational process of the current civil acts system does not exhibit any major issues, however judging on its stability once it is rolled out and substantial increase in the load incurred is impossible at the given time. To allow for correct assessment, testing on the large load will be an appropriate tool and shall provide feedback on the system stability prior to it being deployed to the production to avoid unexpected crash in the course of work.

The system has poor validation mechanisms with regards to the minimum requirements of the electronic system as laid out below. When discussing the civil acts registration system in general, one of its key functions is not only to provide vital statistics and record all acts, but it shall provide valid, updated, reliable and error-free data. The existing software does not allow for automatically checking data in the system when registering new record/data. Validation is possible only if specific data is searched in the electronic archive individually; however, this is allowed only within the digitalized archive of the specific territorial unit, which is registering the new data and not in relation to the centralized electronic archive (due to the abovementioned territorial restrictions). The software also, does not allow for the nearly similar data identification.

In addition, in the time of the study carried out (August 2016), the system did not have the ability to create digitally born documents due to the legislative limitation and the system does not provide automation process for creating and registering act.

Technically, the civil acts application has been built on Java EE and it is using DHIS2 (www.dhis2.org) as its application platform. DHIS2 is a health information system and the system was built primarily for that purpose. One of the key pros of the system is that the team has already gained competence and experience in it, however taking into consideration that there will be the need of expanding the team, it means that the new members will have to learn the operation of the system. One of the cons of the developed electronic system for the purposes of current civil acts registration is the fact that it was not built as service layered system. Specifically, service layered allows for the business layers to be separated and configured in the developed software into user interactive layer and business layer, where the user layer allows for the direct access to data to the internal users, while the business layer allowing for no direct data access and providing data under the rules defined by the business. The current system does not have specific requirements for the architecture, to have implement such ability. However technical implementation functionality is possible with chosen Java frameworks.

The application is web based on a web platform, therefore requiring only a web browser on the Client Side, making it easily deployable. As a Database Platform it has been chosen as open source PostgreSQL, which as part of this study, it was identified as something the team knew well and the budget allowed for. However, with regards to the electronic system with the minimum requirements provided below, certain issues needed to be considered:

* Taking into consideration that all processes in the proposed system are expected to be done digitally, high availability must be achieved on the initially agreed level with the government. High availability will ensure uninterrupted work of the system and thus agreeing its level with the government is essential to clarify the level according to priorities
* When it comes to the commercial data base providers, taking into consideration their need to retain competitiveness, they *ab initio* make sure that their systems are consistent with the current high end hardware systems, while this is not always ensured with the open source systems. To compensate for this, additional commercial instruments can be obtained, which however add cost to the more cost effective open source system
* It should be taken into consideration that the chosen RDMS shall support high end storage solutions and support clustering, load balancing and enterprise back-up solutions. Many RDMS provide Microsoft SQL Server, Oracle Database, MySQL, Postgress and etc., declaring availabile functionality of High Availability, Clustering, Load Balancing. All of those finicality in many cases are dependent onhardware vendors’ support on hi-end hardware. In the case where the vendor does not provide support for specific scenarios, benchmarking levels might be lower than expected.
* Appropriate support for the RDMS products will be required, as there will be the need to tune it to a particular solution and have in place a rapid reaction team for support in case of emergency.

Thus, in the architecture planning phase it could be decided to use a commercial RDMS or use an open source alternative and buy commercial support for them. To determine which system to choose, a decision from the business process owner is essential, as the decision is not purely what technical solution to use, but rather how essential high availability is for the civil acts registration system and what could be the tolerated level and frequency of interruption.

The current system is built as an internal application without consideration of the possibly of expanding to be Service Oriented Architecture (SOA), thus currently offering no possibility of integration with other systems or offering a data service. However, the EPOS project team has indicated that the existing system has such possibilities and this can be implemented in the future.

**Table 5** A SWOT summary of software, developed in the framework of the EPOS project

|  |  |
| --- | --- |
| **Strengths** | **Weaknesses** |
| * Easily deployable to new users due to it been a web-based application * The team has competence in working on the platform, on which the system has been developed | * Poor validation mechanisms from the civil acts registration business process purposes * Built on a platform, primarily designed for healthcare purposes, thus leaving room for audit to question its use in the future * Software is not built as an operational framework |
| **Opportunities** | **Threats** |
| * Trained employees of the CAR system have some experience and knowledge of using software in practice * Technical possibilities for expansion offered by the DHIS2 platform | * Lack of opportunities to test software on large loads, thus uncertainty about the system’s stability * Legislative restrictions not allowing creation of digitally born documents |

The project study team has designed the key minimum requirements for the electronic system to satisfy requirements from the civil acts registration objectives point of view. The table below provides a comparison of the software developed by the EPOS project team with the minimum requirements developed by the study team. Information on the software developed by the EPOS team is provided from the August 2016 snapshot (August included).

Table 6 – comparison of minimum requirements of the CAR electronic system with the software developed under the EPOS project

|  |  |
| --- | --- |
| **Minimum requirements for the civil acts registration centralized electronic system** | **Software developed in the framework of EPOS project** |
| Documents in the system shall be born electronically | None |
| The system shall have the possibility to attach scanned documents to the electronic records | None |
| At the moment of creating a record and on demand, in any future moment, the system shall allow data comparison/validation with other records in the registry;  Data comparison/validation shall be possible with all records in the registry, as well as part of it – regardless of its location | Partially  At the time of the study, the software which was presented to the project allows for direct observation and testing:  - allowed for data comparison/validation only against documents/data digitalized by the same unit;  - does not allow for the data comparison/validation against data/documents digitalized in the entire system. |
| The system shall generate a certificate based on electronic records of a civil act (data import shall be possible) at the same time, the system shall not enable generating certificate with data, differing from the civil acts record | None |
| The system shall have capacity to generate notification and send it to the repository and/or population registry information system | None |
| The system shall have capability to generate a unique identification number and/or request such identification number from another system, which it will link its activities to (this is not the number using within the system internally) | None |
| Unique identification shall be uniform in all systems related to a person, at least in CAR system and external database of passport system | Partially  At the time of the study:  - during the civil acts registration (when the first electronic record is created in the system), the software generates a unique number, used within the system and allowing for linking different civil acts registered to the same person to each other |
| In the process of work, an authorized employee shall have the capability to electronically request information from any other unit. Also, it shall be possible to attach information obtained through such request to the initial request. In the future, such requested information can be used by any authorized person in the system – data inserted and scanned documents shall be searchable in the system | None |
| The system shall allow for the business process related to the case to be functionally split between back and front offices. Business processes in the system shall be split at least into front office business processes (e.g. receiving documents and uploading in the system) and back office processes (e.g. document processing in the system and generation of civil acts) | None |
| Allocation of cases within back offices shall be possible regardless of Organisational subordination of front offices; i.e. applications received by front offices can be sent to any back office, regardless of their location and Organisational subordination. For this the business processes are also required to be designed in such a way to clearly define task division between front and back offices | None |
| Any activity in the system shall be logged according to users and, at any time, user activity shall be accessible/traceable; i.e. the system shall log all activities related to a user: changes and additions made by the user with details, search made by specific users and civil acts checked by users, what was printed out by users, log-on and log-off to the system indicating exact time and date | Partially  -At the time of the study the system logs user activity in terms of inputting and editing of civil acts |
| The system shall allow for the processing of analytical data; i.e. performance of employees, data analysis from different angles, including the number of workload | Partially  At the time of the study:  - software allows generation of statistical reports according to the pre-defined templates;  - there are no BI tools for data analysis. |
| The system shall have interface to electronically request information from other organizations, including from those working on paper based systems | None |
| The system shall be enabled to electronically receive information (documents) from other organizations (external users) which is used by the registering office for the civil acts registration. This implies interface, where the source of information directly inputs information. | None |

The matrix shows, that the current software does not address the majority of requirements, but has the capacity to be developed in the future. During the interview with the EPOS project team it was identified, that in the initial stages of the project, the EPOS team did not have a clear business task provided to them. Thus, the software represents applications for registering 7 types of civil acts (7 applications), which is made to fit the existing practice and legislative framework.

To summarise, the EPOS software represents the archive digitalization software, as it does not respond to the requirements of the civil acts registration system. The civil acts registration services and system is substantially wider than the registration of 7 civil acts. At the same time it shall be outlined, that the system renders services to persons as well as organisations and therefore, the system shall cater for the need of both types of customers. In addition CAR offices use multiple journals to account for received, issued, processed materials/documents, make changes and additions to the civil acts records, recover the civil acts records, etc.

*IT equipment*

The EPOS project acquired hardware for the purposes of central data processing and for use in territorial offices. Even though territorial offices are equipped with computers, their number is insufficient. In most cases there is only one notebook in the office to carry out all the range of functions required. If the decision is made in favour of deploying an electronic system countrywide and fully automating business processes, the provision of IT equipment will need significant expansion.

For data entry only 2 physical servers exist. 1 network switch and 1 network router is also in place. The Ministry of Justice does not have their own data entry server and all equipment is hosted in a co-location manner in the premises of the public company, Tajik Telecom. During the meeting with Tajik Telecom on 25 August, 2016, it was identified that Tajik Telecom data entry does not comply with any international data entry standards. It was noted that Tajik Telecom only provides space on the rack, an uninterrupted power supply (UPS) and communications.

Connection of territorial offices to the central server is mainly organised through a DSL line. Despite the fact that the DSL line is unstable and is frequently out of order (according to the representatives of territorial offices, this outage sometimes continues for days/week), 4G modems are not significantly used as an alternative.

During the meeting with Tajik Telecom’s representatives, it was confirmed, that the company is ready to provide fibre optic connections to governmental offices and to the data centre, if requested.

The biggest challenge to the project is the lack of a clearly identified business driver of the civil acts reform process. Only the leadership of the Ministry of Justice is pushing forwards with the electronic transformation of the Civil Act System. There is also no business leader who can envisage overall process from the top and have a clear vision on what should be achieved and what benefits should be obtained through the transformation of civil acts on a digital platform. Most of the activities in this direction have been performed in an *ad-hoc* manner. To put the challenge in a nutshell, there is competence in the civil acts processes, but the same people lack competence in digital technologies. The reform does not imply merely moving the existing paper based process to digital system. Reform should reengineer the existing processes using the benefits of digital technologies to achieve the desired objectives e.g. improved accessibility of service, reliability of service and data, reduce operational costs etc.

## Overall IT Readiness

* The overall IT system in the civil acts registration system was evaluated for its IT readiness, which was implemented in three stages:



During the design stage, a questionnaire was elaborated, concerning the general IT environment and processes, as well as the existing software. The IT readiness evaluates only the IT component and does not cover political and Ministerial related matters.

Personal ID cards are issued to citizens by the Ministry of Internal Affairs through an electronic system. This system was developed by the Ministry of Foreign Affairs and is still supported by the specialists of the MFA. This system currently fully allows for the process of automation; however, the desire was expressed to further develop the system.

The Ministry of Health shall also be noted in terms of e-governance. Since 2011 a birth-death registration electronic system is in place, which allows for the collection of statistical information.

Based on this we can say, that Tajikistan has a good environment in technical terms and readiness of stakeholders, to develop e-governance. However it is essential to study the topic in all its complexity and to pay more attention to the integration of IT systems which will substantially ease service delivery and ensure precise, timely, complete, reliable and continuously updated information in the system.

An assessment process was carried out in three directions: Architecture, Infrastructure and Processes. Even though the current level of IT readiness is low (which is derived from the mean of different components), we can say that there is a good foundation for further development and perfection of civil acts registration system.

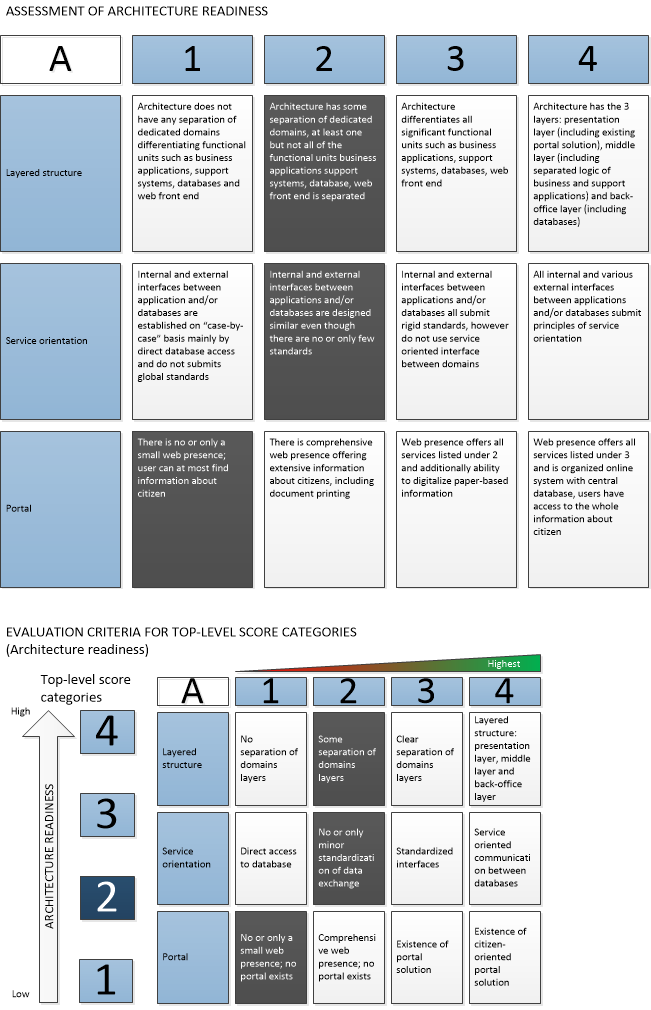
The findings in each direction follow:

**Architectural readiness**–Currently the Civil Acts Registration division has only two physical servers, one of which is used for databases and the other hosts other systems, along with the application server. Business application and user management tools are not separated, which poses a threat for business continuity.

At this stage just a portion of business processes in civil acts registration system is automated. For instance there is no electronic registration process of documents, printing of registered certificates, etc. Besides, the possibility of exchanging information with other systems is not envisaged through electronic services.

The Architecture has some separation of dedicated domains, at least one but not all of the functional units’ business applications support these systems. The database and web front end are separated. In terms of service orientation, internal and external interfaces between application and/or databases are designed similarly even though there are few if any standards in place. With regards to the portal which provides an important element for e-government services, there is little or no web presence. Users can at most find information about citizens.

Graph 3 – Diagram for architectural readiness[[6]](#footnote-6)



**Infrastructure readiness–**In the framework of the EU funded project, territorial offices were equipped with computers – specifically 100 notebooks – mainly all offices have one computer, in some cases even two or three). Currently approximately 30% of users are equipped with computers (in total approximately 364 employees work in the offices). Laptops have Windows 7/8.

With regards to the servers, the department has only 2 physical servers (Win 2008 R2 operational system); one server is used for the database (SQL), the second one on the application and other supporting systems – AD, Antivirus, Mail. Virtualization is not used. The Ministry/department does not have a data centre (for data processing) and relevant infrastructure. The abovementioned two physical servers are located in the Tajik Telecom office (locally).

At the moment of the study, offices could only see information, which they had inputted in the system, while did not have opportunity to share information with different offices. Integration and information sharing with other systems is not permitted (despite the fact that during the meetings with different institutions, the need for information sharing was identified).

Territorial offices are connected to the server (telecom) through the allocated VPN line. Out of 68 regional offices, 60% are connected with the DSL line, and 40% - 4G modems.

The organisation uses computers but there are obvious deficits in the equipment i.e. about every third employee has a desktop PC. There is a good mixture of OS with Windows XP, Windows Vista and Windows 7. With regards to external data exchange, it is only performed in a paper-based manner with other entities. With the Ministry of Health and the Office of the Statistics, reports with aggregated data are exchanged in an electronic manner. With regards to internal connectivity, significant internal connectivity is in place, i.e. above 80% of desktops in headquarters and territorial offices are connected to a LAN. Territorial offices are permanently connected to their headquarters where the connection is used for exchange of data.

Graph 4 – Diagram for the infrastructure readiness



**Process readiness –** the current civil acts registration system has been developed in the course of the EPOS project by a group of developers on the basis of the DHIS2. With the use of the current system, the representatives of territorial offices record in the system civil acts registered by them. Periodically four acts are entered (birth, marriage, death and paternity), received from the Jamoats in paper form in the system. The system has only limited validation mechanisms and electronically born documents are not created.

Users are logged in to the system with the user name and password, with which they gain access only to their environment (they do not access information registered by other users, thus, the registered acts are not compared with the already existing acts in the system).

Despite information being inserted in the system, business processes are not automated and the representatives of the civil acts registration offices record already registered acts *post factum*.

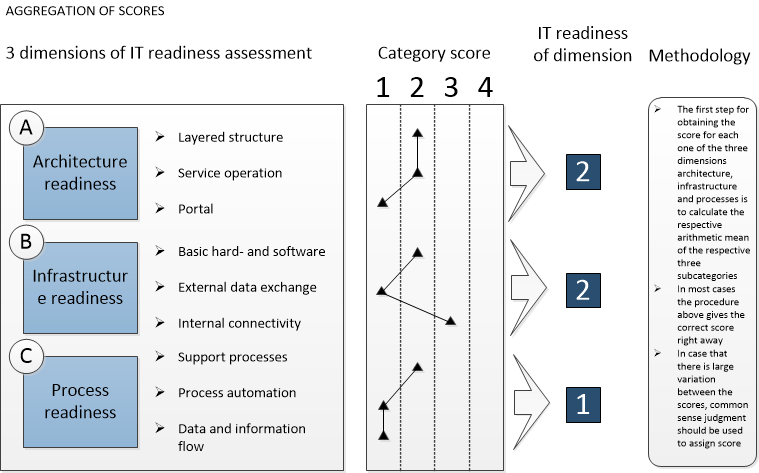
In terms of a support process, at least one of the support functionalities is in place. A security and document management system is offered by an application that is accessed from various business processes. The system is developed in-house. With regards to Process automation, most business processes are performed without the use of IT, i.e. processing mainly paper-based by employees. No process is fully automated. Data and information flow does not happen with the use of electronic tools for registering, i.e. data entry either does not take place or is done 100% manually by typing of paper forms.

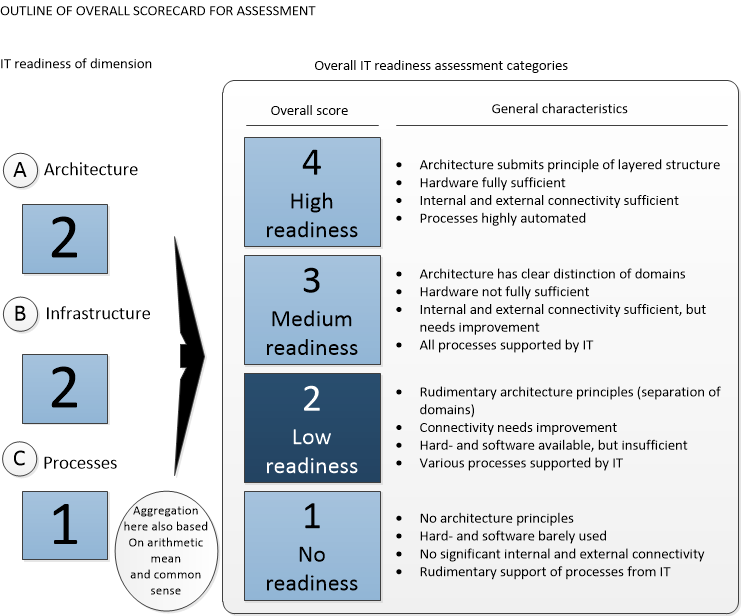
Graph 5 – Diagram on process readiness



Based on the findings of the study, the overall IT readiness in the civil acts registration system has been evaluated as low – with the mean score of 2 out of maximum 4. To better understand what is implied under a score of 2 as compared to the highest level of readiness, a comparative table is provided:

Graph 6 - Diagram on Overall IT readiness





# Discussion on Findings

Based on the findings of the study, we can argue that creating an electronic system of civil acts registration in the Republic of Tajikistan is technically feasible. However it requires resources. In addition, the findings of the study show that the software developed in the course of the EPOS project has capacity to be developed further to meet the necessary minimum requirements for an effective electronic system of civil acts registration. Findings also indicate that relevant costs to developing the new system are nearly similar to developing the existing software, as developing the electronic system of civil acts registration process implies functions and possibilities, which exceed current legislative limitations. It is noteworthy that the gained experience**[[7]](#footnote-7)** of EPOS team, especially the in-depth knowledge of the team members of the civil acts registration processes, would be a valuable input for further development of electronic system of civil acts registration.

It has already been discussed elsewhere in the document that in order to implement a dramatic change in the public sector, strong political will is of great importance, particularly as people feel threatened by the proposed changes. A driving force is needed to push such decisions forward. In the Republic of Tajikistan the political will seems to be present due to several reasons: the Ministry of Justice view that the only way forward for the civil acts registration system reform is towards e-governance. This statement already provides an insight about the feeling inside the system, and how dramatic the changes are expected to be. At the same time, relevant program documents cited above also indicate e-governance as the priority development direction in the Republic of Tajikistan, regardless of some setbacks in the schedule. A move towards this direction can already be observed in several state institutions, which have started to implement e-governance in their systems. The fact that the Ministry of Justice has worked towards the system development in the framework of the EPOS project only shows its willingness to keep up with the e-governance future of the Republic of Tajikistan.

E-governance is viewed by the government as the way forward for the public sector in the Republic of Tajikistan and resources have already been spent on creating some foundations for this, including in the civil acts registration system in terms of the EPOS project. Suspending the process and moving towards the development of a paper based system, which will inevitably be substituted by the e-governance in short-to medium term future, may mean wasting the momentum and demotivating employees of the system currently involved in piloting software developed by the EPOS project.

An electronic system of civil acts registration provides speed of service delivery and statistics generation like no other alternative (paper-based) system. Regardless of the fact how fast and specialized employees are, their performance rate as compared to an automated processes demonstrated in an electronic system is far behind. At the same time, counterparts of the civil acts registration system in certain services have already started to incorporate e-governance into their system. Thus the work of other agencies and their service quality also depends on the work efficiency and speediness of the civil acts registration system.

Another key argument towards an electronic civil acts registration system is its capability to reduce room for corruption. An electronic system enables automation and standardisation of the processes, thus reducing room for employee’s indiscretion to a minimum. At the same time an electronic system allows for tracking the changes in the registry, thus acting as a robust preventive measure.

One of the challenges faced by the possibility of introducing an electronic system is the lack of qualified human resources, both in the direction of IT as well as personnel of the civil acts registration system. However, through well-designed work plans this can be achieved gradually.

All these factors indicate that an electronic system of civil acts registration is the most relevant solution for the Republic of Tajikistan at its current stage of development.

**Indicator baselines defined by the Feasibility Study as requested by the Annex A to the Feasibility Study ToR**

Annex A: List of indicators to be covered by the Baseline and Feasibility studies

|  |  |  |
| --- | --- | --- |
| **Indicator** | **Baseline** | **Source of information** |
| **Output level indicators** | | |
| **Indicator 1:** Number of CAR offices that show improved conditions of work (infrastructure, equipment) | Infrastructure – 17 Justice Centres (Markazi “ADLIYA”) hosting CAR offices[[8]](#footnote-8)  None of the CAR offices are fully equipped[[9]](#footnote-9) | Feasibility study |
| **Indicator 2:** Electronic systems for registration and archiving are introduced and are functional across the entire CAR system | Electronic system – 0[[10]](#footnote-10)  Automated electronic registration and archiving 0[[11]](#footnote-11) | Feasibility study |
| **Indicator 3:** Relevant[[12]](#footnote-12) paper-based records are transferred to electronic format | Majority of relevant civil acts since Spring 2016 are transferred to electronic format[[13]](#footnote-13) | Feasibility study |

The next chapter provides details of the proposed electronic alternative.

# Electronic Alternative

*Description of the alternative – defining the minimum requirements the electronic alternative shall satisfy to be worth implementing*

One of the main objectives of this feasibility study is to discuss the alternatives to the current paper-based civil acts registration system, i.e. moving towards an alternative electronic system. In order to clarify what is implied under the electronic civil acts registration system, some minimum requirements for the new system have been defined by the study team. These requirements go beyond the current legislative constraints and rather provide a list of requirements the system shall fulfil in order to use it effectively for civil acts registration and vital statistics purposes. This detailing is essential to identify preconditions, activities and resources necessary for the implementation and functioning of the system.

Despite the fact that during the preparation of this feasibility study the study 1.2 (on the best model of registration for Tajikistan) had not yet been completed, basic functional requirements for the electronic system were developed based on the system’s objectives, findings and vision already identified as being the best service model.

The civil acts registration electronic system shall satisfy the following key criteria:

* Documents in the system shall be born electronically and the system shall have the possibility to attach scanned documents to the electronic records;
* At the moment of creating a record on demand, in any future moment, the system shall allow data comparison/validation with other records in the registry. Data comparison/validation shall be possible with all records in the registry, as well as part of it – regardless of its location;
* The system shall have a capacity to generate notifications and send these to the repository and/or the population registry information system; e.g. notification on assigning personal ID numbers, change of the family name, death of a person and other similar information can be sent to the external system, like passport office;
* The system shall have capability to generate unique identification numbers and/or request such identification from another system, which it will link its activities;
* Unique identification shall be uniform in all systems relating to a given person, at least in civil acts and internal as well as external databases of passport offices;
* In the process of work, an authorized employee shall have capability to electronically request information from any other unit. Also, it shall be possible to attach information obtained through such a request to the initial request. In the future, such requested information can be used by any authorized person in the system – data inserted and scanned documents shall be searchable in the system;
* The system shall allow for the business process related to the case, to be split between back and front offices; i.e. the system shall allow splitting processes in the manner, where it is clear, where contact with the citizen ends and the work of the decision-making begins. This will allow for citizens to be discharged when all necessary information/documents is collected and decision-making functions of the civil acts registration system is exercised, without making the citizen wait for an unnecessary period;
* Allocation of cases within back offices shall be possible regardless of organisational subordination of front offices i.e. applications received by front offices can be sent to any back office, regardless of their location and organisational subordination. For example, the system shall allow for the application received by the city of Dushanbe CAR front office to be reviewed and decided upon by any other district office in another part of the country;
* The system shall generate a certificate based on an electronic record of a civil act (data import shall be possible) and at the same time, the system shall not allow generating certificate with data which differs from the civil acts record;
* Any activity in the system shall be logged according to users and at any time a user and activity time shall be accessible;
* The system shall allow for the processing of analytical data i.e. performance of employees, data analysis from different angles, including the number of cases and workload
* The system shall have an interface to electronically requested information from other organisations including from those working on the paper based system – for example: a special portal shall be set up, where information will be uploaded either in a pre-identified electronic form, or through a scanned document;
* The system shall be enabled to electronically receive information (documents) from other organisations (external users), which is also used by the registering office for the civil acts registration. This implies an interface where the source of information directly inputs information – for instance date of birth and/or death and can be shared for medical certificate with the respective body, if the latter has such an electronic system.

*Recommendations to support the electronic system of civil acts registration*

The following recommendations have been elaborated to support the implementation and operation of an electronic system of civil acts registration, if it is developed:

1. Using 4G as an alternative (backup line) connection for civil acts registration offices that already have physical line connection. 2. Substitute DSL to Fibre optic connection wherever it is possible.

To ensure the security and sustainability of the existing services for the placement of infrastructure an alternative might be considered at the central server centre of the president’s administration or the Ministry of Foreign Affairs. The existing two physical servers and network equipment are in place according to the representative of the President’s administration. The system has recently been created and is rather modern.

1. During the interview with the EPOS team, it was mentioned that the DHIS2 is used in the CAR system.  DHIS2 is a primarily developed for Health Management systems. There is a risk on increasing dependency on personalities, who have a knowledge of sector specific system (DHIS2). The recommendation is to evaluate the risk, and if the risk is above the acceptable level, to remove dependency of DHIS2 framework for CAR system.
2. It is recommended to separate the development, test and production environments to exclude the influence of systems development on the work process and maintain business continuity.

# *Requirements to successfully implement the electronic civil acts registration system*

1. To build/expand the IT team for the development and maintenance of the civil act registration system.

The ICT team must have the following identified roles.

* **ICT Project Manager**
* **Business Analytics Team** (persons must understand both civil acts business processes also be able translate it on technical terms. A team with an ICT Project Manager will be the primary contact for the governance team (see below). The responsibility of this team is make appropriate technical tasking for the IT team)
* **Solution Architects Team** (Infrastructure Architects should be divided into the sub teams on the data-centre servers’ side, network side and software architect)
* **Developers Team**: Should be lead with a software architect and must have both senior and Junior developers’ roles.
* **Tester Team:** Team must provide Software and Infrastructure tests to ensure functionality and quality of products

Additionally the ICT team should be split into the development and maintenance teams:

**Operation Manager:** this role will ensure that ICT operations will go as they are intended to be, and will take responsibility for the change process within the system.

**Administrators Team:** Group of the people who will monitor and make administration of Infrastructure hardware (servers, storages, etc.), system including virtualization, network **and** applications.

**Support Team:** First and Second line support team, for the civil act digital processing system.

**Security team:** As the system will transform on a digital platform, system security will become an essential part of the solution. Attacks on the system might have a big impact on the country. The recommendation is to have a dedicated security team for 24/7 monitoring and responding to cyber-attacks.

1. System should partially rewrite and to multi-tier applications, based on SOA. Then the system will be enabled to provide B2B services to other systems. Technically it can be done on the existing Java platform.

**REMARK:** For the successful implementation of the reform, civil act system not only should provide service to other systems, but if necessary to use other systems as well (e.g. internal ID card, Passports system). So those systems must also be considering SOA architecture.

1. The current workflow of civil acts is paper based, thus only such a system is envisaged in the legislation. To move to a digitalized system means that government will gain the benefit from digital technologies, streamlining business processes inside the system, thus requiring changes in the legislation. One example from the current situation in the civil acts registration system in the Republic of Tajikistan: information that exists on current electronic system is accessible only for the office which has entered the data, prohibiting the sharing of data with other offices. According to the EPOS and the MoJ team, if not for the legislative constraints, they could easily implement the change in the IT system and enable access to all registered civil acts by all authorised users. Thus, the legislative part is an essential part of the reform, without which the digital component would make no sense.
2. Civil Act reform must include establishing and maintenance of appropriate Datacentre. The current hardware capacity of 2 servers does not meet any reasonable standards.

Datacentre architecture, created in the framework of the project working on creating electronic system of civil acts registration must consider at least one development, one test and production environments. Also IT supporting services e.g. domain, mail, web, internal app must be separated from those environments. The architecture must consider data integrity solutions, (e.g. SAN, hardware clustering and etc.), Data backup solution (Tapes, Optical, remote storage) and provide remote safe facility to store valuable backup data, appropriate Network solutions like a firewall, switches SAN switches must be in place, Uninterrupted Power supply UPS solutions for datacentres must be in place to protect hardware, additionally they should be considering power generators for the datacentre. As the data centre houses expensive hardware it is necessary to have an industrial cooling system to maintain its proper operating environment.

Also architecture must consider physical access security for the environment. There is a standard for data centres TIA-942 though not mandatory it is a recommended standard and organisations should choose the conformity level of this standard according their needs.

When the system fully moves to the digital platform availability of the second backup data-centre with “hot back up” shall be considered, which will have the ability to switch to the second data-centre in case the main data-centre fails completely. A backup data-centre should be located in a different geographical location (so as to avoid disaster).

Contracting and service level agreements for hardware and software vendors participating in the datacentre must be carefully established and have in place dedicated role monitoring fulfilment of the agreements.

1. It is strongly recommended to identify a person or group of persons who will drive the process. Currently the system seems to lack a driving core, with a clear vision

of the benefits of digital transformation of the existing paper based processing.

Usually, when a reform of such a scale is planned, the vision towards the system is not always clear in the initial stages. Therefore, a clear structure is required, which will drive the process and a clear distinction shall be made between the governance and management teams.

The Governance team should ensure that stakeholder needs, conditions and options are evaluated to determine balanced, agreed upon objectives, to set the direction through prioritization and decision-making, to monitor performance and compliance against these pre-determined objectives. This role would preferably be undertaken by the MoJ with its own resources, or with the donor support.

The Management team, on the other hand plans, builds, runs and monitors activities aligned with the direction set by the governance team, in order to achieve the enterprise objectives.

The Governance team should decide: a) what electronic CAR system should be developed (from a business perspective); b) what the government is expected to achieve from an electronic CAR system; c) what high level advantages and risks are inherent to the reform. To implement its functions, the team will require assurance mechanisms to control the reform process and therefore, define indicators like – KGI, KPI and KRI for the monitoring (however these indicators are not exhaustive and can be expanded). The KGI will enable the governance team to measure whether the reform is moving in the right direction and the key goals are aligned; the KPI will provide an ability to measure performance of the reform and key milestones; the KRI will provide opportunity to monitor indicators related to risks.

As the electronic CAR system considers full replacement of the current paper based system, state dependency on the system will rise exponentially. Therefore the governance team should make a decision on how much to invest for the system’s sustainability. Eliminating all risks totally is impossible, however the governance team should define the risk tolerance threshold, which provides a precondition for a detailed security design and acceptable business continuity levels.

The management team shall ensure, that resources for the project’s implementation are in place, once the governance team makes decisions on these strategic issues. Without such preliminary strategic decisions, the management team will always face questions whether measures and resources are sufficient or exceed the needs.

When making a decision on the management team, the following general recommendations and some good practices could be of use:

Dependency on personalities should be minimized to ensure knowledge availability locally and cost optimisation for sustainability. Situations, where only a single person is knowledgeable about the system should be avoided and knowledge duplication promoted. Roles in the teams shall be clearly defined, eliminating overlaps and conflicts of interest. It shall be ensured, that the team has the ability to control SLA or warranty terms from technology vendors, shall use solutions that are appropriately supported by the vendors or ensure that there is a group of people within the team that can provide an appropriate level of support. The team shall also make sure that a disaster recovery plan is in place and aligned with the governance team’s objectives.

## Cost-Benefit Analysis of Introducing Electronic System

## Risk analysis of the electronic system of civil acts registration

This part provides assessment of risks associated with the proposed alternative, means of mitigating them, so that benefits of the system can be evaluated against the risks and the cost of mitigating actions.

The table provides risk analysis through four means:

Risk Category – broad category, including risks in the category

Description – a brief outline of the risk category and the risk within the category

Consequence and likelihood – provides assessment of potential consequences if the adverse situation happens and likelihood of the adverse situation occurring

Mitigation strategy – lists actions undertaken in advance and during the adverse situation, to deal with the consequences.

**Table 7 Risk matrix for the proposed electronic system of CAR**

|  |  |  |  |
| --- | --- | --- | --- |
| **Risk Category** | **Description** | **Consequence and Likelihood** | **Mitigation Strategy** |
| *Operational risks – all risks which are associated with the effective daily operation of the electronic system* | | | |
| Interruption in electronic services | Interruption caused by the system failure, halting the service provision process in one unit or across the country | *Consequence*: impossibility to register civil acts immediately, thus resulting in delayed registration or reduction of registration due to the loss of motivation (unless the registration is in the immediate interest of the person involved)  *Likelihood:* high, as any electronic system is prone to temporary shutdowns or failures | 1. Adequate capacity planning in the design process to allow simultaneous work of multiple users in the system to avoid system overload 2. Setting up a qualified monitoring and IT help-desk, to promptly respond to any temporary failure and operatively resolve the situation 3. Turning the civil acts registration system into a proactive registry of civil acts, thus allowing for proactive registration of delayed civil acts (due to any reason, among them due to system failure) |
| Lack of qualified human resources in the civil acts registration system | Lack of qualified human resources directly involved in the civil acts registration process | *Consequence*: inappropriately registered civil acts, thus allowing for large numbers of errors in the electronic system  *Likelihood:* medium, as civil acts registration system requires experience, which is existent in the system and key personnel turnover in the registering offices is rather low | 1. Electronic system is designed in such a way to reduce the possibility of errors, to minimise required fields, automatically fill in certain information, thus reducing possibility of errors in certain aspects 2. Continuous training of employees is established in the system, to allow qualification of the employees to be at a reasonable level |
| Lack of qualified human resources in the field of IT maintenance | Lack of qualified human resources dealing with the system maintenance, bug and failure fixing in the timely manner | *Consequence:* severe, as it may result in lengthy systems interruption, thus reducing functionality and trust towards the electronic system of civil acts registration  *Likelihood:* medium, as the system is expected to be developed locally, thus equipping human resources with necessary skills for its future maintenance. | 1. Preparation of IT maintenance human resources early in the system design and development stage 2. Continuous training of human resources |
| The system does not envisage certain situations | There are exceptional cases in the civil acts registration process, which cannot be registered | *Consequence:* low, as such cases will be a rare occurrence and its impact on the work of the entire system and the well-being of the civil acts registry is expected to be low  *Likelihood:* low, as experience of the civil acts registration system will be regarded in the system design process | 1. In the system design process to look at ordinary case flow, as well as outlier cases 2. Have operational IT team in place, which will intervene in the system to resolve situations related to outlier cases |
| Inadequate hardware | Lack of appropriate hardware distorts the registration process | *Consequence:* medium, as almost every registration office is expected to have more than one computer in place, allowing for customers to be directed to another workstation if one of them fails.  *Likelihood:* low, in the initial stage, as equipment is expected to be new and increasing over time | 1. Carefully designing minimum technical requirements of the hardware involved in the system 2. Training for employees on handling the hardware, to avoid damage caused by inappropriate handling 3. Adequate warranty system on hardware and allowing prompt reaction to any damaged hardware |
| Subordination related risks | Double subordination and the lack of division in accountability causing the interruptions in operation | *Consequence:* moderate, due to the low uptake of the system use, as part of system participants are not subordinated to the business owner  *Likelihood:* moderate, as it shall be in the interest of regional offices to implement the project for the efficiency reasons | 1. Engaging all participants of the system in the process and in the trainings 2. Demonstrate system benefits for all process participants |
| Asset ownership risk | Risk related to asset ownership, which affects system operation – in particular for assets, which form the core to the electronic system - hardware | *Consequence:* low, due to the fact that the asset belonging does not affect the process.  *Likelihood:* moderate, as assets involved in the process are going to be utilised for various reasons and can turn into an issue for discussion, unless it is decided at early stages under whose ownership the assets are and who is responsible for their management | 1. Clear asset division from an early stage regardless of who has paid for it 2. Clear agreement on asset management – in particular hardware service, from the beginning of the implementation |
| *Software risks – risks associated with the effective use of the proposed electronic system software* | | | |
| Inappropriate software design | Software design does not respond to the current and emerging needs of the civil acts registration system | *Consequences:* severe, as inadequate software design will make the software useless and reduce the trust towards electronic system substantially.  *Likelihood:* moderate, as the business owner (the civil acts registration system) does not have clear information about business processes, challenges and outlier cases of the system | 1. Rigorous design validation process with stakeholders to allow for the early detection of possible shortcomings of the proposed design 2. Flexible system design, to allow for relatively easy changes if required 3. Involvement of business owner early on in the design process |
| Inappropriate software development | Execution of the software development does not correspond to the design and/or its functionality is inadequate | *Consequences:* low, as the system will not be considered finalized until the test-phase is successfully passed, allowing for its re-development  *Likelihood:* moderate, as developing such a system requires qualified and experienced IT human resources, which are difficult to source in the local market | 1. Safeguards in the contracting phase, clearly defining when the development task is considered to be completed, as well as guarantee of the changes, if the development-side shortcomings are detected 2. Peer validation of code and the system at different stages of the development |
| Introduction of new processes, distorting the system | Introducing new processes, procedures and products, which are impossible to be integrated in the system and thus, require either re-developing the system, introducing additional system or having part of operations paper-based and another part paper-based | *Consequences:* severe, as re-developing and adding a new system is a costly activity, while having part of operations paper-based makes the system ineffective  *Likelihood:* low, as the initial system will already envisage all core activities of the civil acts registration system, thus additional processes are expected to be the variation of the existing processes | 1. Flexible design, allowing for the system expansion horizontally and vertically 2. Initial design created in the forward-looking manner, envisaging short and medium-term development needs of the system |
| Issues related to the software sustainability | Problems with licensing and system, used for the software development, creating additional cost/technical burden once the initial development phase is over | *Consequences:* severe, as high licensing costs or software, created on the closed code system can result in the need of rewriting the system  *Likelihood:* low, as information about license and system specification will be known in advance | 1. Carefully designing the contract requirements, setting out clear criteria for licenses and open-source system used for the development process |
| Issues related to the software compatibility | Software is designed in a manner and on a platform, which makes it incompatible with other systems, requiring exchange of information | *Consequences:* severe, as electronic system implies not only electronic registration of information, but also provision of services and exchange of data with other systems  *Likelihood:* low, as the design process will take possibility of compatibility with other systems into consideration | 1. Carefully design the system’scompatibility with other systems 2. Involving key stakeholders from the early stage of system design and validation |
| *Risks associated to the enabling environment* | | | |
| Political risks | | | |
| Lack of political will | Low political will, particularly at the early stages of the reform towards the implementation of the electronic system causing problems/interruption of the system development and implementation | *Consequences:* severe, as pushing forward the implementation of electronic system – entailing multiple, including legislative changes, among others.  *Likelihood:* moderate, as no clear-cut political will can be observed towards the reform in general, let alone electronic system. | 1. Obtain approval at the highest possible political level on the proposed electronic alternative |
| Political instability | Political instability, harming the implementation of the system, or operation of the system after its implementation | *Consequences:* moderate, temporary/lengthy halt in operations or the systems in implementation  *Likelihood:* low, as the final years have been rather stable and no indication of serious political instability is present | 1. Careful monitoring of the political situation in the country and early alert mechanisms in place to be able to take preventive measures |
| Utilities related risks | | | |
| Sustained lack of electricity supply for a lengthy period | Lengthy period without electricity will halt the work of the electronic system of civil acts registration, as its work is highly dependent on the electricity | *Consequences:* severe, as without electricity the system will not be able to operate  *Likelihood:* high, as electricity cuts are common across Tajikistan, with the varying degrees among regions | 1. Equip all offices (according to the needs and situation assessment) with electric generators to ensure stability in the supply |
| Lack of adequate internet connection | Inadequate internet connection hindering the data transmission | *Consequences:* moderate, as system should be designed in the manner to exchange data as soon as connection is re-established  *Likelihood:* moderate, as internet connectivity problems are common in the Republic of Tajikistan | 1. Design system in the manner to exchange information in the delayed manner if the connection breaks 2. Ensure availability of the best possible available internet by regions |

## Financial planning

This part provides for out of pocket costs for three years related to the implementation of the electronic system of civil acts registration. It shall be noted, that it does not provide information about budgeted expenses for the civil acts registration system in its entirety, but incremental expenses and investments needed to design, develop, implement and maintain the system during the three years from the date of its commencement. Estimates also exclude supplies, which might be needed – printing papers, cartridges, etc. Estimates have been made for three years, as this is the optimal time for launching the system to fine-tune it. Expenses provided for the year three mainly reflect maintenance costs of the newly developed system, which is expected to be an ongoing cost.

It shall also be noted, that quotes provided in the reforms budget reflect information provided by the Ministry of Justice and its structural units in the course of the study, as well as market prices for hardware and service procurement related to the electronic system development.

*Key assumptions made during the financial analysis follow:*

* Estimates are made for the three-year period, critical for system development and implementation into practice however does not span for longer than the period. Though taking into consideration that software will require further development over time, at least the maintenance team will be required for sustaining the going concern. Equipment will also require replacement over time and the proposed equipment lifespan is mainly considered to be active for 3-5 years after its instalment.
* When estimating salaries for developing the electronic system of civil acts registration, competitive rates were taken regarding the fact that it requires highly skilled human resources which, unless adequate rates are offered, will not result in competent staff agreeing to work on the system’s development.
* Taking into consideration that estimates have been made based on competitive rates. Equipment prices reflect international prices for standardized equipment, thus substantial fluctuations have not been taken into consideration;
* Estimates have been made in the USD, as a major part of funding is expected to come from donors, where denominated in foreign currency and thus eliminating fluctuations in local currency.
* Refinancing rate of the National Bank of Tajikistan has been applied for discounting the total cost of the project, which stands at 11%[[14]](#footnote-14)

FINANCIAL PLANNING – 3 YEARS

Table 8: Estimates with regards to the development of the electronic system in the US Dollars follow:

|  |  |
| --- | --- |
| Description |  |
| Salary | $**1,497,000.00** |
| IT Equipment | $**2,901,000.00** |
| Trainings | $442,750.00 |
|  |  |
|  | **$4,840,750.00** |

These estimates cover the period of three years, during which the system will be developed, offices equipped and trainings of employees carried out. The hardware and licenses (estimates are provided for only three years) will require periodic update, which is not included in the estimate. The estimates do not include cost of supplies – papers, printer cartridges, as well as the cost of internet and mobile vehicle solutions.[[15]](#footnote-15) Cost estimates do not reflect current list prices, but are rather based on negotiation experience with vendors and price offers, which can be achieved discussing projects of such extent. However, exact prices can only be defined, once the final decision is made on the exact model and equipment.

Table 9 Financial projections for electronic system developing software

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Name** |  |  |  |  |  |  |  | **Year** |  |  |  |
| **Human resources** |  | H1/Y1 | H2/Y1 | Per Annum | H1/Y2 | H2/Y2 | **Per Annum** | H1/Y3 | H2/Y3 | Per Annum |  |
| **ICT Project Manager** | $2,000.00 | 1 | 1 | $24,000.00 | 1 | 1 | $24,000.00 | 1 | 1 | $24,000.00 |  |
| **Business Analytics Team** | $1,500.00 | 2 | 2 | $36,000.00 | 2 | 2 | $36,000.00 | 1 | 1 | $18,000.00 |  |
| **Solution Architects Team** |  |  |  |  |  |  |  |  |  |  |  |
| **Infrastructure Architect** | $2,500.00 |  | 1 | $15,000.00 | 1 |  | $15,000.00 |  |  |  |  |
| **Network Architect** | $2,000.00 |  | 1 | $12,000.00 | 1 |  | $12,000.00 |  |  |  |  |
| **Software Architect** | $2,500.00 |  | 1 | $15,000.00 | 1 | 1 | $30,000.00 | 1 |  | $15,000.00 |  |
| **Developers Team** |  |  |  |  |  |  |  |  |  |  |  |
| **Senior Developer Team** | $2,000.00 |  | 2 | $24,000.00 | 2 | 2 | $48,000.00 | 1 | 1 | $24,000.00 |  |
| **Junior Developer Team** | $1,500.00 |  | 3 | $27,000.00 | 3 | 3 | $54,000.00 | 2 | 1 | $27,000.00 |  |
| **Software Tester** | $1,500.00 |  |  |  | 2 | 2 | $36,000.00 | 1 | 1 | $18,000.00 |  |
| **Documentation Writer** | $1,000.00 |  |  |  |  | 1 | $6,000.00 | 1 | 1 | $12,000.00 |  |
| **Operation Manager** | $2,000.00 |  |  |  |  | 1 | $12,000.00 | 1 | 1 | $24,000.00 |  |
| **Administrators Team** |  |  |  |  |  |  |  |  |  |  |  |
| **System Administrator** | $1,500.00 |  |  |  |  | 2 | $18,000.00 | 2 | 2 | $36,000.00 |  |
| **Infrastructure Admin** | $1,500.00 |  |  |  |  | 1 | $9,000.00 | 1 | 1 | $18,000.00 |  |
| **DBA Admin** | $2,000.00 |  |  |  |  | 1 | $12,000.00 | 1 | 1 | $24,000.00 |  |
| **Network Admin** | $1,500.00 |  |  |  |  | 2 | $18,000.00 | 2 | 2 | $36,000.00 |  |
| **Support Team** | $1,000.00 |  |  |  |  | 10 | $60,000.00 | 15 | 15 | $180,000.00 |  |
| **Security Team** | $2,000.00 |  | 1 | $12,000.00 | 1 | 4 | $48,000.00 | 3 | 3 | $72,000.00 |  |
| **Project Manager** | $2,500.00 | 1 | 1 | $30,000.00 | 1 | 1 | $30,000.00 | 1 | 1 | $30,000.00 |  |
| **Business Architect** | $2,500.00 | 2 | 2 | $60,000.00 |  |  |  |  |  |  |  |
| **Lawyers** | $1,500.00 | 2 | 2 | $36,000.00 |  | 1 | $9,000.00 | 1 |  | $9,000.00 |  |
| **Trainers** | $1,000.00 |  |  |  | 4 | 8 | $72,000.00 | 4 | 2 | $36,000.00 |  |
| **TOT Team** | $1,500.00 |  | 2 | $18,000.00 | 2 | 2 | $36,000.00 |  |  |  |  |
| **Total cost for salaries** |  |  |  | $309,000.00 |  |  | $585,000.00 |  |  | $603,000.00 |  |
| **Hardware** |  |  |  | $1,915,000.00 |  |  | $986,000.00 |  |  |  |  |
| **Training** |  |  |  |  |  |  | $221,375.00 |  |  | $221,375.00 |  |
| **Total cash flow per year** |  |  |  | **$2,224,000.00** |  |  | **$1,792,375.00** |  |  | **$824,375.00** | **$4,840,750.00** |
|  |  |  |  |  |  |  |  |  |  |  |  |
| **Discount factor at 11%** |  |  |  |  |  |  | 0.901 |  |  | 0.812 | **Total** |
| **Present Value of the Cash Flows expected for the three years of project implementation** |  |  |  | **$2,224,000.00** |  |  | **$1,614,929.88** |  |  | **$669,392.5** | **$4,508,322.38** |

Table 10: Details of hardware projections[[16]](#footnote-16)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Datacentre** |  |  |  |  |  |
| **Hardware** |  |  | **$800,000.00** |  |  |
| **Blade Enclosures x2, Power Servers x12, SAN Storage 6 TB (fast SSD and regular SAS Storage), Type Backup 24 TB** | | |  |  |  |
| **Rack Kites, Power Kits, Cables** |  |  |  |  |  |
| **Networks (Switches. Routers firewalls)** |  |  | **$180,000.00** |  | (With "Jamoat" Considerations) |
| **SAN Switches, Network Switches, Routers, Firewalls** |  |  |  |  |  |
| **Uninterrupted Power** |  |  | **$80,000.00** |  |  |
| **4x 10 KWA UPS (N+1)** |  |  |  | $50,000.00 |  |
| **Power Generator for Datacentre (Including Building and Cabling)** |  |  |  | $30,000.00 |  |
| **Software Datacentre** |  |  | **$600,000.00** |  | 3 Year coverage license |
| **Virtualization Licenses, Clustering Licenses, Backup, DBMS, Operation Systems, Antivirus, Hardware and Infrastructure Monitoring Software, Operation Management Software** | | |  |  |  |
| **Datacentre Room** |  |  | **$80,000.00** |  |  |
| **Datacentre Room, Refurbish, Cabling, Securing** |  |  |  | $50,000.00 |  |
| **Datacentre Cooling (Based on particular solution)** |  |  |  | $30,000.00 |  |
|  |  |  | **$1,740,000.00** |  | $1,740,000.00 |
| **IT Team Equipment** |  |  |  |  |  |
|  | qt | Unit Price | Total |  |  |
| **Workstations for IT Team** | 24 | $3,500.00 | **$84,000.00** |  |  |
| **IT Team Software** | |  | **$50,000.00** |  |  |
| **Developer Tools, Collaboration Tool e.g. JIRA, Business Analytics tools** |  |  |  |  |  |
| **Office Equipment** |  |  | **$11,000.00** |  |  |
| **All in one (Printer, Scanner)** | 5 | $900.00 |  | $4,500.00 |  |
| **Internal Network** |  | $2,000.00 |  | $2,000.00 |  |
| **Other Staff** |  | $3,000.00 |  | $4,500.00 |  |
| **Power Generator for development office** |  |  | **$10,000.00** |  |  |
| **Other Office Cost for 3 Year** |  |  | **$20,000.00** |  |  |
|  |  |  | $175,000.00 |  | $175,000.00 |
| **Territorial Offices Equipment** |  |  |  |  |  |
| **Personal Computers** | 251 | $400.00 | **$100,400.00** |  |  |
| **All in One (Printers, Scanner, Copier)** | 150 | $350.00 | **$52,500.00** |  |  |
| **Network Equipment (Switches)** |  |  |  |  |  |
| **Wi-Fi Switches, DSL Router, 4G Modem** | 74 | $200.00 | $14,800.00 |  |  |
| **Power** |  |  |  |  |  |
| **UPS** | 251 | $150.00 | $37,650.00 |  |  |
| **Power Generator** | 74 | $600.00 | $44,400.00 |  | (Allowing to Printing) |
|  |  |  | $249,750.00 |  | $249,750.00 |
| **Jamoats Offices Equipment** |  |  |  |  |  |
| **Personal Computers** | 405 | $400.00 | **$162,000.00** |  |  |
| **All in One (Printers, Scanner, Copier)** | 405 | $350.00 | **$141,750.00** |  |  |
| **Network Equipment (Switches)** |  |  |  |  |  |
| **Wi-Fi Switches, DSL Router, 4G Modem** | 405 | $200.00 | $81,000.00 |  |  |
| **Power** |  |  |  |  |  |
| **UPS** | 405 | $150.00 | $60,750.00 |  |  |
| **Power Generator** | 405 | $600.00 | $243,000.00 |  |  |
|  |  |  | $688,500.00 |  | $688,500.00 |
| **Consular Offices Equipment** |  |  |  |  |  |
| **Personal Computers** | 18 | $400.00 | **$7,200.00** |  |  |
| **All in One (Printers, Scanner, Copier)** | 18 | $350.00 | **$6,300.00** |  |  |
|  |  |  | $13,500.00 |  | $13,500.00 |
| **Training Room Facility** |  |  |  |  |  |
| **Personal Computers** | 40 | $400.00 | **$16,000.00** |  |  |
| **All in One (Printers, Scanner, Copier)** | 5 | $350.00 | **$1,750.00** |  |  |
| **Network** |  |  | $2,000.00 |  |  |
| **Projector and Screens** |  |  | $2,000.00 |  |  |
| **Other Office Cost** |  |  | $5,000.00 |  |  |
| **UPS** | 40 | $150.00 | $6,000.00 |  |  |
| **Power Generator** | 1 | $1,500.00 | $1,500.00 |  |  |
|  |  |  | $34,250.00 |  | $34,250.00 |
|  |  |  |  | Total Sum: | $2,901,000.00 |

Table 11: details on trainings projections

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Jamoat** | **Consular** | **Territorial (x2)** | **Total** |  |
| **Basic IT Training** |  | 405 | 18 | 76 | **575** | 1 Week |
| **System Trainings** |  | 405 | 18 | 76 | **575** | 2 Day |
|  |  |  |  |  |  |  |
| **Person Per Group** |  | 10 |  |  |  |  |
|  |  |  |  |  |  |  |
| **Total Training** |  | **58** |  |  |  |  |
|  |  |  |  |  |  |  |
| **Training should be done during Month** |  |  | **6** |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  | Days |  |  |  |
|  | Hotel | $60.00 | 7 | $420.00 |  |  |
|  | Travel | $50.00 |  | $50.00 |  |  |
|  | DSA | $40.00 | 7 | $280.00 |  |  |
|  | Materials | $20.00 |  | $20.00 | Qt |  |
|  |  |  |  | **$770.00** | **575** | **$442,750.00** |

Out of pocket costs for implementing the system for three years rounds up to: **4,840,750** USD the present value of which at 11% discount rate makes up to **4,508,322.38** USD.

*Asset acquisition:*

Of this amount, 2,901,000 USD is the amount of investment in equipment for the system:

The equipment acquisition is planned in year 1 and year 2. Year one envisages procurement of necessary hardware for the development process – datacentre equipment as well as IT team hardware and software. Year 2 envisages procurement of hardware for employees of the civil acts registration system, as this is the year when the piloting of the electronic system and trainings are envisaged, i.e. period, when there will be the need of such hardware. Procurement of hardware for the employees shall be avoided in year 1, as they will depreciate without their actual use during the first year.

Estimates do not include reserve hardware for cases of malfunctioning, as it bears risk of obsolence and is a rather inefficient use of financial resources. However, it is recommended that procurement contract terms include rapid response mechanisms for faulty equipment (replacement/fixing) within 24 hours to allow for uninterrupted services.

*Software development and maintenance*

**1,497,000** is the amount for system development and maintenance

These costs cover expenses related to the ICT project team, as well as the in-house maintenance team, which shall continue system maintenance and support after the initial development process. These costs span throughout the three years, for which the pro-forma budget is provided, however reduce over time and stabilize, taking into consideration that the need of intensive development reduces and shifts towards incremental development, support and maintenance.

*Training costs*

**442,750** USD is the training costs to equip human resources with necessary skills. These trainings will be required more intensely at the initial stage, taking into consideration that all employees will require acquiring necessary skills to work in the system, while in the long term fewer trainings and more elaborated in the trainings already implemented in the system will be required.

These financial costs are related only to the implementation of the electronic system and do not cover additional operating costs currently existing in the system, e.g. salaries for staff other than IT development and maintenance team, building maintenance, security, etc.

In addition to the out of pocket costs associated with the implementation of the system, obtaining computer skills, in high demand in the Republic of Tajikistan and scarce in supply, is expected to make staff within the system more competitive, giving them higher bargaining power. Therefore, there is the increasing upward pressure on the mean salaries of skilled employees, thus risking the increased turnover and higher training costs.

# Discussions on Cost-Benefit Analysis

The cost-benefit analysis part provides discussion on the costs and benefits associated with the implementation of the electronic system of civil acts registration. Monetisation has mainly been done with regards to out-of-pocket costs of the system’s implementation, while all other costs have been provided mainly in a descriptive manner. This was partly because precise information is unavailable in the system allowing for quantification and partly because quantification would be rather imprecise regarding the essence of costs and benefits.

This part discusses costs and benefits in two directions – monetary and non-monetary costs and benefits.

The discussion will start first providing information about assumptions made for the cost-benefit analysis, the costs related to the electronic system split into monetary and non-monetary costs, followed by benefits – presented in a similar manner.

**Assumptions**

The cost-benefit analysis makes certain assumptions for the electronic CAR system in the Republic of Tajikistan. It shall be noted form the very beginning that financial costwise, the CBA uses the existing system as a baseline and makes estimates on costs related to the electronic system in terms of increments. Cost estimates are made for the first three years of the implementation of electronic system, as this period is considered sufficient to fully develop and roll-out the initial electronic CAR system. In terms of commencement date, projections are relevant if the system development begins within one year period.

Assumption concerning implementation of electronic system is that it is executed in consecutive steps, without breaks in between the initial development and roll-out. Assumption concerning funding is that electronic CAR system is implemented through additional fundings (mainly expected from the donor funds), as the current CAR system budget would make such system development financially impossible. Taking into consideration that electronic system maintenance costs will increase budgeted expenses, as it will entail adding ICT maintenance personnel, as well as hardware turnover, assumption is made that by the time donor funds are ended, the system is financially strong enough to be self-sustainable.

A base year for the cost-benefit analysis is 2017 and discount rate applied for calculated present value of the system cost is 11%, refinancing rate offered by the Central Bank of the Republic of Tajikistan for the final quarter of 2016 and not expected to change substantially in short-term.

The CBA limitation – the analysis was carried out based on the best available information at the time the study was performed. Cost estimates, particularly with respect to hardware acquisition is based on prices currently available on the market, however does not regard bargaining power the Republic of Tajikistan may have in negotiatinos with suppliers, as it is highly dependent on the negotiation skills of representatives from the Tajikistan’s government side.

**Costs**

*Monetary costs*

Only relevant costs, associated with the electronic system of civil acts registration, are discussed in this section; i.e. avoidable costs, which will be related to the development and maintenance of electronic system.

*Initial out of the pocket costs in the first three years of the project implementation*

Financial planning provides detailed estimates in costs related to the implementation of the electronic system for three years, as this is the critical time-frame for development, as well as fine-tuning and rolling out of the system. It shall be noted from the outset, that these costs do not cover current costs of the system, as they are irrelevant, including supplies – papers, printer cartridges, etc.

Out of the estimated **4,840,750** USD for three years, approximately 60% is budgeted for capital expenditures towards hardware, while the remaining 39% is attributed to salaries and trainings. It shall be taken into consideration, that the mean of the estimated amount makes up 1,613,583.33 USD per annum, meaning it exceedsthe annual expenses planned by the civil acts registration system. Funds obtained from the central budget and revenues generated from additional services stand at approximately 1,200,000 USD for the year 2016. An increase in the revenues is expected in 2017 compared to 2016 from paid services (as the current revenue level was partially achieved from paid services since spring 2016). However, despite the expected increase in revenues, the current disposable amount falls short of the maintenance costs of electronic system. Therefore, without additional funding from the donor, the civil acts registration system itself would not have the financial capability to implement the electronic system.

*Maintenance costs of the electronic system*

Setting up an electronic system will require additional ongoing costs, which the civil acts registration system will have to incorporate in its financial planning. Specifically, having an electronic system will require as at the minimum the system support team, which will ensure that the system runs as it is, without the capability to develop further. This, from the current estimates will make up 390,000 USD per annum. However, taking into consideration that the system will require periodic updates and further development, additional annual costs for human resources are estimated at 147,000 USD per annum, making up in total 537,000 USD.

It is also worth noting, that after three years there will be the need to add hardware and gradually replace old hardware and also renew licenses. Hardware renewal cost is estimated at 20-25% of the initial total estimate, currently standing approximately at 724,450 USD per annum. In addition, reaching full capacity will then require adding a back-up data centre for the system, thus resulting in the one-off investment and maintenance costs after the first three-year period.

Taking into consideration the current revenue level of the CAR system generating additional revenues from services and optimizing costs in no-value adding activities will be essential to be able to maintain the system.

*Reduction in certain types of revenues as a result of electronic system*

Currently the civil acts registration system provides paid services to the citizens. Even though some services are considered to be free of charge by the system representatives, for citizens they are not entirely free as they are asked to pay for letterheads, as well as other “voluntary” additional services, which are almost an essential part of receiving the service.

One such service, which is frequently used by the citizens, is the service of filling in an application form. During the on-site visits and interviews with the representatives of the CAR offices employees highlighted, that people find it hard to fill in application forms appropriately, even though they have samples displayed. Therefore, citizens ask employees of the CAR offices to fill-in the form which is a paid service and costs 2 Somoni – approximately 0.14 USD[[17]](#footnote-17). If the electronic system of civil acts registration is implemented, the system is expected to lose revenues from this service, as employees will be requested to fill in electronic form on their own, thus eliminating the need for citizen to perform this action. If the system currently serves around 500,000 persons annually and if at least 50% of applicants use this service, this means reduction in revenues by at least 70,000 USD, which makes up approximately 5.8% of the current expense budget for the system.

Development of electronic system will probably affect other services and revenues currently generated from them, however exactly specifying them for the purposes of this CBA is not possible, as it is partly related to political decisions.

*Increased upward pressure on salaries*

Taking into consideration that implementation of electronic system requires dissemination of computer skills within the CAR system, a skill which is rather scarce in the Republic of Tajikistan and in demand for private organisations, it is expected that these organisations will start poaching skilled personnel from public service into the private sector. This leaves the CAR system with two main options – continuously train new staff to have substitutes, or to retain staff by increasing salaries in the system to make it attractive compared to private companies (impossible under current resources and legislation). Taking into consideration that the CAR system employees’ skills development highly depends on the experience of human resources in the CAR system, therefore, upward pressure on salaries is almost inevitable.

*Non-monetary costs*

Implementation of the electronic system of civil acts registration requires some level of computer skills, which is currently scarce in the system. Thus, unless the existing human resources are trained to gain the required skills, they may end up losing their jobs, which is a high social cost taking into consideration the existing low income level and job scarcity in the Republic of Tajikistan.

Certain costs will be associated with legislative and institutional changes if the electronic CAR system is implemented. However, taking into consideration that the precise model of electronic CAR system and service delivery model has not been defined yet, quantification of costs for such changes will be highly imprecise.

**Benefits**

*Monetary benefits to the CAR system*

*Savings generated through electronic system*

Implementation of electronic system of civil acts registration is expected to bring monetary benefits, however measuring the benefits in numbers is rather hard due to the lack of information in the civil acts registration system. Monetary benefits are expected to be accrued through optimisation of operating activities, however part of them can be observed in the short-term, while others – in the medium term.

Currently employees of civil acts registration offices carry out manual registration of civil acts records in two copies, creating books of CAR records in need of continuous maintenance and archiving. Currently the finance-economic division responsible for the financial state of the CAR system does not maintain records of annual archive costs, such as the space allocated to archives, binding of books with the CAR records, the series of ledgers to be filled in by the CAR employees in the course of the civil acts registration process, thus making cost estimation a rather hard task. Taking into account this fact, an electronic system will totally eliminate the need of maintaining ledgers to account for the civil acts records. Issuing documents, settling payments, will remove an unnecessary burden from the system’s employees, while at the same time performing activities automatically. Besides ledgers, creating electronically born documents eliminates the need of maintaining massive books of CAR records, thus gradually reducing the archiving needs and associated costs (space, stationery, heating/cooling/humidity maintenance, etc.).

An electronic system allows for channelling of funds currently potentially ending in private pockets, to the system budget; i.e. if currently, due to the lack of formalized expedited services, citizens may be required to provide additional monetary incentives to the employees of the CAR system. An electronic system can allow for such services to be developed (discussed below) and revenues traced and channelled to the CAR system’s budget.

*Potential additional revenue generated through the use of electronic system*

Electronic system of CAR registration provides another substantial benefit - possibility to render additional paid services and increase revenues through them. In addition electronic CAR system allows for understanding value chain of the system and concentrating on value-creating activities for different types of customers.

Rendered business services:

* + - Provision of vital statistics to businesses, as precision and timeliness of such information will increase and enable business entities to obtain reports they need promptly. This provides opportunity for the civil acts registration body to charge businesses for additional services for customized reports and through this, generate additional revenues.
    - If an identity database is created, the civil acts registration body can render identity verification services to business entities, which is another vital service particularly for financial institutions, providing a source for additional revenues for the system.

In order to render such services, however, developing and enabling them at the legislative level will be needed.

Create additional services for persons

* The current manual system makes it hard to implement expedited services and charge willing citizens additional fees for such services. An electronic system, due to its prompt access to digital CAR archives and process automation allows for expedited services to be offered to persons for an additional charge, thus positively affecting revenues of the system.

*Monetary benefits for citizens*

Currently citizens require multiple visits (at least three visits) to CAR offices – to apply for civil acts, to bring the receipt of the payment and pick up relevant certificate/reference. They must also collect documents stored within the CAR system and other state institutions, resulting in increased costs for them. An electronic system will allow for eliminating the number of visits citizens require to the offices, as well as money they need to pay to obtain necessary documents to receive services, part of which is expected to be stored within the CAR system and be accessible in case an electronic system is implemented.

*Non-monetary benefits*

Besides monetary benefits, an electronic CAR system is expected to generate non-monetary benefits as well. Overall, the existence of an electronic system reduces the risks of corruption to a minimum, as all activities are traced electronically and the system is expected to have inherent restrictions to eliminate many common wrongdoings. For example, printing a certificate with data differing from the civil acts record not be possible. Besides reducing the risks of corruption and system misuse it also supports the creation of culture among employees and citizens where wrongdoing in the system is impossible and thus, gradually eliminated.

An electronic system also eliminates doubling of work, currently performed by the employees of the CAR system employees, freeing time for more service quality development oriented activities. Currently, when registering a civil act and issuing a respective certificate, the CAR system employees are required to prepare two copies of CAR records, filling in ledgers to perform administrative records, manually filling in certificates – risking mistakes as well as being time consuming. An electronic system will allow for process automation – inputting information once in the system, eliminating risks of errors and the need of additional paper-based ledgers as the system will allow for automatic records of different parameters.

An electronic system also provides opportunity for timely provision of vital statistics and improvement of the data quality in the system, thus supporting other state institutions in developing and rendering respective services and the development of e-governance in the Republic of Tajikistan. Currently obtaining statistics is only possible by manually adding up different reports provided by different offices involved in the CAR registration process, creating room for error and consuming additional human resource time. An electronic system eliminates such waste and reduces the margin of error substantially.

In addition increased IT skills among personnel employed within the CAR system is expected to be one of the key benefits–taking into consideration that all employees of the CAR offices and relevant Jamoat secretaries are expected to be involved in the electronic system to make the system effective. It also provides opportunity for them to upgrade their computer skills and expand their knowledge, which is rather valuable in the current job market.

To summarise, benefits of the CAR system in short, medium and long-run are expected to outweigh on the initial monetary costs of creating and maintaining such a system. However, monetary costs of the system shall also be taken into consideration which, unless additional sources of revenue are designated for the system, may turn into a burden for the CAR system. Therefore, in the course of the donor funded project a financial sustainability plan for the system shall be developed, creating new paid services, generating additional revenues and balancing the system’s maintenance costs. Unless this is achieved, the system maintenance and continuous development, inherent for technologically sophisticated systems, will be a rather challenging task.

# Annex 1 – List of stakeholders, who have been approached in the course of the study

* The Ministry of Justice of the Republic of Tajikistan and its structural units – state body responsible for civil acts registration system in the Republic of Tajikistan, as well as one of the key stakeholders in the civil acts reform process;
* Ministry of Health and Social Protection of the Population of the Republic of Tajikistan; particular, the Republican Centre of Medical Statistics and Information, and the relevant department, responsible for the work of medical institutions and healthcare policy in the Republic of Tajikistan;
* Ministry of Foreign Affairs of the Republic of Tajikistan; particular, consular department of MFA – according to the legislation, consular offices carry out civil acts registration of the citizens of the Republic of Tajikistan, who reside abroad;
* Ministry of Interior of the Republic of Tajikistan – in the Republic of Tajikistan it is responsible for person’s identification and issuance of identification documents; therefore, in the course of carrying out its functions it uses documents issued by bodies, registering civil acts, use information/data issued by them;
* Ministry of Education and Science of the Republic of Tajikistan – to obtain information on the state of documenting among the pre-school and school age children, what challenges are encountered by the Ministry in this regard and what is their approach towards the issue;
* Agency of Statistics under President of the Republic of Tajikistan – what is the source of information for statistics in civil acts registration field, among them to define demographic data; what problems are encountered with in practice;
* Local governments – body at the central level responsible for the work of local administrations (if such exists);
* The UNDP office in Tajikistan – implementer of the civil acts registration reform and key stakeholder
* International organizations, NGOs and INGOs – which in the course of their work deal with the civil acts registration system, its beneficiaries and have information about challenges in the system, which might be interesting for the study;
* Community / Traditional leaders, particularly in rural areas - Community / Traditional leaders stand the closest to the local population; they have more direct (informal) relations; for a large part of population they are the authority and they enjoy trust; they are frequently referred to for advice, counselling, among others for personal matters, people tell them their personal problems. The same time, traditional leaders are listened to by the local population, take into account their opinion.

Key informants, who participated in the study:

* Deputy Minister of Justice, responsible for the civil acts reform process
* Head of the Republican Centre of Medical Statistics and Information of the Ministry of Health and Social Protection of the Population of the Republic of Tajikistan
* Representatives of the division of Civil Status Registration under MoJ
* Representative of the Human Resources Management of the MoJ:
* Representative of the Finance-Economic Management of the MoJ:
* Representative of the Institute of Advanced Training under the MoJ:
* Representative of the Unit, responsible for IT issues in the system of MoJ:
* Representatives of CAR
* Representatives of Jamoats
* Representatives of the EPOS Health Management

# Annex 2 – Questionnaires

**Part 1. Responsible Body – key functions, subordination, structure, territorial units, etc.**

* 1. What is the organisational structure of body responsible for civil status registration in the Republic of Tajikistan – central, regional, district levels;

(The structure under the Ministry of Justice of the Republic of Tajikistan; it is preferable if the textual information on the structure is supported with the diagram)

* 1. List services provided by the civil status registration bodies – central and territorial bodies;

(here, besides birth, death, marriage and other civil acts registration, the following are referred to: issuing the copy of a certificate, making addition/change to the civil acts record, etc. all activities/services, which is performed by the civil acts registration bodies in the Republic of Tajikistan)

* 1. List civil acts registration bodies, which are under the Ministry of Justice of the Republic of Tajikistan, which render services directly to the population; add to the list types of services they render?

(the following is referred to under this question: types of civil acts registration bodies and not the list of individual offices; with regards to the question in the service area, we are interested in the competence of each type of the body, among them of those, which are the part of the service; for instance: registration of name/patronymic/surname change, this service starts in the district CAR offices, where the applicant applies; it then continues in the civil acts registration archive and other district CAR offices, where all civil acts registered in the name of a person are stores and the service ends in the civil acts registration division, where the case carried out by the district CAR offices is approved and the approved case is sent to the district CAR offices for further action)

Please use the following tables to respond to this question:

|  |  |  |
| --- | --- | --- |
| **Name of the CAR body** | **Type of services rendered by the CAR body** | **Comments** |
|  |  |  |

* 1. Bodies (besides the civil acts registration bodies under the Ministry of Justice of the Republic of Tajikistan), which render services in the field of the civil acts registration (service provides) and what type of service is rendered by each of them?

Please use the following tables to respond to this question:

|  |  |  |
| --- | --- | --- |
| **Name of the body** | **Type of services rendered by the body** | **Comments** [e.g. challenges Jamoats face, etc. ] |
| Local self-governing body  - Jamoat |  |  |
| Consular office of the Republic of Tajikistan in other country |  |  |
| ... |  |  |

* 1. Spread and dispersion of the civil acts registration territorial offices and Jamoats, which render services in the field of the civil acts registration (territorial dispersion) by regions, across the country;

Please use the following tables to respond to this question:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Region** | **Number of city/districts in region** | **Number of CAR bodies in the region** | **Number of Jamoats in region / district** | **Comments** [transport mean people use to get to Jamoat Centre] |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

* 1. What is the distance of the service-providing office from the residential area, it serves?

(this question refers civil acts registration bodies under the ministry of Justice of the Republic of Tajikistan and Jamoats; it is preferable to categorise – total number of population to be divided according to their distance from the civil acts registration bodies – how many persons live within 5 km. from the service centre, how many person within 5-15 km and how many above 15 km)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name of the service provider (CAR Offices, Jamoats)** | **Number of population** | | | **Comments** |
| # persons live within 5 km. from the service centre | # persons live within 5-15 km from the service centre | # persons live above 15 km, from the service centre |
|  |  |  |  |  |

* 1. What is the relationship between the Ministry of Justice/civil acts registration division and civil acts registration territorial offices / Jamoats / consular offices:

|  |  |  |  |
| --- | --- | --- | --- |
| **Questions/Issues** | **CAR territorial offices** | **Jamoats** | **Consular Offices** |
| In what form is the Ministry/division involved in the human resource policy and its implementation |  |  |  |
| What is the relationship in the field of technical-material equipment |  |  |  |
| What is the practice of management-coordination – giving thematic directives, tasks, sending guidelines and methodological guides, etc. |  |  |  |
| How is the work of CAR territorial offices / Jamoats / consular offices monitored |  |  |  |

* 1. What is the subordination of civil acts registration division – single, double or more; to which bodies are they subordinated to and on what matters;

(this question studies whether civil acts registration territorial offices are under single, double or more levels of subordination; i.e. what type of supervision is carried out by other bodies, than the Ministry of Justice of the Republic of Tajikistan, for instance: local/regional governments)

|  |
| --- |
|  |

**Part 2. Number of requested and rendered services, their categorization by their types and service provider entities, service fee**

* 1. Total number of services (registered acts and other services) rendered in the civil acts registration field according to the type of services and the civil acts registration bodies and Jamoats, by years 2013-2015;

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **List of Services/activities** | **Statistics for 2013** | | **Statistics 2014** | | **Statistics 2015** | |
| CAR Bodies | Jamoats | CAR Bodies | Jamoats | CAR Bodies | Jamoats |
| Birth registration |  |  |  |  |  |  |
| Death registration |  |  |  |  |  |  |
| Marriage registration |  |  |  |  |  |  |
| Divorce registration |  |  |  |  |  |  |
| Paternity registration |  |  |  |  |  |  |
| … |  |  |  |  |  |  |
| Issuance of the copy of a certificate |  |  |  |  |  |  |
| Making changes/additions to the civil acts records |  |  |  |  |  |  |
| … |  |  |  |  |  |  |
| Other activities/services (applications, review of letters, etc.) |  |  |  |  |  |  |

* 1. Number of applications, on which the applicant did not receive desired positive response by topics;

(the following refers to in this question: written, as well as oral negative response to render services; it is possible, that such data is not fully recorded, however even approximate data would be useful to see how often people apply and do not receive response)

* 1. Amount of service fees according to the services and fees paid (received by the civil acts registration bodies) by services;

|  |  |  |  |
| --- | --- | --- | --- |
| Name of service | Fee/price of the service | Total Amount of the paid fees | Comment |
|  |  |  |  |
|  |  |  |  |

* 1. Where is the service fees transferred to?

(it goes fully to the central budget, or is it split among different budgets, for instance between central budget and budgets of local self-governments)

**Part 3. Physical infrastructure and state of physical data bases (archives)**

* 1. Please describe generally what is the physical infrastructure in civil acts registration offices?
  2. How many offices are of small size, due to which working conditions are hard? How do you describe the small size of the office and specifically, what type of negative influence do you observe?
  3. Have there been instances of CAR offices, archives being robbed or intentionally damaged?
  4. Are local offices sufficiently protected to place computer equipment there; please provide information according to the civil acts registration offices;

(there is no universal standard on physical protection of offices, against which we could assess the existing situation – everything depends on the existing situation and the context in the country)

|  |  |
| --- | --- |
| **List of CAR offices** | **State of physical protection of CAR offices** |
|  |  |

* 1. For how long are civil acts records (original and the second copy of the civil acts) kept in the registration place (CAR offices, Jamoats) and after what period are they transferred to other offices (to other structural units);
  2. What is the state of civil acts records, including the state of archives – to what extent are civil acts records from all regions/districts stored;

(this question refers to, when in some districts civil acts records from certain periods/years are lost, destroyed of cannot be read/are not valid due to some other reason)

* 1. How frequent are cases by topics, when an application for birth or other certificate is turned down, because the respective civil acts record cannot be found;

(this question refers to all instances of civil acts record not been found – reasons can be the absence of registration, loss, destruction or inability to find the record)

* 1. How many territorial units/offices are there, the interior of which can be refurnished with minor expenditure, where transparent space to serve 2-4 persons can be organised;

**Part 4. Specific procedural issues related to rendering services**

* 1. The list of documents to be presented by a citizen;

(this question refers to documents required to obtain each service separately: birth registration, birth registration for children who have reached one year, registration of name/surname change – on different grounds, divorce registration on the basis of spouses’ joint application, on the grounds of court decision, etc.).

|  |  |  |
| --- | --- | --- |
| **List of CAR Services** | **List of required documents** | **Comments** |
|  |  |  |

* 1. What are the terms (dates) for service provision – please indicate for each service separately;

|  |  |  |
| --- | --- | --- |
| **List of CAR Services** | **Terms for service provision** | **Comments** |
|  |  |  |

* 1. How clear is the list of documents to be presented by a citizen and terms (dates) for each service? Which legal acts regulate this matter?
  2. Which other institutions communicate or exchange information with CAR offices in the course of carrying out their functions – this can be police, social service office, local units of the Ministry of Education or educational institutions, religious leaders, healthcare institutions, etc. (in this part we require description of the relationship with their specificity and challenges);
  3. Discussion of 5 problem cases for each service (problem service refers to situation, when a person cannot receive desired service despite the willingness/efforts of administrative bodies, as there are objective difficulties. This can be related to the existence of the respective documents outside the Republic of Tajikistan, destruction/loss of some documents, inability to find information about relationship or family ties of an applicant, lack of access to archive records of medical institutions, etc.);
  4. Besides documents, presented by a citizen to obtain specific service, does an employee/public servant request information/documents from other territorial bodies or other public institutions? In the case of positive answer, please indicate details – regarding which services and whom the documents/information is requested from, as well as what type of documents/information is requested);
  5. Major challenges related to obtaining/rendering services, which are experienced by citizens and public servants. Please list circumstances and major problems, which prevents successful rendering of services and issuance of documents;

(for example: difficulty with birth registration can be related to the fact, that at the birth of a child a medical certificate was not issued and there is no court ruling; registration of surname change cannot take place, as civil acts record of parents/ancestors cannot be found).

**Part 5. Human Resources (HR)**

5.1 Does the organization have Code of Conduct?

Yes  No

If yes, please provide the document

5.2 What are the staff selection criteria, if any and procedures for staff recruitment, including gender quotas?

5.3 Do the job descriptions exist in the organization?

Yes  No

If yes, please provide a template

* 1. Number of employees in each CAR offices (at all levels – central, regional, district):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| List (names) of the CAR offices | **Number of employees according the staff-table** | | | | **Comments** |
| Total number of employees | Managerial positions | Number of staff supervised by the manager/s | Number Technical staff |
|  |  |  |  |  |  |

* 1. Is there any practice of staff rotation?

Yes  No

If yes, please provide what are the criteria:

* 1. What kind of trainings is applied for the employees of CAR bodies?
  2. What kind of trainings is applied for the staff of Jamoats, who are rendering the CAR services?

5.7What is the age and sex categorization of civil acts registration staff?

(this question implies the entire system – CAR offices, archives, wedding houses, civil acts registration division);

* Under 25 -
* Between 25-35 -
* Between 35-55 -
* Over 55 -
  1. Knowledge/experience with computer equipment by the employees of the civil acts registration bodies:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| List of the CAR offices (central, regional, district level) | Total number of employees by sex: please categorise by their skills | | | |
| Have no skills | Typing skills only: Tajik, Russian (please indicate the language) | - Microsoft word;  - Typing skills: Tajik, Russian (please indicate the language) | - Microsoft word, excel;  - Internet browser;  - Typing skills: Tajik, Russian (please indicate the language) |
|  |  |  |  |  |
|  |  |  |  |  |

* 1. How many new employees (of them are female) were appointed in the civil acts registration system in the years 2013-2015 ?

(please, indicate according to the number of structural units (offices))

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| List of the CAR offices (central, regional, district level) | Number of new employees appointed in the CAR system | | | Comments |
| 2013 | 2014 | 2015 |
|  |  |  |  |  |
|  |  |  |  |  |

* 1. How many position promotions (of them women) have taken place in the years 2013-2015?

|  |
| --- |
|  |

* 1. How many employees (of them women) have left civil acts registration system in the years 2013-2015? Out of the total number, how many have left work with their initiative and how many have been dismissed (of them women) with the employer’s initiative? Please indicate the number of employees (of them women) who have left (through their and employer’s initiative) according to structural units;

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| List of the CAR offices (central, regional, district level) | Number of employees, who have left CAR system: | | | | | |
| 2013 | | 2014 | | 2015 | |
| with own initiative | with the employer’s initiative | with own initiative | with the employer’s initiative | with own initiative | with the employer’s initiative |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

* 1. What is the procedure of employee dismissal in the civil acts registration system?

(what is envisaged by the legislation and what is the practice; for instance: if the management decides, that an employee shall be dismissed from work due to the lack of qualification of “bad habits”, can it be done easily?)

* 1. Employee remuneration – minimum and maximum remuneration in the central apparatus? minimum and maximum remuneration in the local (district) units and jamoats?
  2. Who inspects the work of civil acts registration offices and through what mechanisms?
  3. What is the subject of inspection – only the legality of work, or the service quality as well?
  4. How many structural units of civil acts registration system were inspected in the years 2013-2015? Taking into consideration the total number of inspections, please, follow the example and indicate what was the subject of inspection, what type of violations were revealed and what outcomes were obtained after the inspection:

|  |
| --- |
| Example: the work of 9 CAR offices, 2 archives and 2 marriage registration offices were inspected in 2013-2015, out of which:  The inspection object was:   * In 5 cases X, * In 6 cases - Y * Etc.   Violations revealed through the inspection:   * In 3 cases - X * In 1 case - Y * Etc. * In 4 cases no violations were revealed   Outcomes of the inspections:   * In 2 cases – 2 employees were dismissed from the respective units; * In 3 cases – the head of the unit was issued with a reprimand; * In 5 cases – employees of the unit were issued with a thank you letter; * etc. |

* 1. Information on instances/facts, where the civil acts registration employees were directly involved/participated in: issuing documents incorrectly, issuing documents with identification data of one person to another, other similar cases; please provide information according to structural units (offices) and according to the types of mistakes/violations;

(this question refers to unintentional mistakes, as well as intentional violations)

**6. Informational Technologies (IT)**

**General**

1. Organization / structural unit, legal status:

|  |
| --- |
|  |

1. Organisational structure:

|  |
| --- |
|  |

1. Budget. Please provide detailed data on the:
   1. Annual budget:
   2. Part of your own incomes in the annual budget (if applicable):
   3. Structure of expenses
      1. Office costs:
      2. Salary (including bonuses) by positions
      3. IT and infrastructure maintenance (licenses, software support, devices support) costs:
2. Business Objectives:
   1. IT unit /division Basic functions (defined by regulation?)
   2. Strategic plan – yes/no

If yes, please submit

* 1. Objectives and capacity growth forecast (if not given in the Strategic Plan)
  2. What part of IT operations is outsourced and what is retained in-house.

1. Services:
   1. Service catalogue (a list of the internal as well as external, if applicable)
   2. Basic software, which develops or serves organization:

in-house developed:

purchased:

*\* in case of purchase - a software brand, name, version, specifications.*

* 1. Structure of the services (architecture, the interactions, if any)
  2. Platforms (operating systems, databases). Operating systems configuration details. Database type, capacity, load.
  3. Backup

the technology used:

the size:

the policy:

1. Information about provided services (for other organizations) - yes/no

If yes, then: contractual obligations, in case of SLA.

1. Software Development

Coding platform:

Technology:

Business-process analysis tools, if any (UML, BPMN, …):

Project management methodologies used, if any (Agile, Waterfall, Scrum ...):

Source code management and publishing process:

Testing process:

Software Development Life Cycle Management, if any:

1. Physical infrastructure:
   1. Network topology (physical and logical), peak and the average network loads on the channels.
   2. SAN network topology and devices, if any.
   3. Physical servers:
      1. Brands, models, the configuration of each server according to:
         1. Models of processors and quantity
         2. RAM
         3. HDD type and size. Do you use the server HDD for data storage?
   4. Data storage systems:
      1. Brand, Model
      2. Hard drives: quantity, type, capacity
      3. RAID type
   5. Replication type and technology, if applicable.
2. Virtualization infrastructure - yes/no

If yes, then:

* 1. Hypervisor type and management system
  2. The number of servers and each resource: CPU, RAM, HDD
  3. The average and peak loads for each server according to its components (CPU, RAM, HDD).

1. SOA Services: What services are in published mode, the technical description of the service and who uses?

|  |
| --- |
|  |

1. The projects in planning and development stage

|  |  |
| --- | --- |
| Description: |  |
| Architecture: |  |
| The technological Model: |  |
| Platform: |  |
| Human resources employed: |  |
| The estimated power consumption after launch: |  |

1. IT support:
   1. Systems, you are supporting and support functions:
   2. Support structure:

hot line:

Technical assistance:

*\*Please indicate the number of employees by function.*

* 1. Number of users:

Territorial distribution of users:

1. Information security - yes/no

information security management system, if applicable:

Internal regulatory documents:

Formal policies, procedures, guidelines, standards:

1. IS (Information System) Audit
   1. How many times was conducted IS Audit (Including Security Audit)
   2. IS Audit Plan
   3. Outcomes and results from IS Audit
   4. Improvements
   5. IT activities alignment to Organisation goals and objectives

**Network**

Please fill in the following table:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Information about the network infrastructure (territorial units) | | | | | | | |
| Territorial unit | Internet connection (yes/no) | Internet Connection Type (optic, DSL, ...) | Internet connection speed | VPN (yes/no) | Local Area Network | | Connection to the central datacentre (yes/no) |
| (yes/no) | number of computers in LAN |

**Computers**

Please fill in the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Information about the computer infrastructure (territorial units) | | | | | |
| Territorial unit | Staff  (q-ty) | Computers (q-ty) | UPS(q-ty) | Scanner  (q-ty) | Printer  (q-ty) |
|

**Software**

1. If exists any SDLM (Software Development Lifecycle Management) Process in organization.

Please provide any documentation what formally describes any aspects of SDLM.

1. Document that describes a business requirement for existing software. Security Requirements.

Any documents that proves software development alignment to business requirements.

1. Business process for software deliveries if any (e.g. User acceptance test and procedures.)
2. Software Quality Control (User stratification, Security, Code maintainability).
3. Development Team in-house or outsourced
   1. Development Team. (Positions, Platforms, Competences)
   2. SLA Management. (How, who is charge of development, monitoring evaluation and escalation)
4. Description of Existing Software what software are developed in house, and what software are maintained by development team that was developed outsourced. (Description, Technologies used, brief architecture)

**Description of Current Registration Software**

1. Height level architecture. (Central, Distributed, Mixed) Please Describe how the solutions are working. Distributions in Regions Connection types, Client types. Number of Users. Datacentres Primary and secondary. Dependency to other systems.
2. Technologies used (Platform, frameworks end etc.). Both Server and Client Side.
3. Development Platforms and components used in the solution. Both Server and Client Side. (e.g. NET, Java, Components, Database Servers …)
4. What source code is available and what is not. (Additionally restriction on IPR, if any).

1. The statutes of the civil acts registration sectors and the marriage houses of the CAR divisionare approved bythe Decree #110 of the Minister of Justice of the Republic of Tajikistan (21/07/2015). [↑](#footnote-ref-1)
2. Specific examples:

   * Delayed registration of birth and death – it is necessary to verify data concerning a person by specific years and territory to ensure, that birth or death has not been registered elsewehere;
   * Marriage registration – it is necessary to check data concerning persons, who are getting married by years and territory, to make sure that none of the persons is already married;
   * Divorce registration – it is necessary to check data from the marriage act to make sure, that the marriage is valid and that divorce has not been registered based on the application of another spouce according to the place of his/her residence;
   * Registration of paternity – it is necessary to check data from the birth act of the person, for whom the paternity registration shall take place;
   * Registration of adoption - it is necessary to verify data from the birth act of an adoptee;
   * When registering the change of name/patronymic/family name – it is necessary to check/request data from all those civil acts, which have been registered to a person and which shall be updated as a result of a change in name/patronymic/family name;

   Data/document verification-request is necessary also when making changes/corrections/additions to the civil acts records, recovering or nullifying a civil act, issuing copy of a certificate. [↑](#footnote-ref-2)
3. Some services take place with the participation of more than two civil acts registration offices. one of the complex cases is the  change of name/patronymic/surname. In order to register the change of the surname, applicant goes to the CAR office based on the place of residence, which then starts the work. Work on the case involved requesting-searching for all those civil acts records, along with the documents presented by the applicant, which have been prepared in the name of the applicant, as change needs to affect all those records. At this stage all those civil acts registration offices get involved in the process, where records are stored (both copies). The next stage is when the CAR office working on the case sends the decision to the supervising body (CAR division, regional CAR unit) for the approval. Supervising body makes a decision and sends it back to the office, which has conducted work on the case. This latter registers the act of change in the surname, issues a certificate and sends notification to all civil acts offices, where civil acts records, related to the applicant are stored. Offices, receiving notification, insert respective changes in the civil act record and issue a certificate. [↑](#footnote-ref-3)
4. The CAR Division does not maintain statistics on civil acts registered by Jamoats and rather provides aggregated data for all registered acts by regions/districts/cities by types of civil acts. However, according to the existing practice Jamoats are obliged to carry out primary registration of birth and death, while CAR sectors perform only delayed registration of birth and death. Therefore, out of aggregated data (which provides separation between primary and delayed registrations), it is possible to identify the portion of primary registrations, thus, registrations carried out by Jamoats. [↑](#footnote-ref-4)
5. World Bank (2012), *Tajikistan’s Winter Energy Crisis: Electricity Supply and Demand Alternatives”.* Available on: <http://siteresources.worldbank.org/ECAEXT/Resources/TAJ_winter_energy_27112012_Eng.pdf> [↑](#footnote-ref-5)
6. These diagrams were designed by the research team based on needs electronic system have. [↑](#footnote-ref-6)
7. EPOS team has elaborated existing software; ensured its introduction in the pilot regions; provide software support for end-users; provide maintenance of the existing software and introduce minor changes if necessary. [↑](#footnote-ref-7)
8. It shall be noted, that despite newly built infrastructure, it has to fit specific business model; therefore, the existing justice centers can be considered as an improvement in terms of physical infrastructure, however in need of adjusting to the final service delivery model. [↑](#footnote-ref-8)
9. At the moment of the study there was no single office with at least one full workstation – computer, all-in-one printer, power generator, network infrastructure. [↑](#footnote-ref-9)
10. As the Feasibility Study discusses, the current system represents a digitisation system for already registered civil acts, thus cannot be effectively considered as electronic system of civil acts registration. [↑](#footnote-ref-10)
11. Currently all civil acts registered by Jamoats are digitized by CAR offices. [↑](#footnote-ref-11)
12. What is “Relevant” shall be decided in the study related to Digitization of CAR archives and thus the indicator with its baseline will require specification later. Key stakeholders shall decide what part of archives is “active” and make digitization priorities as digitizing the entire archive (part of which is irrelevant for the functioning of CAR system) is not a cost efficient approach. [↑](#footnote-ref-12)
13. However, scanning of civil acts records does not take place , which is an important component for the archive digitization. [↑](#footnote-ref-13)
14. http://www.nbt.tj/en/ [↑](#footnote-ref-14)
15. the estimates will further be elaborated in the course of the third mission and feasibility study 1.2 [↑](#footnote-ref-15)
16. Hardware does not include reserve hardware for cases of malfunctions. It is suggested, that when negotiating procurement of hardware, rapid response mechanism is included in the agreement, so that supplier is liable for replacing/fixing any malfunctioning hardware within 24 hours, so that the process is uninterrupted. [↑](#footnote-ref-16)
17. Decree #430 of the Government of the Republic of Tajikistan of 2 July 2015 on the Size of Fees for Additional Services Rendered to Persons and Organisations in the Civil Acts Registration Bodies in the Ministry of Justice of the Republic of Tajikistan or other authorised bodies [↑](#footnote-ref-17)