O'ZBEKISTON RESPUBLIKASI OLIY SUDI

Review on the advanced international experience and practices for implementing e-justice and proposals for the further development of "E-SUD" information system in Uzbekistan

Prepared by the joint project of
the Supreme Court of the Republic of Uzbekistan,
United States Agency for International Development (USAID)
and United Nations Development Programme (UNDP)
"Rule of Law Partnership in Uzbekistan"

Date: May-July, 2015

This report is prepared within the framework of the joint project of the Supreme Court of the Republic of Uzbekistan, United States Agency for International Development (USAID) and United Nations Development Programme (UNDP) "Rule of Law Partnership in Uzbekistan". The contents are the sole responsibility of the authors, and do not necessarily reflect the views of the Supreme Court of the Republic of Uzbekistan, USAID, the United States Government and UNDP.

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1 Executive Summary

There is no democracy without a system of swift and transparent justice. Therefore, the introduction of information systems in the courts allows a decrease both in time and number of pending processes, boosting the efficiency of the services provided to citizens and to the society in general[1].

The United Nations E-Government Survey 2014, clearly shows that Uzbekistan is making quick advances in their e-Government strategies, in fact they are ranked in second place of central Asian countries. Of course, the topic of the report being presented here is not e-Government and therefore this report will not focus on the more general aspects of e-Government but take a vertical view point on the implementation of e-Justice systems. The Uzbek government signed an agreement with the UNDP to run a project entitled "Civil Justice Reform Project: Effective Court management (CJR: ECM)" which aims to improve the Justice system with a particular emphasis on Civil justice. This ambitious project aims to better the justice system by implementing actions in a multifaceted manner with e-Justice being one of the tools being used facilitate the attainment of these objectives.

A subsequent agreement entitled "Rule of Law Partnership in Uzbekistan" was established and signed in November 2014. The project is co-financed between the UNDP and USAID[2]. The ultimate goal of the Project is to strengthen public access to and trust in Uzbekistan's civil court system. The Project works primarily with the Supreme Court of Uzbekistan, building on that institution's political will and organizational capacity to build public trust and achieve greater alignment with internationally recognized standards of civil court's accountability, rule of law and judicial performance. The Project provides assistance and support in implementation of current systemic and institutional reforms aimed at further deepening democratization and liberalization of judicial and legal system[3].

The international experience of implementation of national e-Justice systems has not always resulted in success stories and there have been a number of multi-million dollar ICT failures across the globe. E-Justice in particular presents a number of challenges to successfully implement and gain an acceptable usage level. Some of these stem from insufficient involvement of the actual end users (i.e. Lawyers, Judges and the Citizen) during the requirements gathering parts of the project. The design of such systems often being driven by the Courts Administrative bodies who may possibly have a different perception how the system should function. Others reasons may lie in the perception of e-Justice as being an additional cost to the legal profession or just simply too complex for those who are not IT savvy.

In this document I will be presenting a number of different national e-Justice systems with a particular focus on the lessons learned by each administration, by sharing these experiences we can build better Justice Systems.

A summary of the lessons learned are as follows;

- ***Work and design with your users*** - It in imperative that any development of e-Justice systems is done in conjunction with the main stakeholders. In the case of the French e-Justice system this was done in partnership with the Council of Bars, which is even better as the Council of Bars had a financial motivation to see the system being widely adopted by the legal profession. In Singapore they also worked in collaboration with the Judiciary and the legal profession to build the eLitigation system.
- ***Avoid imposing costs on end users*** - Additional costs that a user has to incur to connect to an e-Service will act as a major disincentive for the take-up of the system and this will prolong the uptake. This was clearly seen in the French e-Justice systems and has remained an issue until today.

[1] Risk factors in e-justice information systems - João Rosa, Cláudio Teixeira, Joaquim Sousa Pinto - Department of Electronics, Telecommunications and Informatics, University of Aveiro, Aveiro, Portug

[2] http://www.undp.org/content/undp/en/home/presscenter/speeches/2014/10/16/helen-clark-speech-at-the-launch-of-the-rule-of-law-partnership-with-the-supreme-court-of-uzbekistan.html

[3] http://www.uz.undp.org/content/uzbekistan/en/home/operations/projects/democratic_governance/rule-of-law-partnership-in-uzbekistan-.html

- ***Work in parallel with legislators*** - Any legal amendments need to be made before the systems are put in place, even if a pilot system is being implemented. The lack of a legal basis for electronic submission was one of the reasons for low take-up of the French e-Graffe system. The UK - Money Claims Online system was built parallel to changes in legislation and this was one of the reasons why this system achieved success.
- ***Continuously promote the system*** - Achieving high usage rates can take a considerable amount of time. The Italian PCT system was originally put in place in 2005 and it has taken 10 years to achieve the substantial take-up that is enjoyed today.
- ***Keep the system as simple as possible*** - this is a conclusion of the Italian designers of the PCT system which had initially failed and it is also one of the reasons for the success of the Money Claims Online System. The UK Pen Drive system shows that there is a beauty in simplicity and shows that the Courts can still take leverage from electronic Justice even when a sophisticated electronic system is not in place.
- ***Big bang implementations often do not work*** - Systems need to be introduced gradually in a phased manner both in terms of functionality and in terms of implementing across the different courts.
- ***Build your systems in a modular fashion*** that are sufficiently decoupled from each other to allow independent deployment. Success of a number of e-Justice systems was attributed to the fact that they were extensions of already existing case management systems
- ***Apply the right level of security*** and implement formal risk management techniques to properly asses the security measures that need to be in place. For example, Singapore eliminated the need to use a smart card to authenticate users who wished to file a case using the eLitigation system. Italy provides a mobile app that can be used on an open mobile network but compensates for this by anonymising information. Lock the door too securely and no one will come in.
- ***Mandate the use e-Justice –*** but only after the ICT system has sufficiently matured in terms of stability and functionality. Italy is now achieving high level of electronic submissions and they are incrementally mandating the use of electronic submission cross the different instances of Courts.
- ***Digital by default –*** new services are implemented with the manual paper based route being the exception. Therefore the de-facto method of using the government service is electronic. The UK and Denmark have implemented this successfully.

Lanzara[4] talks about the past experiences with e-Justice and other e-Government systems and notes that the building of electronic services entails substantial institutional reconfiguration at different levels of government. The making of e-Government involves the building of a new kind of technical infrastructure and the setting up of holistic communication systems. Effective e-service delivery will not happen without a deep restructuring. We therefore need a deeper understanding of how innovation is shaped and limited by the rules of technology and law.

The information provided on the E-SUD system shows that this e-service is achieving a good level of maturity and the functionality provided is in line with the trends being propagated in other systems that were examined in the previous document which included Italy, France, Singapore and the UK. In light of this and the thoughts provided by Lanzara[2] I have focused on the areas of concern as also indicated in Annex 1. These, I have noticed, are really horizontal issues and they pertain to the provisioning of a government electronic identity system (authentication), a payment gateway (for fees and proof of identity) and a citizen and organisation register (authentication and notification services). I have therefore focused

[4] The Circulation of Agency in E-Justice: Interoperability and Infrastructures
By Francesco Contini, Giovan Francesco Lanzara

on these areas and provided alternate solution that have been implemented and proved to be effective at a national level.

2 Background Information

The Uzbek government has worked with the UNDP on a series of projects, which have the primary objective of improving the justice system, and much progress appears to have been recorded in this area.

A joint project was setup in June 2012 with the theme – "Civil Justice Reform Project: Effective Court management (CJR: ECM)" with the objectives of[5];

Offering technical assistance to strengthen the institutional framework of the civil courts of Uzbekistan through:

a) development of favourable conditions for further improvement of the civil justice in legislation (de jure) and in practice (de facto);

b) enhanced accessibility of justice through E-justice implementation, improving court decisions, as well as enhancing enforcement of court decisions, and increased awareness of public of available legal remedies in obtaining civil justice;

c) improved efficiency of civil justice system;

d) promotion of alternative methods of civil disputes settlement.

This project instigated a number of initiatives to improve the ICT infrastructure and tools available to the courts' administration and judiciary. E-Justice was also seen as a way to improve the efficiency of the Courts and enhance the transparency of the Justice system. An e-Justice pilot project was identified and the Zangiota inter-district civil court was assigned as the designate court for this. To facilitate matters the pilot was backed by Provisional Regulations enacted by the Supreme Court.

The E-SUD electronic case management system was implemented and an evaluation of the project in November 2013 showed that this system was being effectively used for non-disputable cases, while analytical recommendations were provided on claims.[6]

Based on the success of this project a subsequent partnership was signed between the Government of Uzbekistan and the UNDP (co-financed by USAID) entitled "Rule of Law Partnership" which commenced in November 2014. One of the three key objectives of this project, which is being lead by the Supreme Court, is ' Improving courts' efficiency through introduction of information systems (interactive services)[7]". The following is an outline of the expected *ICT related* results that are anticipated to be elicited from this partnership;

a) Introduction of interactive services through Supreme Court website.
b) Further piloting of E-SUD judicial information system in additional eight district courts, and elaboration of additional modules on hearing cases in appeal, cassation, and supervisory instances. Strengthening the capacity of judges and judicial personnel in application of E-SUD system.
c) Providing technical assistance to High Economic Court in increasing the efficiency of court hearings by piloting of audio-video recording of court proceedings.

In light of the above the UNDP have requested the gathering of further information pertaining to the area of e-Justice based on different fora. This report therefore focuses on a number of e-Justice systems implemented in different national domains, focus on the lessons learned from each project and additionally the positive aspects that enabled them to establish a best practice in the area of e-Justice. An emphasis will also be placed on the tools

5 http://www.undp.uz/en/projects/project.php?id=181
6 http://www.uz.undp.org/content/dam/uzbekistan/docs/projectdocuments/ggu/ruleoflaw/un-uzb_rule_of_law_eng.pdf
7 http://www.uz.undp.org/content/uzbekistan/en/home/operations/projects/democratic_governance/rule-of-law-partnership- in-uzbekistan-.html#

that were implemented to establish a communications channel with the legal profession and the citizen therefore enhancing the transparency of the justice system. It will additionally look at technical frameworks that were put in place to facilitate communication, interrogation and sharing of cross-domain information.

We can note the main Presidential Decrees (taken from Annex 1) which drove the development of E-SUD forward as being;

I. March 21st 2012, Resolution of the President of the Republic of Uzbekistan 'On steps for further introduction and development of modern information communication technologies' (# ПП-1730)
II. Provisions of the second Decree (# УП-4459 dated August 2nd 2012)
III. Decree of Cabinet of Ministers of the Republic of Uzbekistan (# 346 dated December 10th 2012). Summary is below in table.

Task	***Comment***
Submit proposals on organization of electronic court proceedings, including: video and audio recording of court proceedings as well as new types of stenography of court proceedings.	During the study visit to the Zangiota interdistrict court it was noted that video and audio recording facilities were in place.
Elaborate 'Court activities' and 'Court documents' information systems aimed at gathering, processing, systematization and storing information on court activities, court decisions.	E-SUD also acts as a case management system therefore being able to provide these features. Workflow capabilities included by the diverse flows presented by the different instance of courts. These pose a challenge to map and effectively develop.
Upgrade web-sites of the courts in view of need to provide services related to online filing of statements of claims, motions and annexes thereto to courts via 'electronic means of data exchange'	E-SUD provided the capabilities to electronically file.
Upgrade web resources of courts in view of need to mandatory publication of decisions of economical courts	Publications of decisions are being done through E-SUD
Enable notification of litigants and sending to them court rulings and other correspondence via 'electronic means of data exchange'	E-SUD is able to provide email notifications and SMS notifications along with the functionality provided by the virtual cabinet.
Introduce and use of corporate email systems and e-doc flow systems based on usage of digital signatures	It does not appear that a corporate email system is in place although E-SUD acts to some extent in this fashion. Functionality for digital signature has been developed but the use of digital signatures remains an issue for various reasons

It would therefore appear that E-SUD is technically achieving the objectives that were set although some issues do exist and as always there is room to ameliorate the system in terms of functionality.

The system has been run in pilot mode for a period of time while it was being developed, refined and augmented with further functionality. The pilot appears to have been very productive in terms of providing feedback and establishing the system. There is a danger though, that the system could remain in a prototyping/pilot mode for a

longer period of time than is productively desirable. The information provided to me indicates that an additional eight inter district civil courts will be brought online shortly and I am in agreement with this approach. The implementation team should identify and plan how the E-SUD system will be deployed in the medium term and outline the resources that are required for each phase of the implementation. It is important that sufficient time is left between the different phases that will allow the implementation team to take stock of the issues and resolve the critical and high priority issues before moving onto the next stage.

Moving to a different instance of a court will also require that the team reconsider any changes to the functionality of this instance but it is imperative to keep in mind the lessons learned mentioned in the previous document. "Keep the system as simple as possible" which was the conclusion of the Italian designers of the PCT system after they had initially failed.

Coming back to the issues that are being encountered, many of which are related to the horizontal enablers of e-Government (please see Table 1 overleaf) and are therefore not a problem that is specifically related to e-Justice but rather to e-Government services in general. In particular we note Authentic Sources, e-Payment and e-Identity. The need for these three enablers are felt more strongly due to the nature of e-Justice with its particular security requirements and need to protect privacy of data. These enablers are therefore given a particular focus in this document but at the same time, where possible, focusing on the solutions found to real life problems.

Enabler	***Description***
Authentic Sources	*Authentic Sources are base registries used by governments to automatically validate or fetch data relating to citizens or businesses.*
ePayment	*Electronic Payment (ePayment) is an electronic money transfer between government and citizens or business in eGovernment service delivery.*
eIdentity	*Electronic Identification (eID) is a government-issued document for online identification, and authentication*
Open Specifications	Open Specifications are free and possibly standard specifications that can be used throughout eGovernment applications8.
Single Sign On	Single Sign On (SSO) allows users to get access to multiple systems without the need to log in multiple times.
Architecture Guidelines	targeting a uniform and re-usable service-based approach.
Secure eDelivery	Secure Electronically Delivery (eDelivery) is a legally recognized secure delivery for electronic exchange of documents and data between government and citizens or businesses.
eSafe	Electronic Safe (eSafe) is a legally recognized system that allow for secure storage and retrieval of electronic documents.

Table 1 - Horizontal Enablers of e-Government[8]

[8] Digitizing Public Services in Europe: Putting ambition into action 9th Benchmark Measurement | December 2010 - Capgemini, IDC, Rand Europe, Sogeti and DTi

3 Increasing Transparency of the Justice System

E-justice allows the use of Internet technology in handling various administrative procedures before, during and after the administration of justice, provides a host of possibilities throughout the legal process. It is seen by many as the key to increasing transparency with the citizen. In this respect "E-justice" can be defined as the use of technology, information and communication to improve citizen access to justice.

It can be further noted that transparency helps to ensure that courts can do their jobs efficiently and effectively. The quality of justice is enhanced when the public knows what parties are presenting to the court and take issue with misstatements; when media can report on the quality and clarity of opinions; and when public pressure and concern about image can encourage judges to decide cases expeditiously[9]. It could be argued that transparency could become a distraction, for example, by requiring judges to spend time deciding whether to remove privacy-related information before releasing documents to the public or compiling personal financial information for disclosure. It is therefore logical that an informed citizen is less likely to be suspicious of the due process of the Courts and through ICT, government administrations are in a better position to provide these insights. Information provided should be extended beyond the workings of the Court Halls and serve to educate the citizen about the jurisprudence of the national regime, therefore providing a better understanding on how the Judicial systems functions. It is only with this knowledge that our citizens can have a better understanding of their rights.

A report entitled "the role of public legal education" [10] states that Public legal education provides people with awareness, knowledge and understanding of rights and legal issues, together with the confidence and skills they need to deal with disputes and gain access to justice. 'Equally important, it helps people recognise when they may need support, what sort of advice is available, and how to go about getting it. Public legal education has a further key role in helping citizens to better understand everyday life issues, making better decisions and anticipating and avoiding problems. The PLEAS[6] report cites the use of online facilities to further assist in the educational programme.

3.1 The European e-Justice Portal (https://e-justice.europa.eu)

The European e-Justice portal enhances the transparency of the Member States Justice system by providing their citizens with practical information, in their language, on the judicial system and procedures. All information in the portal has been translated into the 23 official languages of the European Union. This portal aims to increase visibility in order to improve access to justice for European citizens. In particular, the portal contains European and national information on victims' rights in criminal cases, their rights to compensation, the fundamental rights enjoyed by citizens in each Member State, and fundamental principles relating to the citizen's ability to initiate proceedings before a court in another Member State. With more than 12,000 pages of content, the portal holds a wealth of information.

The concept of a jurisprudence portal would also apply to Uzbekistan but of course it would not need to have the complexities of hosting multi-country information. The concept of having a Justice Portal that contains information on the Uzbek legal system and other online facilities would go a long way in giving the citizen a good understanding of the legal system and their rights; it would also facilitate the invoking of certain legal procedures. In Malta we did

[9] The use of ICT in Brazilian Courts-Roberto Fragale Filho
[10] Developing capable citizens:the role of public legal educationThe report of the PLEAS Task Force

not have all this information collated under a single portal and therefore the use of the EU e-Justice portal has allowed us to effectively provide a one-stop-shop of comprehensive information on our justice system to interested parties.

The portal is divided in four core sections and therefore targeting the visitor to find information relevant to them much faster. The four core groups are;

- Citizens
    - Find a lawyer
    - Find a notary
    - Going to court
    - Rights of victims of crime in criminal proceedings
    - Family matters
    - Costs of proceedings
    - Rights of defendants in criminal proceedings
- Businesses
    - Interconnected insolvency registers search
    - Business registers
    - European Payment Order forms
    - Land registers
    - Going to court
    - Monetary claims
    - Legal professions
- Legal Practitioners
    - Law
    - Case law
    - Legal professions and justice networks
    - EJN in civil and commercial matters
    - Judicial systems
    - Registers
    - European judicial training
- Judiciary
    - Law
    - Tools for courts and practitioners
    - EJN in civil and commercial matters
    - European judicial training
    - Videoconferencing
    - Taking of evidence form

While not all of the sections would be relevant at a national level a good number of them are. It is important to note that the portal goes beyond providing static information as it provides a number of search tools along with dynamic forms for online interaction with the Justice systems of other member states. Many of the forms can be filled in by the citizen without the need, intervention or endorsement of a legal professional. The portal uses wizards to help the citizen identify the most suitable procedure to use, for example a small claims procedure. This wizard system is still in its infancy and therefore requires further refinement.

Although the European e-Justice Portal is to be lauded as an excellent initiative, unfortunately, the portal has not reached the usage rates that one would have anticipated and by May 2013, three years after being launched, they were only having 80,000 visits per month. On a more positive note the number of hits was on the increase and with the introduction of new register search facilities (for example on Insolvency Information) the upward trend is expected to continue. The number of users visiting the e-European e-Justice Portal raises a question as to the size of the investment that should be made on such initiatives. As a minimum there at should be least a good understand of the requirements and needs of the end users and this should be assessed before proceeding to build such systems. An aggressive marketing exercise would help to ensure that take-up of the new services justifies the investment made by government.

3.2 Victims Portal – making it simple (www.infovictims.com)

This portal is a joint imitative between Austria, Czech Republic and Portugal and although it focuses on victims of crime, it is a good example of a Justice portal moving away of the formal formats that are normally associated with the Justice and Legal Sector. The portal uses an attractive design which is animated with cartoon like pictures. All information in the portal uses wording that is easily understood by the layman therefore further encouraging the citizen to drill further into the portal and gain access to their rights as victims. Here, a balance between providing sufficient information to keep the citizen in the know, and information overload are maintained. The Netherlands are now proposing a further simplification of this portal and have produced an animated video clip that explains victims' rights in an even more concise manner. The Netherlands feel that this approach could be used for the e-Justice Portal to further simplify the access and understanding of the Justice process. This latter approach is still under consideration by other European members due to the costs related to producing multiple versions of the clips to cover the different legal systems and official languages.

Figure 1 - The info-victims web site

3.3 Databases of Jurisprudence

Publicising the outcomes of local criminal cases and the details of the convicted offenders can help to[11]:

- reassure the public
- increase trust and confidence in the criminal/civil justice system
- improve the effectiveness of the criminal/civil justice system
- discourage offending and/or re-offending

Evidence, from UK studies, suggests that the public wants to know about the outcomes of local court cases. This information is also a legitimate way of engaging communities and making criminal and civil justice services more transparent and accountable.

Transparency and effectiveness therefore emphasized as two positive consequences of the use of information and communication technologies (ICT) in the Courts. In fact ICT has expanded the possibilities of access to information and judicial decisions.

There are a number of issues related to privacy and data protection although these are subject to the national legislation and how data is classified in the national domain. In some cases, subject to statutory prohibitions or orders prohibiting publication, the Courts may refuse the publication of the documents. Other common instances of withholding publication are where family courts or minors are involved. Prudence must be applied to either withhold the publication of the sentence or sufficiently anonymized the details of the parties and other relevant details. From a scan of the 27 European member states, it is apparent that they all withhold the publication (to the general public) of the sentences in a number of cases or else these are totally anonymized to protect the vulnerable

[11] https://www.justice.gov.uk/information-access-rights/sentencing-outcomes

party. It is possible to automate the anonymisation of sentences that are published on the internet but this is mainly only feasible where the sentence is built on the fly from pre-defined information from an ICT system (i.e. the sentence is not typed in a word processing document format). This method could easily be applied to summary cases but becomes much more difficult to do with Court Cases held at a high instance. This is mainly due to the verbose and unstructured content of sentences of this nature.

Another interesting approach that is starting to pick up in Europe, although still in a conceptual stage, is to have the legal citations in judicial decisions computer readable and therefore searchable. These legal references within judicial decisions are extremely important for legal research, but these are currently not machining readable. Since their numbers run in the millions, manual tagging is not feasible. Natural language processing technologies are very promising, but are not used on a wide scale yet and may not have reached sufficient maturity levels.

I will use the French example of the "Jurinet" database of the Cour de Cassation which holds court decisions since 1960 and several famous decisions before 1960 as an example of a database of jurisprudence. Through this system Judges have access to the decision, the report and the advocate general's opinion. The system also provides hyperlinks to decisions of a similar nature therefore facilitating research. There is also a second database named Jurica, this database holds all Court of appeal's decisions in civil matters. Another tool provided to Judges in France is the availability of a search engine based on "key constitutional questions" from past cases with the relative decisions taken; these decisions are further classified by date and applicable law. There are also analysis, draft decisions for trial judges and a summary of the Court's jurisprudence on key constitutional questions. The website www.courdecassation.fr additionally offers general information, an access to the publications of the Court (jurisprudence newsletter, newsletter of the court, annual report) and a selection of decisions from different divisions.

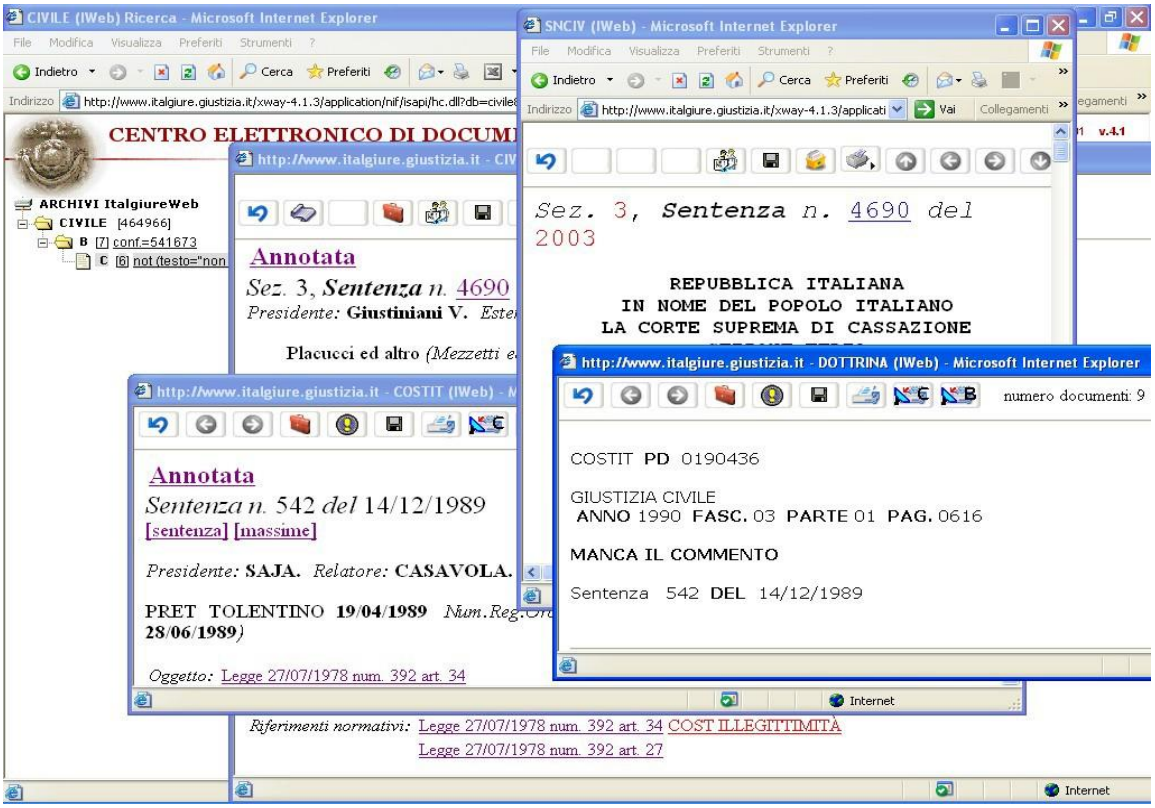

Figure 2 - Italy's Italgiure web site

Another site – Legifrance - www.legifrance.gouv.fr provides a public service (i.e is available to the public) for the dissemination of Law, any decisions placed here are put online after anonymisation (de-identifying individual data).

It provides information on French law, European law and International Law. The national legislation is not presented as single document per chapter but dematerialised into articles of the same law. The web site additionally provides cross-linking to other related legislation.

Italy's Italgiure web site - http://www.italgiure.giustizia.it/ of the Italian Supreme Court provides similar functionalities to the French services but has a richer search interface with the ability to create customised searches and save them for later use. Search results are presented in a tree format. The site provides a wide spectrum of decisions collated from different Courts including Tax Commissions and the European Courts of Human Rights. The site is not available to the general public but limited to employees of judicial bodies or certain public service entities. Each user is allowed 1,000 minutes of usage per year and if this limit is exceeded then a fee is applied on a per minute basis. A discount is applicable on usage after 8pm. The sub-site www.italgiure.giustizia.it/sncass is available to the public and offers access to decisions by the Court of Cassation. Although the documents are scanned and therefore preserve the side notes and manual signatures, they have also have been OCRed (Optical character recognition) and therefore the text of the document is searchable, which of course allows for a richer search criteria. Italy have also have and number of mobile apps that are downloadable free of change. Examples of these are the Civil Mediation app that provides information on Mediation and its relative legislation acts and the Civil Code of Procedure App.

Figure 3 - Italy,Civil Code of procedure app

3.4 eServices - Online information on case details

The provisioning of case information online represents a revolution in citizen access and government accountability and transparency, which after all is part of the growing reality of nations that implement an e-government strategy. Public access to electronic court files provides a convenient way for the public to assess and gauge the effectiveness of the judicial system and ensure the fairness and equality of its operations.

It must be noted that opening access to case documents can put the Courts in a balancing act. One involves the balance between privacy and accountability. Therefore the question that must be asked is; What level of information should be made available online? For example, in the USA many states make judicial opinions at the appellate levels freely available online but do not offer online access to trial court proceedings, which generally contain more detailed and sensitive evidence. Others offer access to trial court acts and other information at the case level. European countries also vary in their approach although they are regulated by the European Data Protection directive and their national law may prove to be even more stringent.

One issue that often comes up is the distinction between the publication of civil cases and criminal cases information. Even more fundamentally, should access to this case information be chargeable or otherwise considered and treated as open data and therefore freely available? Would putting a monetary charge for access to case information be considered as a restriction to access to Justice? In Europe there is a strong drive towards electronic Justice and the cross-border interactions between the citizens that are resident in member states but needing to use the services of a Court jurisdiction of a different member states. Nevertheless any access to Court Case information is decided by the national jurisdiction and not by the country of residence of the individual.

Of course the need for a balance between the data protection/privacy and having an informed citizen needs to be maintained. The upcoming EU Data Protection Regulation (2015) and the recent ruling by the Courts of Justice of the European Union on the 'right to be forgotten' (May 2014) are anticipated to have an impact on the current e-services and open access being offered in European countries. The new regulation is expected to reverse the burden of proof on to the holder of the data, i.e the holder of the data must prove why the data still needs to be maintained. Subsequent to the 'right to be forgotten' ruling the Maltese data protection agencies had already received a number of requests to have access to individual judgments removed from the internet. Each decision is of course taken on its own merits. In light of the right to be forgotten ruling Google has created a new form allowing citizens residing in the EU to request the takedown of URLs they dislike. Removals will only happen for EU-versions of Google, and there will be disclosure in Google's results when listings are dropped. Each removal will be examined by Google on a case-by-case basis. In the case of rejection, people will be notified and told they can appeal to their country's data protection agency.

While access by the public to Court Case information remains hotly debated there is a drive to give litigants access to Court case information that they are party to. Here there should be no infringement of privacy issues.

A good example of a publicly available portal is that of the Delware State Court (USA). http://courtconnect.courts.delaware.gov/public/ck_public_qry_main.cp_main_idx. This portal offers a search facility and returns high level information on

(a) documents actually filed with the Delaware Judiciary office, or a judge;

(b) orders entered by judges from the bench;

(c) scheduling orders entered by judges, case managers and Civil Administration personnel;

(d) judgements and/or liens entered by operation of law on behalf of governmental.

3.5 Other concepts of transparency

There are a number of other measures that can be implemented by the national Justice bodies to allow the public to gauge the performance of the justice system of their country, this will allow them to hold local public services to account. This can be achieved through the publication of statistics on the performance of the Justice system. In the UK they publish statistics that focus on key trends in case volume and progression through the criminal and civil court system in England and Wales. At a high level the statistics are for the areas of; civil justice, family justice, coroners and burials, criminal justice overview statistics, prison and probation, sentencing and reoffending[12]. A guideline for the publication of statistics is available on the internet. The UK Ministry of Justice go beyond just reporting the figures but they additionally provide an analysis of the trends across the different reporting periods. The statistics act as a benchmark for the performance of the Justice system.

In conclusion, transparency in the Justice system is achieved through the publication of information that is made available to the citizens, press and legal profession. A balance needs to be maintained between privacy and data protection and this balance will vary according to the legislative constraints that are placed on the national body, along with the culture of the country. Information does not necessarily need to pertain to court cases or sentencing (although this can be anonymised) but can also take the form of educational information on the procedures of the courts, the rights of citizens and online tools that allow the citizen to easily seek recourse and gain access to

[12] http://www.justice.gov.uk/downloads/statistics/a-guide-to-moj-statistics.pdf

Justice. The publication of statistical information on the performance of the Justice system is also deemed to create an image of a transparent Justice system.

4 Introducing online services - lessons learned

4.1 France e-Barreau and interconnected systems

4.1.1 The French legal system

The basis of the French legal system is laid out in a key document originally drawn up in 1804, and known as the Code Civil, or Code Napoléon, (Civil code or Napoleonic code) which laid down the rights and obligations of citizens, and the laws of property, contract, inheritance, and others. Essentially, it was an adaptation to the needs of nineteenth-century France of the principles of Roman law and customary law. The Code Civil remains the cornerstone of French law to this day, though it has been updated and extended many times to take account of changing society. There are other codes, including notably the Code Pénal, or Penal code, which defines criminal law.

4.1.2 ICT Drivers in France

. The strategy for ICT development is handled by the Ministry of Justice in a centralised fashion. To further ensure consistency within the e-Justice ICT applications, any IT developments must conform to the requirements of the National Commission for Liberties and Computer Technologies. The Ministry for Justice has additionally introduced a “framework for technical coherence” to ensure that developments at a local and central level achieve the desired interoperability.

4.1.3 e-Graffe

This project commenced in 2003 and was driven by the success of other major e-Government projects that were implemented in the preceding years such as the TeleIR taxation system which cost over 1 billion euro. The system achieved high compliance rates due to the incentives offered by the French authorities for on-line filing, these included rebates and extended timelines for filing of returns. Offering additional incentives are deemed essential to ensure that the advantages of using the electronic services are realised by the end users, therefore ensuring a substantial level of take up and a return on the financial investment made by the government.

The e-Graffe system was not a government lead initiative but was a result of cooperation agreement between the Ministry of Justice and the Paris Bar. The e-Graffe system interfaces with the Case Management System, which was already in place, through the internet. This system allowed lawyers to access a number of services that include court e-notices and allowed faster access to court rulings. A closed email system was also provided, which allowed lawyers to communicate with the courts support staff and receive electronic documents. The system also allowed a method of filing for emergency proceedings therefore giving it an edge on the manual proceedings. The Courts also viewed this system in a positive light as it saved them the time of manually entering case information into the CMS, this of course eased the burden of resistance to the interfacing of the systems with the case management system.

Although the electronic interfacing was in place, there still were a number of instances governed by the rules of civil procedure that entailed that paper documents continued to be used. The rules were not changed given that this system was deemed to be of an experimental nature and this lead to a lower take-up than was originally anticipated. The system in fact only achieved a 25% level of the estimated number of potential users.

It is interested to note that initially, access to the system entailed the use of a digital certificate and carried a subscription fee of €750 over a three year period. Although this sum of money is not that high and therefore it should not have been a major deterrent to take-up, neither does it encourage the easy uptake of the system.

The technical success of the e-Greffe system encouraged the further development of a new system but this time with the involvement of the National Bar Council. Therefore the system was being driven from a national spectrum rather than the limited scope of the e-Graffe system that was limited to the Paris Bar and its members. The National Bar Council decided to implement a single national wide solution for a number of reasons which included an element of competition between the notaries and lawyers (the notaries already had a network in place). Once again an agreement was signed between the Ministry of Justice and now the National Bar Council. This project differed from the e-Greffe project because it encapsulated a change in procedural rules from the manual to the electronic. The Code of Civil procedure was amended to permit the electronic registers to be recognised as official versions for documents therefore removing one of the obstacles that was experience by the e-Graffe system. The changes to the Code included the need to guarantee the integrity and confidentially of the information stored in the system, it allowed the transmission of documents electronically with the proviso that the party must have agreed to receive them in this manner. A number of other security provisos were included to ensure the proper identification of parties using the electronic system.

4.1.4 e-Barreau

The users' interface was provided by the e-Barreau system and this was supplied as a package which included the internet connection, a secure mailbox and a digital certificate that was stored on a USB key. The package was not deemed to be attractive to legal firms and with an initial cost of €280 and a rental of 64€ per month was deemed to be expensive. This was one of the main factors that contributed to a low take-up of the system in the first two years (from 2005). As a result of this the Council of Bars introduced a new system that would allow the lawyers to use an internet service of their choice. This introduced a vendor specific VPN box from Navista. Although this allowed the use of any internet service, it also created a vendor lock in with Navista, any lawyer who wished to connect to the e-Barreau had to acquire this box and pay a monthly maintenance fee. A lesson learned here is that additional costs that a user has to incur to use an e-Service will act as a major disincentive for the take-up of the system and this will prolong the uptake. These high security requirements have stemmed from the agreement between the Ministry for Justice and the Council of Bars along with the changes in legislation to allow electronic submission to be considered on par with manual submission. At this point there is no indication that France will be revisited and changed in any way in particular with the requirements for the Navista box.

Along the years a number of further changes were made to the legislation to permit further electronic communication and dissemination of electronic documents to the Courts and litigants. One particular amendment to the legislation is of importance to note and is related to the electronic signature of documents. Although the lawyers were equipped with digital certificates and could therefore sign documents with qualified certificates, the courts were not in a position to verify these electronic signatures through software. To surpass this issue a decree was issued to recognise documents sent through the e-Barreau system as being signed.

Another amendment to legislation obliged the use of electronic communication as from 1 September 2011, in civil matters before the courts of appeal where notices of appeal and notices of acting by counsel for the respondent are concerned, and since 1 January 2013 for all other acts for cases with mandatory representation. As from 1 September 2011 and 1 January 2013 respectively, lawyers and the State Counsel's Office were obliged to use the electronic route processes. Failing to do this will lead to legal decisions or measures in which they have been involved may be held to be inadmissible.

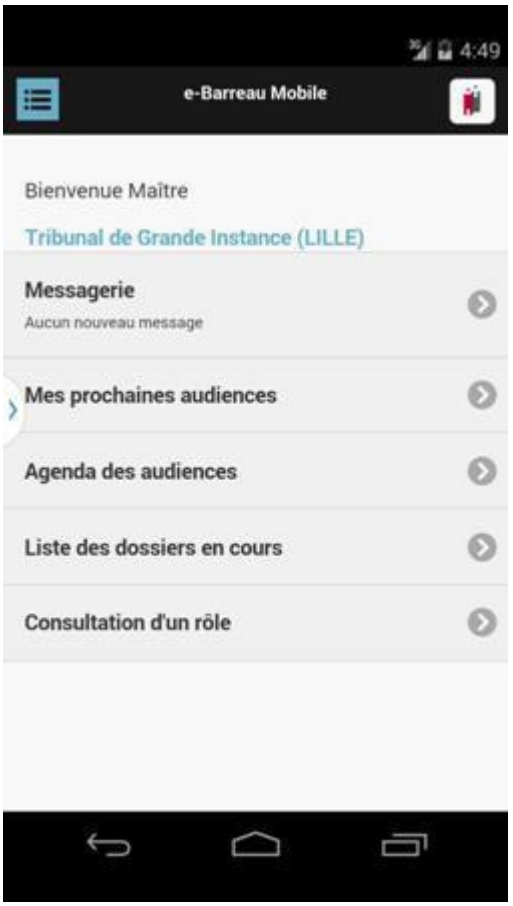

Figure 4 - Mobile e-Barreau

Here it can be observed that the mandatory use of electronic means (through a system) will ensure the uptake of the electronic service. This obligation can only be realised if a cooperative approach exists between the government and the stakeholders (represented by the Bars in this case). Otherwise stakeholders would protest at the prospect of being 'forced' to use a system, more so if this system carries an ongoing rental costs. Therefore it is imperative that any development of e-Justice system is done in conjunction with the main stakeholders. In the case of the French e-Justice system this was done in partnership which is even better as the Council of Bars had a financial motivation to see the system being widely adopted by the legal profession.

Other systems of mention are the "e-huissiers" through which the Bailiffs also have an interface from which they are able to formalise their applications for orders for payment, request orders for costs and the CASSIOPEE application (Chaîne Applicative Supportant le Système d'Information Orienté Procédure Pénale Et Enfant). This latter application covers all of the activities of the criminal courts (excluding police courts and sentence implementation courts) and is therefore at the core of the computerised criminal justice system. It is now fully operational in almost every regional court in France.

On a positive note the Chamber of Bars launched a mobile application version of e-Barreau and introduced functionality that allowed registered users of the e-Barreau system to register mobile devices of their choice through the e-Barreau main system. Users can also de-register a mobile device if it is lost or stolen. The app currently enjoys around 1,000 downloads on the Android Play Store alone, this must be assumed to be encouraging for the provisioning of further e-Justice applications that target mobile devices.

Today, to use the e-Barreau system, lawyers are still required to have a Navista box which now comes at a lower cost of €69 with an additional rental cost of €16 per month. Additionally each layer must have an AC Certeurope

key, this key holds a single lawyer certificate for authentication and a qualified certificate to sign any electronic document.

4.2 Italy – Electronic Civil Trial Online System (Processo Civile Telematico – PCT)

4.2.1 Legal System

The Italian legal system is that of a civil law State, governed by codified law. The Constitution of Italy was adopted on 22 December 1947. Power is divided between the executive, the legislative and judicial branches. The Italian Constitution establishes a balanced interaction between these branches, rather than a rigid separation.

Whilst State power is centralized to a great degree, Article 131 of the Italian Constitution divides the State into 20 regions, each conferred with limited governing power. Moreover, five regions, namely, Sardinia, Sicily, Trentino-Alto Adige, Vale d'Aosta and Friuli-Venezia Giulia, have been granted extended autonomy by statute. The remaining fifteen regions were established in 1970 and are governed by regional "councils". Additionally, special legal status has been granted to the cities of Trento and Bolzano. This delegation of legislative and executive power has resulted in some mitigation of the strong centralization of power inherent in the Italian system of government.

4.2.2 ICT drivers in Italy

ICT in the public sector is driven by a government agency called AGID (Agenzia per l'Italia Digitale), the agency is responsible for ensuring the attainment of the objectives of the Italian Digital Agenda consistently with the Digital Agenda for Europe. For this, the AGID are assigned a broad spectrum of responsibilities that allow them to ensure the digital agenda for the Italian government.[13] The law that established the AGID has allowed them to establish ICT units in each Ministry, therefore the AGID works in conjunction with the Ministry of Justice.

4.2.3 e-Justice and the Italian Justice system

During an e-Justice Conference that was held in late-2014 the Italian administration presented the numerical state of play of the Justice and e-Justice systems in Italy. The following figures are of interest and show the magnitude of the Italian Justice system and therefore the size of the problem that needs to be tackled. There exists;

- 140 tribunals
- 26 Courts of Appeals
- 1 Supreme Court
- 465 Justice of the Peace Offices

In 2014 there were 3,800,000 pending cases with 2,800,000 new cases introduced each year. In this respect the Italian e-Justice system processed a considerable number of transactions. In the first six months of 2014 alone 597,000 documents were e-filed by lawyers (external) and 943,472 documents e-filed by 3,000 distinct judges.

The above transactions are processed through the Electronic Civil Trial Online System (Processo Civile Telematico – PCT) which is Italy's main e-filing system for civil cases.

The Electronic Civil Trial (PCT) was legally established through Presidential Decree 123/2001 (Regulation on the use of IT and telecommunication tools in the civil trial, in the administrative process and in the process before the

[13] http://www.agid.gov.it/

judicial sections of the Court of Auditors) and follows the enactment of the provisions of the Law of 15 March 1997 no 59, and Presidential Decree 10 November 1997 and no 513, regarding the signing of electronic documents through a digital signature.

The PCT enables interoperability between authorized users outside the Courts (e.g. lawyers, assessors, Public Administrations, citizens, private companies) and authorized users inside the Courts (judges and clerks), through a high-secure infrastructure which ensures reliability of transmissions, authenticity, integrity, non-repudiation and confidentiality.

The large volumes of cases in the Italian civil courts meant that considerable storage space was required to store the case files therefore the implementation of a digital system was a desirable initiative. Court Case files in the PCT are maintained in a digital folder that comprises of both the documents sent electronically by lawyers using the certified electronic mail (PEC) and all acts that are created in the process by the court. All communications and notifications to and from the office as well as between the parties of the proceedings take place electronically. In fact current usage figures run at around 1 million emails per month.

The advantages of the PCT are obvious in terms of saving resources which the ministry estimates at approximately 44 million Euros in 2014 alone this comprises of;

- human resources - both regarding the court staff through the streamlining of process and the removal of multi stages that were predominate in the manual paper based system) and also by the legal professional (lawyers or their employees no longer need to go physically to the courts to deposit documents or request copies of records and documents or to obtain information on the status of the case and the content of the file),
- Rental of Storage Space - the reduction in paper has meant that it is no longer necessary to find larger premises to be used for archives
- Environmental resources - less printing of paper and less travelling by lawyers, consultants and bailiffs
- Time – electronic transmission of records and documents and communications are delivered instantaneously.

The Justice Ministry has recognised that the transition to the PCT must take place in a progressive manner and therefore the legislation put in place in 2011 provides for the digitisation of paper files for cases already opened before the introduction of the system. Furthermore it established that for all communications related to proceedings must take place electronically.

Initially from 2005 to 2009 the system only provided for money claims and was utilised in 5 of the 165 instances (Tribunals and Courts of Appeal) but the usage has increased incrementally over the past years and this is due, in part, to the mandating of electronic submission through the PCT system. The following milestones enabled the system to gain better acceptance by the Courts and legal professions.

- 2011Q4 – Introduction of certified email (PEC)
- 2013Q1 - Mandatory by law to send communication electronically (via PEC)
- 2014Q2 – e-filing became mandatory by law for injunctions and pleadings in new cases (in all tribunals) to be filled through PCT
- 2014Q4 - e-filing became mandatory for all pleadings (in all tribunals)
- 2015Q2 (estimated) e-filing to became mandatory also in all Courts of Appeal

The security in the e-filing systems is established through the use of a smart card that holds an electronic signature that allows access to an authorised ‘Access Point’ which is setup and managed by a service provider. Verification

of the professional qualifications of a lawyer to practice law in Italy (and therefore have access to the system) is the responsibility of the Italian Bars. Documents transmitted through the system are legally binding if signed by an advanced electronic signature.

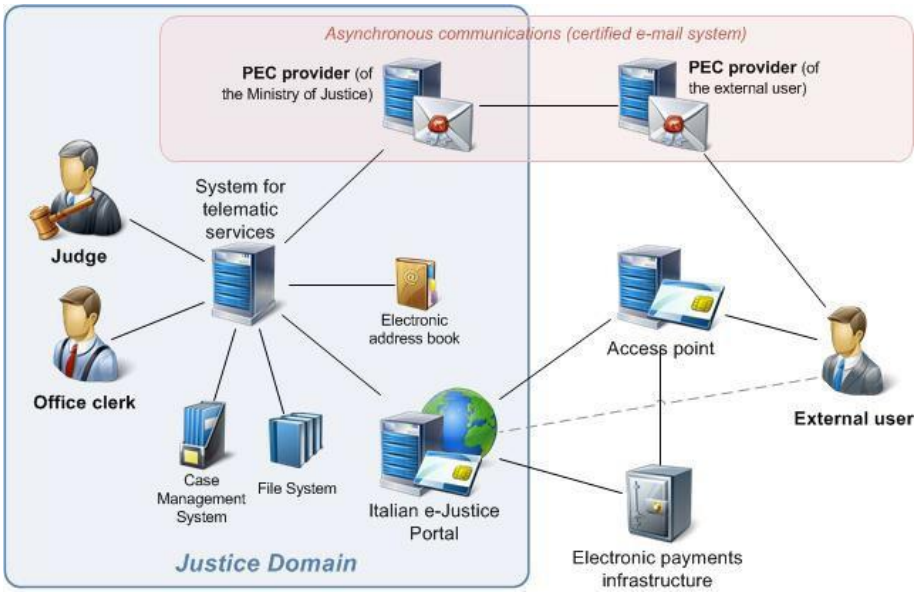

Figure 5 -Italian e-Justice architecture

It is interesting to note that Italy has implemented the submission of electronic documents (transmission of electronic legal acts and official communications and notifications) through a secure mail system called PEC (Posta Elettronica Certificata) which is in line with the requirements of national legislation and technical rules, and policies applicable to all public administrations and citizens. This is in fact similar to the approach taken by France for electronic communication. To ensure that the messages have arrived and to provide a timestamp of receipt, the PEC sends an official delivery receipt with the exact time. Both messages and receipts are digitally signed by the sender's service provider and the recipient's service provider in order to ensure authenticity, non-repudiation and integrity.

In actual fact the implementation of the PCT has been considered to be problematic with some resistance by Judges and Court staff who considered the software user interface as not being user friendly. The system was originally put in place in 2005 and it has taken 10 years to achieve the substantial take-up that is enjoyed today. Even this take-up can, in some not so small part, be attributed to the mandating of electronic submission rather than the voluntary uptake of the system.

The lessons learned from this project have been summarised by the Italian Ministry of Justice and these have been noted to be;

- Keep the deployment simple. Initial attempts develop e-Justice systems failed due to the high technical complexity. Decisions were changed and PDF used (complexity for XML, encryption, etc left to vendors)
- Gradual deployment in courts. The system was deployed gradually and initially only covered a small number of instances and use cases. Once the system matured and there was a high confidence in the stability of the system and the functionality, after which, use of the system was made mandatory.

- Ensure a High-level disaster-recovery and failover. As the usage of the system becomes more ingrained with the working procedures of the courts then any failure to the system can cripple the functioning of the Courts.
- Costs related to the use of the system such as the Access point and PEC email system are not viewed positively and create hindrance to the uptake of the system.

4.3 Singapore – eLitigation

4.3.1 Legal System

The roots of Singapore's legal system can be traced back to the English legal system and it has evolved over the years. Their sources of law are derived from Constitution, legislation, subsidiary legislation (e.g. Rules and Regulations etc) and judge-made law.[14]

Singapore therefore practices the common law legal system, where the decisions of higher courts constitute binding precedent upon courts of equal or lower status within their jurisdiction, as opposed to the civil law legal system in the continental Europe. The current criminal code was preceded by the Indian Penal Code which was adopted when Singapore was a crown colony.

The full Judicial power in Singapore is vested in the Supreme Court as well as subordinate courts by the Constitution of Singapore. The Supreme Court consists of the Court of Appeal and the High Court. The Court of Appeal exercises appellate criminal and civil jurisdiction, while the High Court exercises both original and appellate criminal and civil jurisdiction.[15] The Chief Justice, Judges of Appeal, Judicial Commissioners and High Court Judges are appointed by the President from candidates recommended by the Prime Minister. The prime minister must consult with the Chief Justice before recommending the judges.

4.3.2 ICT drivers in Singapore

The Ministry of Finance (MOF) acts as the e-Government owner. The MOF sets the policy direction on use of ICT in Government, champions and provides funding for whole-of-government programmes and projects.

Working closely with MOF, the Infocomm Development Authority of Singapore (IDA) acts as the Chief Information Officer for the Government. IDA provides technical advice and recommendations, master planning and project management services to MOF and other government agencies in the implementation and management of e-government programmes.

In turn every government agency also appoints agency CIOs who are responsible for agency-specific information technologies, infrastructure and services within their own organisations. Agency CIOs assist Permanent Secretaries of Ministries, Heads of Organs of State and Chief Executive Officers of Statutory Boards. IDA also plays a key role in defining government-wide ICT policies, standards and procedures and conceptualising and managing whole-of-government projects.

[14] www.mlaw.gov.sg/our-legal-system.html
[15] SUPREME COURT OF JUDICATURE ACT - Singapore (CHAPTER 322)

4.3.3 eLitigation

Singapore was chosen as an example of a leading nation in the implementation of e-Justice as in the UN eGovernment Survey 2014[16]. They have leaped from 10th to 3rd place in the e-Government Development Index and 10th place in the e-Participation Index for 2014.

One of the early systems in the Justice system was the Electronic Filing Service (EFS). The EFS enabled a subscriber, who uses a smartcard for authentication of identity, to file his court documents for both civil and family court jurisdictions. He can also use EFS to serve on the opposing party. EFS also automates workflow of documents and correspondence within the courts. As with any IT system, EFS is capable of generating statistical reports for case management purposes. Electronic filing of court documents using EFS was made compulsory. To ensure that Justice remains accessible to all, the Singapore government outsourced the operation of a service bureau to a vendor who provides electronic assistance for a small filing fee.

As part of an ongoing e-Government evolution a new generation of e-Justice System was developed known as Integrated Electronic Litigation System (iELS) or eLitigation and this system was put into production in 2013. The system was developed in collaboration with the Judiciary and the legal profession which ensured high stakeholder involvement. eLitigation brought about a number of advances on the EFS which included intelligent electronic court forms with built in automatic checks and validations. Another major change was the elimination of the need for a smart card to authenticate a user who wishes to file a case using Front End Web version. The need for additional software components was also eliminated therefore making the system simpler to access and making it available from a wider diversity of form factors (e.g. tablets, mobiles).

eLitigation users must use their registered SingPass IDs to login and access the eLitigation module. The SingPass is an eID that is easily available from government. Citizens can either apply online (but the credentials will be sent by post to the address where the citizen is registered in the Singapore government's database, or by going to a SingPass office and producing the required identification. The system itself is only available to law firms and selected government agencies in Singapore. Non-law firms intending to submit court documents electronically can appoint a registered law firm or seek the assistance of the CrimsonLogic service bureaux. A semi-online/manual procedure is in place to validate the requests from law firms before access is granted.

Access to the system by legal professionals within a Law Firm (or Government Agency) is controlled by an administrator (of the system) as appointed from within the Law Firm. The administrator controls who has access to the system by entering in the users' SingPass ID amongst other details. The administrator can create groups and assign particular access rights to groups and then subsequently add users to the group. The administrator can also control which court cases are visible to individuals or groups. Through this system the administrator is taking the responsibility of assuring that users that have access to the system are actually legal professionals and this role therefore does not fall in the responsibility of the Courts administration.

The system provides the following functionality;[17]

Electronic Filing Service -This allows Law Firm users to file and submit documents electronically to the Courts. Case files and other relevant documents are more likely to be in accordance with Court rules and standards as pre-defined templates are used.

[16] http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf

[17] eLitigation Administrators Guide

Case Information Repository -The Case Information Repository allows individual Law Firm users to have a virtual storage of all files and documents that are relevant to the cases they are handling. The repository allows them to easily retrieve the needed documents, update and store for future reference.

eService - This allows a Law Firm to electronically and cost-effectively serve Court documents to other Law Firms. It minimizes the time spent on serving Court documents through hardcopy means.

Notifications and Alerts -Law Firm users can be notified of any updates about the cases they are handling.

Calendaring and Hearing Dates - This allows the users to view and select the available hearing dates within the time frames defined by the Courts.

Reports Generation - Reports about financial transactions on a particular case can be automatically generated based on the criteria set by the user. Case-level information on charges incurred would also be available.

Court Replies and Notifications (Mailbox) - This allows the users to see and access a list of the recent cases that they have created, filed and submitted.

Search for Created and Filed Cases/Quick Access - The Search function allows the users to look for cases that they have created or filed. The Quick Access function gives the users an option to directly perform certain actions, such as filing a new case, document or request.

Financial Management - The Law Firm Administrator can generate ad hoc financial fees reports and tax invoice reports from the eLitigation system.

The system was designed to capture structured information (i.e captured in data fields) and the filing process guides the user one step at a time. The use of dynamic eForms means that the data that needs to be entered into the system is contextualised to the nature of the case. When filing a new case the user primarily enters the Type of Case then a contextualised eForm is displayed. Parties may then be entered or else imported from another case (stored in eLitigation). The user can select from High Court, District Court or Magistrates' Courts. The legal professions involved in the case are then selected. After this the users is lead to select the nature of the case. Legal Aid or relief can also be declared. Documents of type PDF can be attached at different stages of the process.

The system additionally supports the requesting of a hearing on a specific date and urgent hearings. Lawyers are also able to choose from one of the three methods of serving another firm;

a) *File and Serve* - In the normal File-and-Serve, the document is served only after the Court has approved and replied to the accepted document. Documents that are rejected by the Court will not be served to the recipient Law Firm(s).
b) *Immediate File-and-Serve*-In Immediate File and Serve, the document is served immediately upon eFiling, regardless of the outcome of the Court's acceptance of the document.
c) *Deferred File and Serve* -In the Deferred File and Serve, the document is served on the specified date and time, regardless of when or whether the Court has approved the service of document.

At the end of the process their system shows the total cost which is automatically computed by the system based on the number of documents that are prepared and attached as well as the number of recipients.

4.3.4 Lessons learned[18]

- The eLigation system was an evolution from the EFS system as it provided better structured data through the implementation of dynamic eForms which meant that information entered into the system could be used throughout the court case. The older system utilised PDF document attachments as the prime source of data. Of course such as system would be more complex to build.
- Not all forms can be digitised - It was not practical to create dynamic eForms for all instances and they therefore focused on the prime documents that would provide the best reusability of information.
- Ensure sufficient flexibility and coverage in the dynamic forms - If the electronic forms are not sufficiently flexible for cater to unusual applications, litigants with unusual or uncommon applications may find that they cannot use the system.
- A reengineering processes is required for the system to be successful - documents that are not valid in an electronic environment should be removed. This also serves to reduce the number of eForms required.
- Use and established method for authentication – Singapore used SingPass. In the absence of such a tool the system is forced to use other methods such as smart cards/digital certificates.
- Mandating electronic filing will ensure the system becomes the de-facto tool but this should only be done once the system is established and sufficiently mature.
- A high literacy rate combined with a good broadband provision and a technology savvy society are key factors to success of e-Justice. When these are not present then this will hamper take-up of an electronic service.

4.4 UK - failure and success stories

4.4.1 Legal System

The United Kingdom has three legal systems. English law, which applies for England and Wales, and Northern Ireland law, which applies for Northern Ireland, and these are based on common-law principles. Scots law, which applies for Scotland, is a pluralistic system based on civil-law principles, with common law elements dating back to the High Middle Ages

The essence of English common law is that it is made by judges sitting in courts, applying legal precedent (stare decisis) to the facts before them. A decision of the Supreme Court of the United Kingdom, the highest civil appeal court of the United Kingdom, is binding on every other court. For example, murder is a common law crime rather than one established by an Act of Parliament. Common law can be amended or repealed by Parliament; murder, for example, now carries a mandatory life sentence rather than the death penalty.

The principal sources of UK law are statutes which are Legislation from the UK Parliament and devolved parliaments; 'Common' law as law made through principles established in cases over the centuries during the standardisation of law throughout England and Wales from the eleventh century onwards and Law from the EU regulations and directives.

[18] The Evolving Role of Electronic Case Management Systems Fourth Judicial Seminar on Commercial Litigation 2013 Designing and I implementing the Integrated Electronic Litigation System in Singapore - Justice Lee Seiu Kin

4.4.2 ICT drivers in the UK

The UK Government ICT strategy for 2011 outlines the governance of ICT. Governance will be achieved through lead departments accepting responsibility for actions and parts of the ICT infrastructure model where delivery activities are already aligned with their work. This form of devolved delivery will require new and robust governance.

A new ministerial committee (the Public Expenditure Committee - Efficiency and Reform) was created which will drive progress by providing a forum for scrutiny and decision making in order to ensure that government ICT is used more effectively to power public sector reform.

4.4.3 Libra and others

The UK Libra project was a very costly failure and as a result of this, a number of lessons were learned. The IT systems in magistrates' courts had been deemed to be inadequate for many years and a common IT strategy for magistrates' courts has been called for since the 1980s. After two failed projects in the early 1990s, the Lord Chancellor's Department decided in 1996 to procure a PFI contract for a national standard IT system called Libra. The Department received only one bid, from ICL (now called Fujitsu Services), for £146 million. ICL raised its bid by 25% after being named preferred bidder and in December 1998 the Department signed a deal with ICL for a 10.5 year contract at a price of £184 million[19]. ICL renegotiated twice with the government and the project took on a budget (ended up costing) of £390 million over a 8.5 year period.

Putting the tendering process and contractual issues aside the lessons learned from this project can be summarised as;

- Redesign of the process is necessary to gain the benefits of IT - The department did not reengineer that processes of the Courts but rather choose to computerise the current processes as they stood.
- The project executive needs to have the necessary authority to make decisions for the end user departments especially when a large number of end user departments are involved, such as 42 magistrates courts.
- An understanding and agreement of how to realign the business process is required before contracting IT development.
- The success or failure of an IT development often depends on its scale and complexity. Departments should carefully consider whether projects are too large and ambitious to be undertaken in one go. Departments should think carefully about breaking up big IT projects into manageable pieces that can be delivered incrementally. [20]

4.4.4 The Money Claim Online (MCOL)

The Money claim Online is an e-filing system that is available throughout England and Wales and is accessible to both the citizen and legal professional. This service can be used for a fixed claim sum of under £100,000 against no more than 2 people or organisations and is therefore not suitable for cases where the sum is not know and needs to be liquidated by the Courts.

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[19] http://www.publications.parliament.uk/pa/cm200203/cmselect/cmpubacc/434/434.pdf

[20] Report from the Committee of Public Accounts, Improving the Delivery of Government IT projects (HC 65, Session 1999-2000, HC 65)

The system offers an incentive over the manual filing procedure as the Court fees are lower, for example the fees for a claim in the region £10,000.01 to £100,000 is 5% of the value of the claim with manual filing while it is 4.5% of the value of the claim if submitted online. Online users are required to pay by debit or credit card.

To use the system a citizen or organisation must get a Government Gateway User ID and the procedure for getting this account is simple and can be done totally online. The validation of the account is immediate and users can proceed to raise the claim without delay even if they did not initially have a Government Gateway User ID.

All claims are processed by a single centre, the 'Northampton County Court' as MCOL (IT System)is administered at the Northampton Bulk Centre (CCBC). If a hearing is required then the claims will be transferred automatically to either the claimant's or defendant's local County Court for an oral hearing.

If the defendant does not reply within a stipulated number of days then the claimant can go online again and ask for a judgement to be issued. If the judgement is not respected then the user can ask the court to use bailiffs to collect the money through the Money Claim Online system. The bailiff will ask for payment within 7 days and if the debt isn't paid, the bailiff will visit the person's home or business, to see if anything could be sold (auctioned) to pay the debt.

The defendant can also interact with the Courts by replying online during the duration of the case through the Money Claim Online System. The defendant must have a Government Gateway User ID to access the system.

The system takes a different approach to the typical Justice system for notifications. The legislation allows that once the claim is printed and posted to the defendant it is deemed to be served within 5 days. The Northampton Court does not check the claim and neither is the defendant required to sign the claim pack once this is received. This notification method is valid in England and Wales, as no formal summons is needed to start a civil claim. The claimant sends his or her claim to the court, and the court notifies the defender by mail.

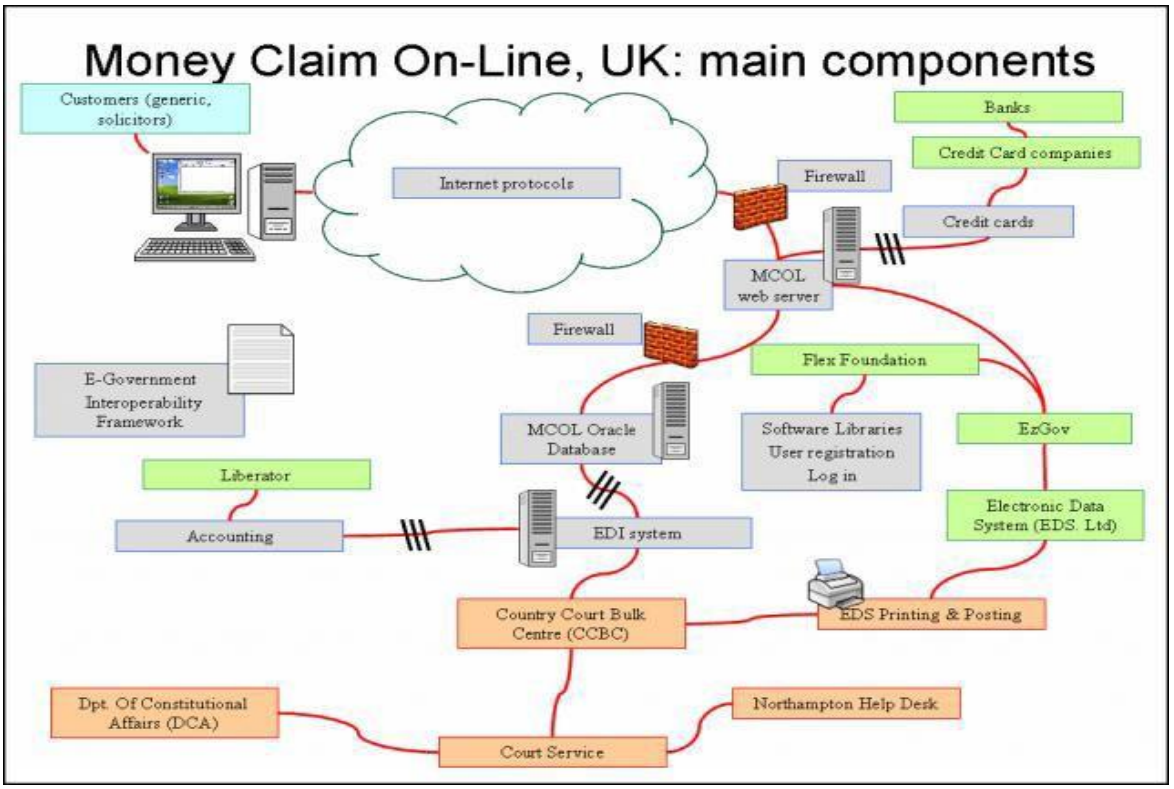


Figure 6 - UK Money Claim Online

Money Claims Online Architecture[21]

There are two factors that have contributed to the success of this system

- The system was built on an already existing case management system that handled bulk money claims that was used by the Northampton Courts. This allowed a modular approach to be used. The MCOL was in fact considered to be web front add-on to the Case management System.
- It was based on the parallel change of legislation and technology (Lupo, 2012). Therefore, ICT designers worked with the policy offices of HCMTS in order to ensure a smooth change both of legislation and online procedure. Moreover, the wanted lack of specific details in the rules adopted for the development of e-justice services, gave some space of manoeuvre to the MCOL designers when they implemented the project. This acknowledges the importance to carry on flexible changes in the legislation to enable the use of technology, instead of just inscribing the procedural law into the technology.[22]

4.4.5 The Pen Drive in the Supreme Court of the United Kingdom[23]

The following is an extract of a presentation given by Lord Kerr (Justice of the Supreme Court of the United Kingdom and former Lord Chief Justice of Northern Ireland.) which shows that electronic solutions do not need to be complex and that simple methods backed by the right agreements and legislation can provide the advantage that the courts are looking for to take them out of the paper age.

In order to facilitate the reduction on the use of paper documents every party to a case has to lodge a 'memory stick' containing their core bundle and all the relevant decided cases and statutory material upon which they wish to rely. This is formatted as a PDF document, and each page is numbered to allow for ease of navigation during the oral hearing. Parties must cite both the electronic bundle page numbers and the hard copy page number (if different) in court.

During the hearing all parties have the necessary electronic equipment with standard Adobe software to read the PDF documents. During the case the councils refer to the page numbers on the document and the standard search (or go to) functions are used. The PDF reader allows for annotations and highlighting to be made on the PDF documents. A large screen is also available in the Court room and used by the Council during their oral presentation.

The courts also use video recordings of the hearings, which means that they do not need to have stenographers or transcribers in the courtroom during hearings. They also live-stream all hearings online via the website, and make footage available to broadcasters and educators on request. More than 15,000 people each month watch the proceedings.

4.4.6 Lessons Learned

There is a beauty in simplicity. – The Courts can still make leverage of electronic Justice even when a sophisticated electronic system is not in place.

[21] Electronic Access to Justice: From Theory to Practice and Back – Marco Velicogna
[22] Practice direction 7E – Money Claims Online
[23] Lord Kerr (UK) input for session on 'e-Justice and e-Law in Supreme Courts across EU' October 2014

4.5 The e-Justice experience in a CIS country

4.5.1 The Azerbaijan legal system

The legal system of Azerbaijan is based on civil law. As the country was a republic of the Soviet Union until 1991, its legal history has also been influenced heavily by socialist law. The current Criminal Code of Azerbaijan came into force in September 2000, replacing the older Criminal Code of 1960 which had been based on the principles of Soviet law. Article 1 of the Criminal Code states that the Criminal legislation of the Republic of Azerbaijan consists of this Code. New laws defining criminal responsibility are subject to inclusion in this Code.

Azerbaijani courts do not rely extensively on case law and judicial precedent. Decisions of the courts are not usually counted as a source of law except for decisions of the Constitutional Court of Azerbaijan. The sources of law in the Azerbaijani legal system are:

- The Constitution of Azerbaijan.
- Acts adopted via referendum.
- Laws passed by the National Assembly of Azerbaijan, Azerbaijan's legislature.
- Decrees.
- Resolutions of the Cabinet of Ministers.
- International treaties to which Azerbaijan is a party.

4.5.2 ICT Drivers in Azerbaijan

The Ministry of Justice (MOJ) of Azerbaijan acts as the project implementing agency for e-Justice projects related to the modernising of the Courts. The MOJ has been the implementing agency for the ongoing Judicial Modernization Project (JMP) since 2006 and has developed extensive experience and skills in managing and implementing a World Bank-financed project. The Minister of Justice provides strategic oversight and guidance on implementation while operationally, the Deputy Minister of Justice is designated as the Project Director and oversees the project implementation, management and coordination. Relevant departments and units of the Ministry of Justice dealing with budgeting, procurement, financial management, substantive reforms for which the Ministry is responsible, assist in the implementation of e-Justice systems.

It is the intention of the MOJ to establish an ICT department within the Ministry and this is anticipated to address the ICT skills gap concerns, and thereafter maintain an information technology department in the MOJ. The Office of a Chief Information and Technology Officer has been established to provide the technical leadership required and to establish the IT Department. A study is in the process of being conducted to assess the remuneration of IT personnel in the private and public sector with the aim of being in a position to recruit staff.

It is the intention of the MOJ to initially outsource analysis activities and seek to procure systems off the international market.

4.5.3 The current state of play (CEPEJ)

The CEPEJ report for Azerbaijan[24] for 2014 (based on 2102 data) cites that the basic electronic tools that offer assistance to the Judges and Court staff are implemented in all of the Courts at a 100% level. These include Word processing tools, Electronic data base of caselaw, Electronic, E-mail and Internet Connection.

The same report also cites that an electronic case registration system is available in all of the Courts while a Court Management Information System, Financial Information System and Videoconference facilities are available to 50% of the Courts of Azerbaijan.

With regards to extended IT facilities for online submissions it is relevant to note that electronic web forms are available to all of the Courts while online follow-up of cases, electronic small claims, electronic processing of undisputed debt recovery and electronic submission of claims are available in 50% of the instances.

It is pertinent to note that the figures collated by the CEPEJ report are based on a *self-assessment questionnaire* and many of the questions do not provide sufficient information and are therefore often subjective to the interpretation of the respondent.

4.5.4 Investment in e-Justice

As from 2006 Azerbaijan have been working with the World Bank and have entered into three agreements for the financing, through loans, of projects related to the Justice reforms. The first agreement in 2006 comprised a $21.6million loan and this project ran until 2011. An extension was granted in 2011 that took the project end date to 2014 with an additional financing of $33.4million. In July of 2014, Azerbaijan entered into the third agreement with the World Bank to borrow US$100 million, to support the Judicial Services and Smart Infrastructure Project (JSSIP). This project builds on the Judicial Modernization Project (JMP), and aims at improved access, transparency, and efficiency of selected judicial services[25]. The project is targeted to run until December 2018.

Azerbaijan's goal for judicial modernization is to achieve levels of performance and credibility comparable with other advanced countries. They have recognised that significant institutional and infrastructure challenges will have to be addressed for this to be achieved. Building on the successes of the JMP, Azerbaijan now desires to expand its judicial modernization program countrywide to improve the delivery of judicial services through 'smart courts' and other institutional and technological improvements.

The initial project entitled JMP focused on the rebuilding of the physical courts building, capacity building of the Judiciary, training activities and the provisioning of ICT equipment and networking infrastructure required to complement this.

The project also focused on the analysis of the functional requirements of new ICT software that would be used in the Courts. The main components comprised of an e-notary system and an electronic Courts Acts database/registry which went into production towards the end of 2010.
Development of internet based information services including design of website to enable the publication of court decisions and related materials for citizens and legal professionals was also completed by 2011. In the latter part of 2014, work was also initiated on the ICT infrastructure required to host the automated case and document management systems and information network for Judicial-Legal Council.

The 2014 JSSIP has three components:
1)Judicial Service Delivery Improvements (Estimated Cost $16.38 million) including improving legal aid for the vulnerable and marginalized; e-filing of cases; e-notarial services; enforcement of judicial decisions; automated case and document management systems; business registry and business inspection modernization. Key elements of this component are envisaged to include technical assistance and analytics on access to justice for

[24] http://www.coe.int/t/dghl/cooperation/cepej/evaluation/2014/Azerba%C3%AFdjan_2014.pdf

[25] http://www.worldbank.org/en/news/press-release/2014/07/09/world-bank-continues-supporting-public-service-delivery-in-azerbaijan

vulnerable groups, examination of gender issues in legal aid and judicial employment and options for introducing mobile courts in remote areas.

2) Smart Infrastructure including 'smart courts' and related ICT infrastructure to be implemented in 10 to 13 locations across the country; capacity-strengthening for facility design, supervision and operations; expansion and strengthening of the justice system ICT infrastructure (Wide Area Networks, Data Centres, Disaster Recovery Centres and Network Operations/ICT Management System) to deal with increasing data flows arising from increasing case loads and a progressively increasing number of courts across the country. The MOJ's proposed courthouse/court complex locations are based on the following criteria:

(i) regional court complexes in the 5 largest cities,
(ii) courts in Masalli and Gusar to serve ethnic minorities;
(iii) court in Absheron to serve Internally Displaced Persons (IDPs) who have practically no access to judicial services;
(iv) several urban locations with high case volumes.

3) Capacity Building, Project Management and Sustainability including

(i) strengthening IT management and operational capacity,
(ii) M&E and statistical capacity,
(iii) olicy and budget analysis capacity and change management,
(iv) training, knowledge sharing and operational capacity augmentation,
(v) project management and results reporting

The progress being made with this project (JSSIP) is reported is reflected in a recent Implementation Status & Results Report dated April 2015. From an ICT perspective it has focused on the drafting of technical and functional requirements for the E-library. A pilot e-library (for testing) is expected to be functional by end-2015. The target usage for this system is of 10,000 users.

An IT Call Centre and Help Desk is also in the process of being setup - The terms of reference for these assignments are being developed by the MOJ in consultation with the Supreme Court, the ToR should be completed by Q3 2015.

Technical specifications for an Audio-video court proceedings transcription system operational in JSSIP financed courts are planned to be finalised by late 2015.

4.5.5 Electronic Online services

The web site http://courts.gov.az is the portal for the Judicial System of Azerbaijan and it provides general information on the Courts, Judiciary and information on the legal system. It also has a form that allows citizen to file an appeal online. This is complemented by a number of downloadable forms in word doc format.
The appeals can fall into three categories:

1) Suggestion - appeal aimed at the improvement of an activity of government authority, entity, organization and enterprise, resolution of issues, related to education, science, technology, legislation, arts and other areas.

2) Petition — appeal stipulating requirements, related with implementation of rights to which citizens are entitled.

3) Complaint — appeal with requirement on restoring of violated rights to state authority, entity, organization and enterprise.

The appeals form appears in all sites related to the justice system and it would appear that the availability of this electronic form has been made mandatory across Justice Sites.

Figure 7 - Online Appeal Form

The site additionally provides information on the structure of the Courts and Judiciary. Under the Courts section information on the different instances of Courts can be found along with the link to the home page of the Court (if available)
The following links are available;

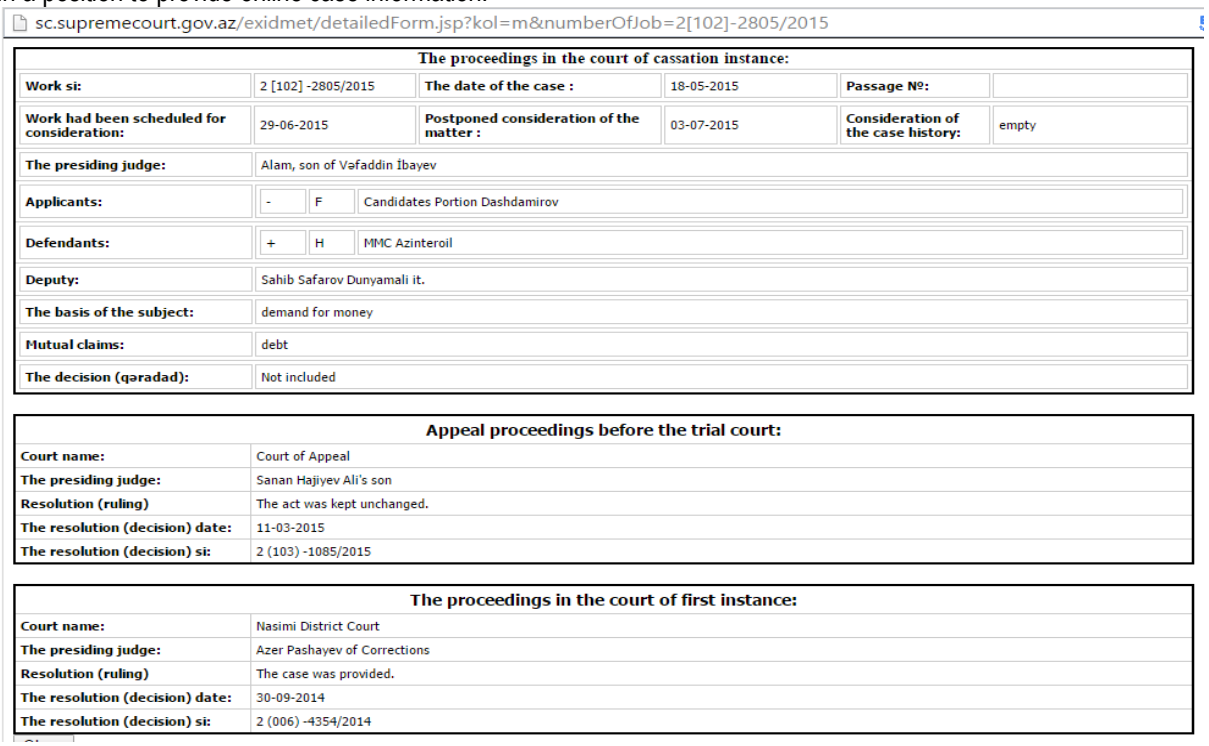
- Judicial-Legal Council
- The Constitutional Court
- Supreme Court
- Courts of appeal
- Administrative-economical courts
- Military courts
- Courts on grave crimes
- District (city) courts

The site for Constitutional Courts (http://www.constcourt.gov.az/) holds information on the Constitutional Laws along with milestone Judgements that can be used as a decision of precedence.

The Supreme Court (http://www.supremecourt.gov.az) provides a search facility for decisions but this functionality does not appear to have been fully implemented across all of the instances. The site, in the future, should provide for civil, administrative, economic, criminal and military decisions as well as supporting case information.

The Courts of Appeal portal (http://courts.gov.az/bakuappeal) is used to cover all of the Courts of appeal in Azerbaijan and it predominantly provides information on Sittings and Judgements but customised to the needs of the geographical area being covered.

The Courts of first instance which include District (city) courts, Administrative-economical courts, Courts on grave crimes and Military courts also share the same content management system as the Courts of appeal and therefore offer similar functionality. While the functionality covers all of the districts it appears that not all of the districts are in a position to provide online case information.



sc.supremecourt.gov.az/exidmet/detailedForm.jsp?kol=m&numberOfJob=2[102]-2805/2015

The proceedings in the court of cassation instance:

Work si:	2 [102] -2805/2015	**The date of the case :**	18-05-2015	**Passage №:**	
Work had been scheduled for consideration:	29-06-2015	**Postponed consideration of the matter :**	03-07-2015	**Consideration of the case history:**	empty
The presiding judge:	Alam, son of Vəfaddin İbayev				
Applicants:	-	F	Candidates Portion Dashdamirov		
Defendants:	+	H	MMC Azinteroil		
Deputy:	Sahib Safarov Dunyamali it.				
The basis of the subject:	demand for money				
Mutual claims:	debt				
The decision (qəradad):	Not included				

Appeal proceedings before the trial court:

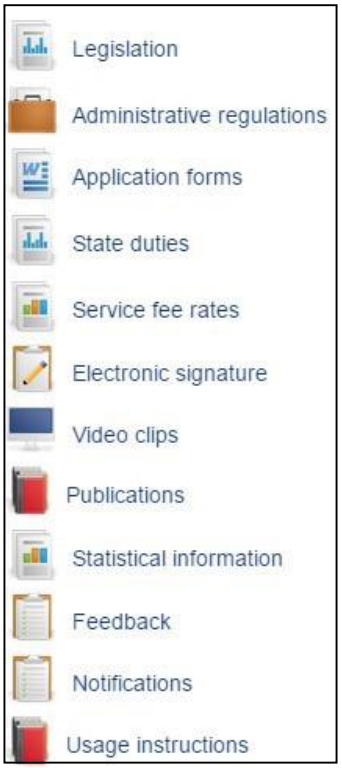
Court name:	Court of Appeal
The presiding judge:	Sanan Hajiyev Ali's son
Resolution (ruling)	The act was kept unchanged.
The resolution (decision) date:	11-03-2015
The resolution (decision) si:	2 (103) -1085/2015

The proceedings in the court of first instance:

Court name:	Nasimi District Court
The presiding judge:	Azer Pashayev of Corrections
Resolution (ruling)	The case was provided.
The resolution (decision) date:	30-09-2014
The resolution (decision) si:	2 (006) -4354/2014

Figure 8 - sc.supremecourt.gov.az/?mod=exidmet

4.5.6 e-notary (http://www.e-emdk.gov.az)



The Government of Azerbaijan issued a tender for the *Supply and Installation of an E-notary System, Including Customization Of Software And Commissioning Of The System* in 2007. This project included the complete computerization of all the notary offices of Azerbaijan and the transfer of the notarial records from paper to electronic media. It additionally linked state notary offices and registration bureaux on to one electronic network. The objectives of the project were to expedite the preparation and distribution of documents to target recipients. The project also aimed to reduce the amount of paper being consumed.

The system has been cited to provide more transparency and has allowed the parties to remain in contact and interact through the inclusion of email correspondence. That section can be used to obtain information about the working hours, locations and contacts of the judicial bodies as well as about the NGO registration procedures, the registration procedures for other legal entities, the notary acts and the documents required, the amounts of the duties payable and on the enforcement of court rulings. The judiciary bodies have also started the use of the e-service bureaux whereby notary, civil status act and non-commercial legal entity registration information can be obtained instantly, different kinds of payments can be made and the Ministry can be contacted direct via the hotline and e-mail.

4.5.7 e-Government enablers

E-GGovernment in Azerbaijan was built in accordance with the "National Strategy on Information-Communication Technologies for the Development of the Republic of Azerbaijan (2003-2012)" and implemented in the framework of the "E-Azerbaijan" Program. With the view of wide use of information communications technologies (ICT) the project increased efficiency of state agencies. The activity aimed at

simplifying interactions between citizen (C2G), business bodies (B2B), as well as between state entities (G2G). This therefore took relations between the citizen and government to a new level and at the same time increased transparency by satisfying the information requirements of the citizen. A number of e-Government enablers have been put in place over the past years and these are described in brief hereunder;

- Azerbaijan has established a National Certification Services Centre under the Ministry of Communications and Information Technologies. This certificate has an established fee structure for citizens, government and businesses entities ranging from 17USD to 68USD[26]. They have also recently introduced a mobile ID which costs as little as 9USD over a three year period. The certificates can be ordered online but the chip card needs to be collected in person at any one of the regional centres or post office branches.

- An Electronic State Register of Population was established in 2012 with the assistance of the UNDP[27]. Data from 15,000,000 civil status acts was captured into electronic format and each citizen given a unique identification number. Computer networks and other equipment were installed in key departments of the Ministry of Justice, connecting these working stations to the network of Electronic Information Bank of Civil Status Acts. The "State Register of Population Automated Registration Information System" was launched and subsequently installed in various sites.

- An electronic payment infrastructure is also available (https://gpp.az) but the depth of the level of integration with online sites is unclear.

4.6 Case management as a hub

The importance of a robust and established strong case management system has often been cited as one of the factors that allowed for the implementation of a successful e-Justice system. From the case studies examined in this document one can observe that in several instances the extensions in functionality that allow the interactions of the legal professionals and citizens with the Case management data have been developed as separate modules. Concrete examples of these are the e-Barreau system, the Italian Civil Trial Online System (Processo Civile Telematico – PCT) and the Money Claims Online to mention a few. These were all built as separate modules and interfaced with the established case management system. This of course does not exclude the possibility of building a system with the perspective of both catering for internal functions and outwards facing functions that can handle both internal case management functions and external interfaces with the legal professionals. Such design should be taken from an architectural concept of a homogeneous data storage area rather than a single application and must ensure that modules are sufficiently decoupled from each other. Many of the European system have mature Case management systems that were put in place a number of years before the realization of e-Justice came to maturity. This of course led to the approach of building the interfacing of the external facing system onto an already established case management system.

Nevertheless in a number of case studies cited by international experts one of the reasons for the success remains the fact that they built further on an already established system. Giampiero Lupo and Jane Bailey[28] explain that IS, organizational theory, and e-justice scholars have focused on the design advantages of working with an existing installed base . The term installed base refers to the technological solutions, institutional arrangements, organizational practices, and legal frameworks already in place when a new e-justice system is developed. Additionally this may reduce adoption barriers and safeguard capabilities already in place by basing the implementation stage of an information system on an existing installed base. However, others have noted that

[26] http://www.e-imza.az

[27] http://www.az.undp.org/content/azerbaijan/en/home/operations/projects/democratic_governance/Establishment_and_Development_of_the_State_Register_of_Population_of_the_Republic_of_Azerbaijan.html

[28] Giampiero Lupo and Jane Bailey - Designing and Implementing e-Justice Systems: Some Lessons Learned from EU and Canadian Examples

relying on an installed base can also produce problems. For example, if some installed base components are resistant to change (if a legacy dated system is used) this may hinder the evolution of an e-justice service.

Such an approach has allowed some counties such as Slovenia (COVL)[29] to build the necessary services that allow third party vendors to build applications that can interface with the case management system. In the Slovenian case a Business to Government interface was developed for bulk filing of claims by large creditors. The XML schemes were made available on-line and this allowed them to implement the necessary interfaces to their proprietary systems or to buy it ready built from third party developers. Bulk filing was also made available through this interface and it allowed for creditors who require filing of many simultaneous claims through this interface. Security measures were of course put in place and businesses were required to have a qualified digital certificate and be authorised by the MOJ to proceed. The business units using this interface were first required to undergo conformance testing prior to being authorised to connect onto the production services.

In any case the external facing Justice systems should be implemented with an architecture that is sufficiently de-coupled from the main internal system therefore allowing evolutions in one system to be independent of the other.

Erwin J Rooze[30] classified case management systems in three different levels of sophistication and describes the functionality expected in each sector.

Level of sophistication	Management area	Description of typical effort
ADVANCED	Content management	*Case content automation*: automation of life-cycle of documents, improved analytic aids for judges and improved text editing, multimedia logging.
	Procedure management	*Case handling automation*: elimination of duplicate activities and integration of checks into smart documents/forms
	Logistics management	*Caseflow automation*: predefined workflows transport digital files to persons
MEDIUM	Content management	*Case content support*: electronic documents are inserted with case data and standard text blocks are available
	Procedure management	*Case handling checkpoints*: intake of documents and collection of court fees is improved, notifications are made and scheduled automatically and signals on milestones are planned
	Logistics management	*Caseflow support*: scheduling and allocation of capacity are combined, people receive forms, lists and signals that help to prepare forthcoming events
BASIC	Administrative management	*Case administration systems*: registration and recording of documents, events and results

Figure 9 Levels of sophistication in eCase management systems

[29] Building Interoperability for European Civil Proceedings Online - Gregor Strojin - Supreme Court of Slovenia
[30] Differentiated Use of Electronic Case management Systems -Erwin J. Rooze

At the highest levels of sophistication we can see that the Courts are able to function in a paperless environment and the Courts can function in a totally digital fashion throughout the whole process including receiving and communicating digitally. This is the optimal solution but also the most difficult to achieve as not only do all the processes need to be mapped into the system but the parties to the case must be ready to interact with the Courts electronically without exception. Compliance to use totally electronic interactions is generally difficult to achieve unless this is mandated by legislation as was done for the Italian system and Appeals in the French Courts.

The medium level of Case management sophistication is an achievable target. It does not rely on a totally electronic interaction but allows for the uploading of electronic documents and workflow processing bringing along a number of advantages such as notifications and planning tools.

At the most basic level the system serves as an electronic register and maintains the high level details of the case. Therefore the system assists the Court administration with their management of cases and provides basic statistical information. Such case management systems can be considered to be the minimum level of functionality that should be available to the Courts.

Another perspective to consider when selecting/designing a case management system is further discussed by Rooze and this contemplates the aspect of differential case management. The differences are outlined below;

1. Mass caseflow management – typically cases such as small claims where there is a high volume which is of lower consequence and complexity. Such cases may not even need to be heard by a Judge but can be handled at a lower level by a trained Judicial officer. In this case the software must be optimised for a short disposition time with a high volume of cases. Due to the nature of these cases it is possible to utilise templates for the issuing of the case decision more so in areas that are de-penalised, such as traffic offences. As these cases entail a high amount of administrative work it is essential that the software is kept simple to use and the number of steps in the system is kept to a minimum. The case information that is processed in the system should be rationalised to meet the needs of the Case types being handled while at the same time providing the required baseline for a decision to be taken and issued electronically (if possible). Such systems are therefore amenable to a high level of digital processing due to their simplistic nature.
2. Complex Caseflow – normally associated with cases of high complexity which occur in lower volumes. Such systems would need to support rich content management with a focus on knowledge management. Typical case types are high value Intellectual Property Infringements.
3. Regular Caseflow – these cases are logically the cases that do not fall under the other two headings. While volumes are not low they do represent the bulk of the work of the courts of magistrates.

4.7 Modular Approach

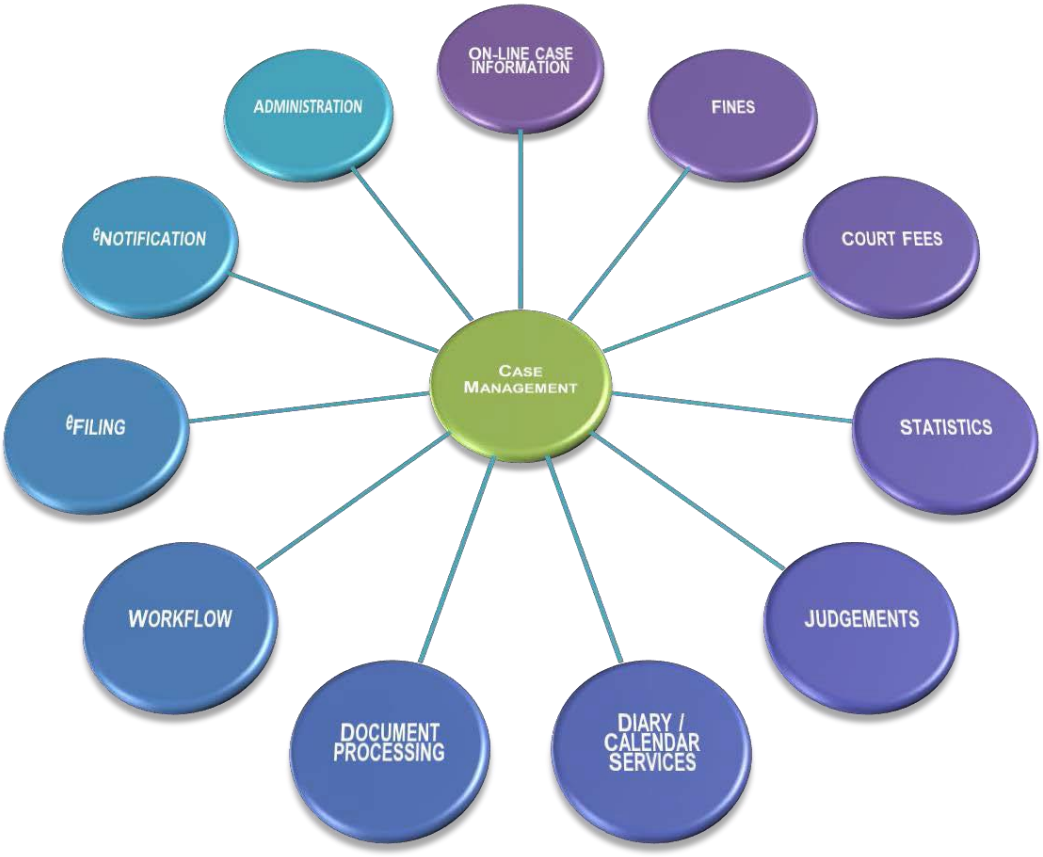
The modular approach to building a case management system was touched on in the previous section and it is typical to many of the successful European e-Justice systems.

Giampiero Lupo and Jane Bailey[31] cite examples such as eCourt and MCOL and how they illustrate the way in which modularization can facilitate evolution. They conclude that modularisation appears to have permitted eCourt to mediate the complexity of the initiative's ultimate vision by allowing for staged development that permitted functionalities to be layered on gradually rather than all at once. The MCOL example illustrates that modularity may also be effective in allowing components of a project to move forward independently from other components (which can be especially important where certain components are controlled by private sector partners). Moreover,

[31] Designing and Implementing e-Justice Systems- Giampiero Lupo and Jane Bailey

the failure of a single component in a modularised architecture does not undermine the entire system by creating a single point of failure.

Figure 10 -A modular approach to case management system



4.8 Desirable ICT functionality (CEPEJ)

The 2014 CEPEJ report[32] classified ICT facilities in justice under three different areas

1. Direct assistance to judges and court clerks with the following tools being mentioned;
    - Word processing
    - Electronic database of jurisprudence
    - Electronic files
    - E-mail
    - Internet connection

In this area I understand that Uzbekistan has made considerable advances in the provisioning of ICT equipment and software tools. There is also a database of Judgements that is continuously being evolved.

2. Administration and management, with a focus on;
    - Case registration system
    - Court management information system
    - Financial information system
    - Videoconferencing

    Here again Uzbekistan have advanced and piloted videoconferencing equipment and an e-Filing system in the Zangiota inter-district court which is designated as a pilot Court. The case registration system is discussed in the next section and this is normally the source of the court management information system where a particular emphasis is placed on the generation of management information that allows the motoring of the Courts progress in terms of clearance rates and disposition times of case loads. Financial management systems can be inherently built into the case management system as an integral part of the system where money transactions need to be processed as part of transacting with the courts or the recording of Court fines from sentences and Court Fees. Such transactions can be integrated with a commercially available financial package which will in turn allow the Courts administration to enjoy the full reporting functionally and accounting concepts that are inherent to this type of 'commercially off the shelf package'

3. Communication between courts and the parties with the following facilities;

    - Electronic web forms
    - Website
    - Follow-up of cases online
    - Electronic registers
    - Electronic processing of small claims
    - Electronic processing of undisputed debt recovery
    - Electronic submission of claims
    - Videoconferencing
    - Other electronic communication

Communications between the Courts and the citizen/legal profession form an essential key to providing a transparent justice system. The facilities provided by web sites are discussed in section 3 and will therefore not be treated further here for the sake of brevity.

[32] http://www.coe.int/t/dghl/cooperation/cepej/evaluation/2014/Rapport_2014_en.pdf

The raising of small claims by citizens is an electronic 'must have'. Citizens who are looking for remedies from Judical bodies for nominal amounts, need to have an easy and cost effective way of doing this without the need to engage a lawyer. An electronic service can easily be developed to provide a wizard that guides the citizen to raise the small claim and pay the relevant fees online. Functionality available should include the right of electronic response, the availability for the defendant to electronically file a counter claim and eventually also the electronic means to appeal. Small claims tribunals will gain by having access to videoconferencing facilities to conduct oral hearings if required therefore without the need to call the parties to the tribunal buildings. Given the relatively low financial value of such claims one could consider using standard equipment such as PC's and low end and freely available tools, such as Skype to conduct such videoconference sessions. The current maximum value of EU cross-border claims is €2,000 but this is set to change to €10,000 under the new regulation. Pilot projects are underway in the EU to make electronic cross–border small claims a reality.

The ability to follow-up electronically on undisputed claims is anther service being pushed within the European Union. This is established by Regulation (EC) No 1896/2006 of the European Parliament and of the Council of 12 December 2006 creating a European order for payment procedure. Although the regulation does not mandate electronic submission it does allow for it, and additionally prescribes how claims should be electronically signed.

Standard e-Forms have been drawn up for the European Payment Order and are available on the www.e-Justice.eu portal. These additionally provide information about which courts can issue a European Payment Order and where the application forms should be sent. The regulation additionally allows for these forms to be submitted by email or by fax.

The ability of an interested party to follow-up on cases online is an initiative that promotes transparency of the court process. This goes beyond the ability to view the Court decision online but is extended to the provisioning of case status information online. Typical examples could be the status of the service of court documents to third parties, sitting information and sitting verbals and transcripts. If such access is not possible then the use of email and SMS notifications can be used by the Courts to keep the citizens informed of aspects of their case.

4.8.1 Connecting Registers

In Europe the concept of interconnecting registers is at the forefront of the agenda of the European Commission as they encourage transparency and additionally the sharing of these registers promotes a secure business environment across the European Member States and also at a business level. In the European context a number of registers are considered to be part of the remit of the Justice Director General and these include Business Registers, Insolvency Registers and Land Registers.

The EU estimates that the implementation of Interconnected Business registers will stimulate trade and bring about savings of up to 70 million euro a year[33]. For example, the sharing of Insolvency registers allow companies that are involved in cross–border trade to have the required knowledge of the financial stability of any organisation that they are dealing with. The model is also extended to individuals in the form of a credit rating and such information also important for business to make educated commercial decisions. These registers will serve as a one-stop shop for businesses, creditors and investors looking to invest in Europe. The same concepts would also apply to Uzbekistan with any potential foreign investors looking to find information on businesses and the solvency of such enterprises. Other electronic databases currently on the agenda are the provisioning of search facilities on succession registers and a register of will. Such electronic tools are expected to facilitate the work of the Notaries

[33] http://europa.eu/rapid/press-release_IP-11-221_en.htm?locale=en

when tracing the succession of deceased persons and also tracing the last Will, therefore respecting the last wishes of the deceased person.

4.9 Conclusions on key factors that make a success

In this section we have seen a number of e-Justice systems that were deployed at a national level and examined the issues that hinder progress and take-up of these systems. We have also looked at the positive aspects that helped propagate the success and take-up of the e-Justice systems. A spectrum of e-Justice systems were selected and taken from a different view point to cover a broader aspect of the approach to be taken when implementing e-Justice;

- The French systems with the difficulties encountered with the propriety networking access and fees that has to be paid to use the system.
- The Italian system with the sheer mass of volumes of court cases and the high amount of end users.
- The gross failure in the UK while managing an implementation that was far too large and from the approach taken doomed to failure on onset.
- Then subsequently the UK money claims online that was a great success as it built further on an existing system.
- Finally the technologically advanced eLitigation system that was a further evolution of a functioning e-Justice system.

A summary of the lessons learned in this section are as follows;

- ***Work and design with your users*** - It in imperative that any development of e-Justice systems is done in conjunction with the main stakeholders. In the case of the French e-Justice system this was done in partnership with the Council of Bars, which is even better as the Council of Bars had a financial motivation to see the system being widely adopted by the legal profession. In Singapore they also worked in collaboration with the Judiciary and the legal profession to build the eLitigation system.
- ***Avoid imposing costs on end users*** - Additional costs that a user has to incur to connect to an e-Service will act as a major disincentive for the take-up of the system and this will prolong the uptake. This was clearly seen in the French e-Justice systems and has remained an issue until today.
- ***Work in parallel with legislators*** - Any legal amendments need to be made before the systems are put in place, even if a pilot system is being implemented. The lack of a legal basis for electronic submission was one of the reasons for low take-up of the French e-Graffe system. The UK - Money Claims Online system was built parallel to changes in legislation and this was one of the reasons why this system achieved success.
- ***Continuously promote the system*** - Achieving high usage rates can take a considerable amount of time. The Italian PCT system was originally put in place in 2005 and it has taken 10 years to achieve the substantial take-up that is enjoyed today.
- ***Keep the system as simple as possible*** - this is a conclusion of the Italian designers of the PCT system which had initially failed and it is also one of the reasons for the success of the Money Claims Online System. The UK Pen Drive system shows that there is a beauty in simplicity and shows that the Courts can still take leverage from electronic Justice even when a sophisticated electronic system is not in place.
- ***Big bang implementations often do not work*** - Systems need to be introduced gradually in a phased manner both in terms of functionality and in terms of implementing across the different courts.
- ***Build your systems in a modular fashion*** that are sufficiently decoupled from each other to allow independent deployment. Success of a number of e-Justice systems was attributed to the fact that they were extensions of already existing case management systems

- ***Apply the right level of security*** and implement formal risk management techniques to properly asses the security measures that need to be in place. For example, Singapore eliminated the need to use a smart card to authenticate users who wished to file a case using the eLitigation system. Italy provides a mobile app that can be used on an open mobile network but compensates for this by anonymising information. Lock the door too securely and no one will come in.
- ***Mandate the use e-Justice –*** but only after the ICT system has sufficiently matured in terms of stability and functionality. Italy is now achieving high level of electronic submissions and they are incrementally mandating the use of electronic submission cross the different instances of Courts.

5 Electronic Identity

The electronic identity management feature in national portals is an important way that governments can regulate, monitor and standardize access to its online services. Citizens wishing to use e-services can access a vast range of online services through unique credentials that allow the system to recognize the user, tailor the services to his or her needs and allow easy and fast tracking of the status of transactions. Hence, users no longer have to memorize many credentials and usernames in order to access e-services. This feature is also beneficial to the government in that it allows all agencies, providing different services, to have coherent, cohesive and similar information about users. This reduces bureaucratic procedures, minimizes redundancies and replication within the agencies and maximizes the output to citizens. The UN e-Government survey-2014 shows that the number of countries offering such a feature has increased from 52 in 2012 to 69 in 2014, or an increase of 9 percent age points in 2 years[34]

The write-up of the E-SUD system (Annex 1) that was provided for this assignment also cites issues that are being encountered by the lack of a national electronic ID system across Uzbekistan. The document further explains that a pilot Identity Card system is being run in Uzbekistan and this is anticipated with tracing the correct address during notification of untraceable parties. While the attainment of such an e-Government tool would provide an optimal solution it is understood that either this is not a feasible option or it is something that will not come to term in the immediate future. In the interim, pragmatic alternative solutions need to be found for e-Justice services. Such solutions can also be extended into the e-Government domain.

5.1 United Kingdom

The United Kingdom has traditionally resisted the implementation of a national identity system. The principal objections to ID/eID cards is that they are an infringement of the citizen's right to remain anonymous should they wish to. They give the state powers it has only ever had before in wartime. In fact a card scheme was subsequently abandoned during times of peace. Critics cite that there is no evidence that they provide additional security for citizens and they additionally claim that the benefits are outweighed by privacy and data protection considerations.

Several attempts have been made in the UK to introduce ID cards, the last being The Identity Cards Act 2006 (c 15) This is an Act of the Parliament of the United Kingdom that has since been repealed. A project had commenced for the implementation of the ID cards but the momentum was stopped once there was a change in government and the project dropped. Subsequently the Conservative/Liberal Democrat Coalition formed after the 2010 general election announced that the ID card scheme would be scrapped.

This has left the citizens of the UK without an identity card that can hold digital certificates and form part of an eID national infrastructure. The UK has had to find workarounds to this to enable them to implement their Digital by Default agenda. Two of the solutions implemented by the UK are examined here.

5.1.1 Government Gateway

The UK government gateway allows citizens and organisations to register electronically over the internet. A citizen can register as an individual, an organisation or an agent. The Government Gateway uses an approach called “Registration and Enrolment” (R&E). First the citizen has to register for a User ID. Then they have to enrol in the various electronic services they wish to use.

Individual registrations, as the name suggests, are valid if you want to access online government services on your own personal behalf such as carrying out your tax self assessment or applying for tax credits online. Individuals

[34] UNITED NATIONS E-GOVERNMENT SURVEY2014

can also register a digital certificate but this certificate must be purchased by the individual prior to the registration process.

Registration as an 'Organisation' is valid if the citizen represents a business (including employers, sole traders and farms) or charity, or other commercial or non-commercial organisation. If one registers as an organisation, this registration only enables the holder to make transactions on behalf of that organisation.

Registration as an Agent applies to citizens that wish to submit forms to the government on behalf of other organisations or individuals. Before this registration can take place the citizen must register as an Agent in the Government Gateway. They require an Agent Identifier (Agent ID), issued by the government department(s) that handle the service(s) that they are enrolling as an Agent for. An Agent may be an organisation (for example, a firm of accountants, or a payroll bureau) or an individual (for example, someone who completes a tax return on behalf of a disabled relative).

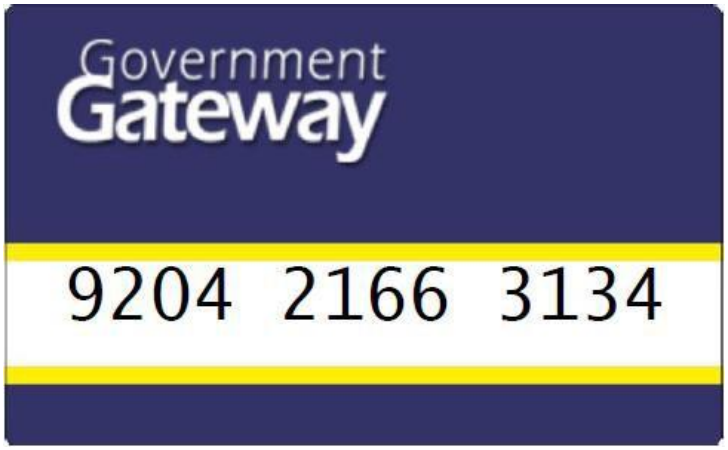


Figure 11 - UK Government Gateway Pass (sample)

The Government Gateway pass alone is not enough to gain access to e-services. The citizen is required to register for every electronic service that they intend to use. After registration with the Government Gateway, the citizen must enrol for a first service, and the user ID for this will be sent by post to the address held by the department for that user.

The User ID identifies the citizen and authorises them to access the Government Gateway. This must be used along with a password to log in to the Government Gateway. Additional functionality is provided for Organisations, allowing the main user to add other people onto the organisational group, and they will subsequently be sent their own User ID.

An Activation code is sent to the citizen every time they enrol for a new government service. This needs to be only used once to activate the service for the first time. When enrolment is made for subsequent services, then a separate Activation code is sent for each service that you enrol for. Activation codes are sent to the address held by the government department handling that service.

The types of electronic services offered vary in accordance with the sensitivity and nature of the service and while for some the Government Gateway credentials will suffice, for others enrolment of a digital certificate that is linked to the Gateway account is necessary.

The Government Gateway has been in use for 13 years and has now been earmarked for a replacement. A radically different approach will now be taken to provide electronic identity services through the Gov.UK Verify service.

5.1.2 Gov.UK Verify[35]

In a radical move away from the Government Gateway, the UK Government will now buy its identity verification (and perhaps its mapping of that identity to the various government services) from many providers. This project is in its initial and piloting stage but is anticipated to run on a wider spectrum by Quarter 4 of 2015.

Currently the following industry leaders are partners in offering this service; Barclays, GB Group, Morpho, PayPal. Royal Mail, the Post Office, Experian, Digidentity and Verizon. However not all of the services providers are currently up and running during this beta trail of the service.

The service providers either already have access to aspects of person data (e.g. PayPal has access to banks to verify credit card information) and/or will be given limited access to e-services by the central government. Examples of this are basic driving licence information which will allow the service provider to verify if the driving licence number provided is correct.

To register for this electronic identity citizens navigating to the www.gov.uk/verify site are first asked a series of questions related to the documentation that they hold; for example a passport, a driving licence, a mobile phone or fixed line. Depending on the replies given they are then directed to a list of identity service providers that can fit the citizens' needs based on the information that the citizen holds.

The user is then asked a series of questions based on the information that they have said they hold. Examples of these questions are the Passport number and expiry date, and driving licence details. Further supplementary questions are instigated by accessing data such as from the electoral register. A typical question could be that the user is invited to select from a list of initials of a person living at the same address. Once this process has been completed then the user is registered with one of these service providers.

The next step is to register for the service and sign in with the UK Verify account. During the first time usage of the system, the user is asked to provide additional information to allow the e-service to link the Verify account with the account of the internal system. For example for a Taxation e-Service the user will be requested to provide tax numbers and some other information. Once the user is identified in the system then the Verify account can be linked. After this process all the user needs is the user name and password to access this service.

Not all services will require the second line of verification. Some services don't need to know who the user is. For example to order a document, the service provider only needs to know where to send it. Other services will need to be more confident of whom the user is; for example, if the user is going to be able to see sensitive personal details, or make a claim for payment.

Each service will assess risks by considering things, such as, whether sensitive data can be seen and whether money transactions will take place, in order to decide what level of identity assurance they need.

As a personal comment I feel this is a somewhat longwinded process and carries a substantial cost to government but it satisfies a number of requirements of the UK citizens which include;

- That a centralised database will not be maintained by the government
- There is not just one single point of failure or risk as would be the case with a centralised eID system
- Citizens are given a choice of service provider some of which they may already transact with (such as PayPal).

[35] https://www.gov.uk/government/publications/introducing-govuk-verify/introducing-govuk-verify

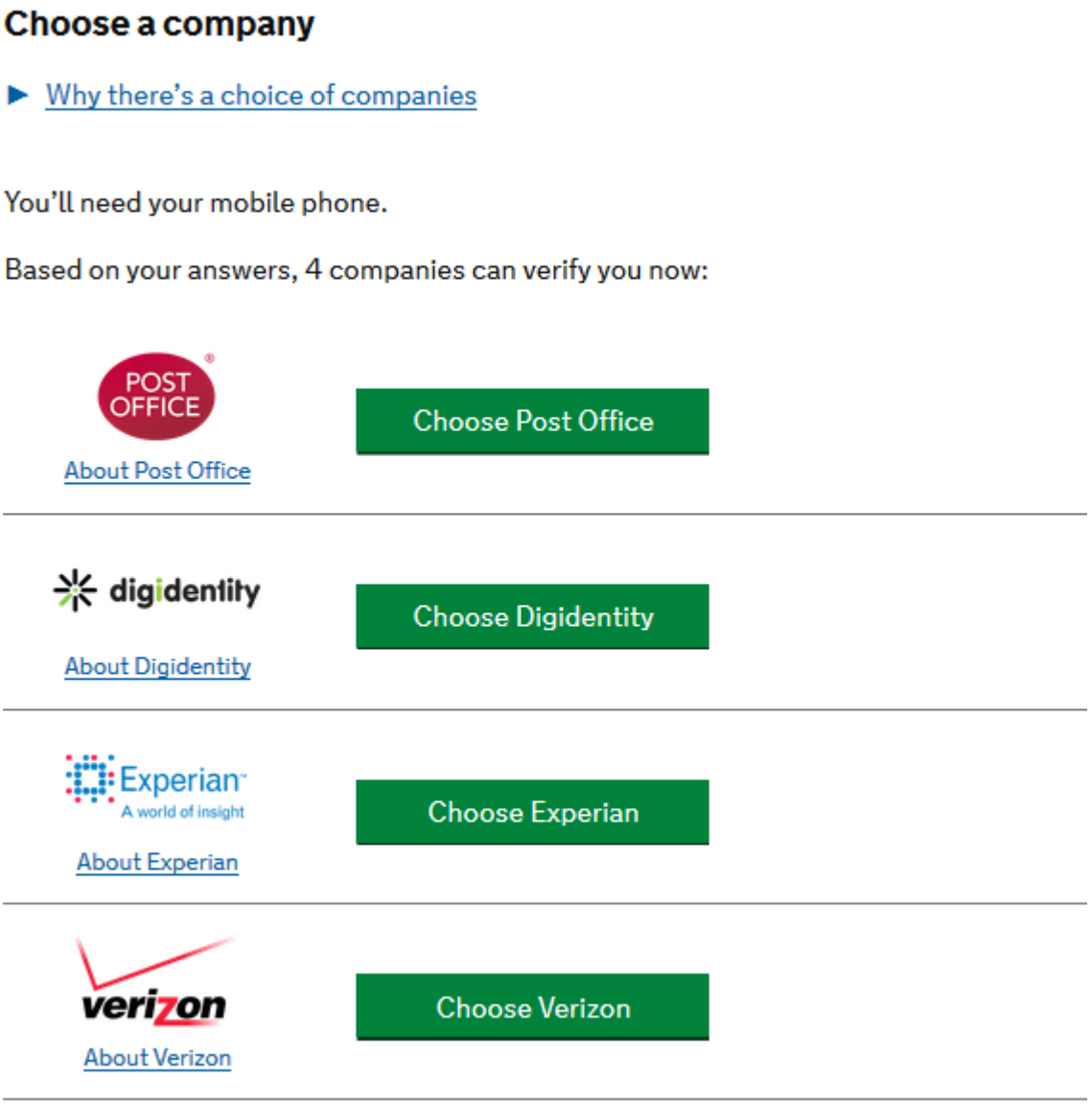


Figure 12 - gov.UK Verify - selection of provider

5.2 Finland

Finland has advanced well in the area of Identification and Authentication. They have an eID card which is voluntary in Finland. It is issued by the Finnish police authorities and is valid for five years. In fact the first cards were introduced in 1999, and in June 2003 the Population Register Centre announced a chip upgrade to the country's eID card to enable the use of fully functional digital signatures instead of the current "citizen certificate". The upgrade to the card allows citizens to carry out secure transactions with public authorities, businesses and other service providers via the Internet and through mobile devices.

In spite of having a fully fledged eID in place the government of Finland have also sought alternate methods to allow citizens to interact electronically with the government without the need for an eID. In fact most e-services are available without requiring a logging in, but some require electronic identification, and some may even require a digital signature. Electronic identification can be performed and a digital signature entered using online bank identification, a certificate card or a mobile certificate systems.

We will focus on the authentication via bank identifier as an alternate to eID. An agreement is in place between the Finish Government and certain mainstream Banks that operate in Finland. There are currently eleven banks offering this service.

Here the user must first gain access by agreeing with their bank to provide this service. When the user is required to login they are presented with a list of available banks that offer this service. The user needs to select the bank that they are registered with and then follow the instructions on how to authenticate as provided by the online service of the bank. This is basically a user name and password that is issued by the bank. The management of these credentials are handled by the banks and not by a central government function.

There is one limitation that is placed on shared accounts and that is that it can only be used for electronic access by the person on whose name has been recorded in the bank files as the main user of the bank connection on the Web. However, since some banks permit both spouses to make their connections online, but only if they have agreed with the bank that each spouse has separate identifier codes for the shared bank account.

The success of using banks for authentication has been so large that the Ministry of Finance has recommended this method as a secure way of transacting with government[36]. In fact the Finish post office has switched their services from one that was managed internally to one of the leading Banks in Finland.

It is pertinent to note that the level of authentication and signature does not need to run at a consistent level throughout the service. If you take the Finnish example they accept different forms of authentication methods depending on the types of transactions being executed. The submission of form with payment may not even require any authentication at all while on the other hand the viewing of personal details (for example of a Court Case) would. Governments need to look to relaxing the need for strong authentication where this is not required. This is of course subject to a formal risk assessment and any legislative constrains that may be in place.

An interesting insight comes from Teemu Rissanen who states that “Online payment transactions have an important role in electronic services. A payment transaction is regarded as equivalent to authentication and can therefore also substitute an electronic signature in the meaning of a record of legal act[37]”

Therefore where payment is required for an e-service there will be less motivation to impersonate a third party and make a false submission more so that other checks and balances would be in place. The main check is the traceability of the payment to the originator of the transaction. I therefore see such submissions as having a high potential for being electronically submitted with no or a low level of authentication in place.

[36] E-commerce and V-business: Digital Enterprise in the Twenty-first Century - Stuart Barnes

[37] Electronic identity in Finland: ID cards vs. bank Ids Teemu Rissanen - http://link.springer.com/article/10.1007%2Fs12394-010-0049-8#page-1

In Malta we are in the process of revaluating a number of services that required authentication via our National eID. One example of this is the Electronic Small Claims Procedure which can be used by citizens for money claims of under €3,500 ($3950). The take-up of this service was not as high as anticipated and even though we have had a national eID in place for a number of years, the use of the eID for this service was thought to be inhibiting the take-up of the service. We have therefore evaluated the risk factors of this service with the aim of reducing the level of authentication required. We have agreed that given the fact that a payment must be made electronically and that this payment is traceable to the card/bank account of the originator, then this alone is enough of a safeguard for a submission that is being made to a tribunal (lower court). Additionally there would be little motivation to submit a fraudulent claim as the defendant can demand an oral hearing and the party that lodged the small claim would have to present themselves to the tribunal. Amendments to the legal instrument have been made to allow for such electronic submission. We anticipate that this revamped service will go online by the end of summer 2015 and will be accompanied by a media campaign.

5.3 Singapore – SingPass

The SingPass is an eID that is easily available to the residents of Singapore and some other groups of non-residents. Citizens can apply online and their SingPass credentials will be sent by post within 4 working days to the address where the citizen is registered in the Singapore government's database. Alternatively they can go to a registered SingPass office in person and produce the required identification.

Over here it is stressed that a great weighting is put on the addressed as registered with Government. This therefore allows the SingPass to be sent by post and eliminating the need to go and apply for it in person. This in fact resembles the UK government gateway ID. The relevance of having an online database of citizens is further stressed here as it can be used as a knowledge base that can act as an enabler of electronic services.

5.4 e-Codex

The aim of this project is to pilot an interoperability framework between existing European national judicial systems (i.e. for the cross border transmission of judicial documents, decisions, information, etc), addressing mainly the horizontal issues on the interoperability between Member States' activities, such as a secure network for the judiciary and e-Id management of the different stakeholders (e.g. judges, courts, lawyers, etc).

One of the main issues faced by this pan-European project was authenticating and signing of documents across different European countries and the recognition of different digital certificates some of which were qualified and others that were not. Similar issues existed with the availability of digital certificates for all citizens in particular those that wished to make a onetime access for such as a small claims procedure. One pragmatic solution that was found was the implementation of an agreement which became known as the 'circle of trust'. The agreement was to be signed between member states and in effect meant that every participating MS trusts and accepts the documents, applications and signatures from other MS according to the legal standards of the sending country.

More interesting is the fact that they accepted signing-in through what was called an 'Advanced Electronic System' as proof of identity. The Advanced Electronic system could be any system in use whereby the identity of the account holder has been established. Typically we could mention any accounts given to civil servants where the identity of the owner of the account would be know and established. The e-Government system would therefore use directory services (such as Active directory in Microsoft products) to issue a protocol such as LDAP Bind to verify that credentials are correct. The same concept could apply to other systems such as email accounts that have been issued after verification of the physical identity of the user. This is not unlike signing in with Facebook or Google except in these two cases the identity of the user would not have been verified and in effect this would not provide sufficient proof of identity.

5.5 Other solutions

The Unified Patient Court (UPC) is a new jurisdiction within Europe that has been established specifically to handle Patent Litigations. Although the agreement between member countries is established this has not yet come into force. The Preparatory committee is currently in the stages of setting up the Courts, the rules of procedure and the fee structures before it can become operational. The UPC agreement specifies a digital by default approach and therefore the IT System and the ability to file online are key milestones for the Court to become established. More so, the litigants will not be allowed to file offline (except in very rare cases and due to the ultra sensitivity of the evidence in question).

Given that litigants can originate from anywhere within the international community, the method of handling authentication becomes an issue as no common means of authentication exists across national border. Although a good level of security is required there is no single method that can uniquely ensure the identity of the users. Faced with this dilemma the UPC needed to find a fit for purpose solution and therefore a risk based method is used for the primary login. The Risk based approach is defined as "decisions on how to provide services are based on a balanced understanding of risk and reward". The rationale here being to "ensure appropriate security is applied but avoiding over-engineered solutions, therefore striking an appropriate balance between control and business need".

The system will function in the following manner; the user (as a plaintiff) creates an account during the first submission of their case. The user will also need to pay courts fees to open the case. The fee regime for the UPC starts at around €10,000. Therefore there is little scope for making a fraudulent claim when the costs of opening this claim has such a considerable price tag. The user will need to effect payment online and thus leave an electronic trail in the system that can be traced back to the bank account of the originator.

Therefore this is the risk based approach that is being taken by the UPC. They know that they must take risks to have electronic filing but they know that there are a number of mitigations to these risks. Apart for the payment of fees the plaintiffs can be challenged to appear in Court to verify their identity.

Once the user has established a relationship with the UPC through the creation of an account and the payment of Court fees a two factor authentication (implementing Open standards – RFC 6238) will be used to complement the user name and password. The user will be asked to register a mobile number with the UPC. A onetime token will be sent via SMS that would form part of the credentials to be used to access the system. It is unclear at this stage if the token is going to be required for every login or just for certain events that are deemed to be more sensitive than others. Such a decision would need to be taken over the coming months and before the eService goes into production.

6 A database of citizens and organisations

The write-up of the E-SUD system (Annex 1) that was provided for this assignment cites a number of issues that are being encountered when attempting to notify plaintiffs with incorrect addresses or inconsistent plaintiff names. It additionally cites issues with uniquely identifying citizens in particular, in relation to authentication by citizens in the E-SUD. It is also understood that the Uzbek government is piloting an Identity Card system and therefore the following information should be taken in this context.

It is believed that e-government can bring the citizen closer to government and the government closer to the citizen. The attainment of such an e-government model can be difficult if the government it unable to digitally identify its citizens. With the advent of the digital age Malta had identified this need as an essential tool for the attainment of citizen electronic services. Work had commenced in the mid-1990s to provide a more flexible citizen register than the one that was currently in place at the time.

As time passed and electronic services became more granular and the concept of the citizen database was extended to encompass a resident database i.e. any person that is residing on the Islands of Malta but not necessarily a Maltese citizen. It is after all expected that any resident would need to interact with government electronic services, which of course also include electronic Justice services.

Originally the Government of Malta had a number of disparate systems across Government departments, thus rendering the management of information as a corporate resource ineffective and expensive. The extensive investment in Information Technology by the Maltese Government was complimented by an efficient and effective Information Resource Management activity to maximise the return on investment made. For this reason, the Common Database (CdB) was indicated as one of the most strategic systems in the Information Systems Strategic Plan. This has allowed the Maltese Government to promote an information sharing culture across Government Departments to improve data correctness, consistency and currency. The CdB therefore serves as the basic platform to implement this policy, and consolidate public domain information that is commonly used across Government Departments.

Therefore the purpose of the CdB is to provide a central repository for Government information, which is commonly used across Government departments. The information held in the CdB is restricted to information about Persons, Addresses, Organisations and the inter-relationships between these subjects, which are in the Public Domain.

The CdB was designed to:

- reduce the cost of data collection and maintenance for Government computer systems
- improve the quality of Government information, since areas of information can be ascribed to individual 'Owners', responsible for assuring and maintaining its accuracy.
- facilitate the one-stop shop concept in Government Departments.

The CdB receives separate transaction types for each subject area of its information - Person, Address, Person Address Link and Personal Relationships. Data concerning Person and Personal Relationships is received from the Public Registry; Person with Address details are received from the Electoral Office, eResidency office and Asylum seekers office. The Organisation registration data is supplied by the VAT Department (however, at the moment this is not currently being maintained). Transactions are electronically transferred into a validation process termed 'The Gateway'. Each transaction is flagged with a date-stamped 'Transaction Status Code', according to its validity, and written forward to the CdB Transaction File.

Transactions that fail validation remain in the Transaction File, to be verified, amended or rejected by the 'Owner' of that area of information. Transactions which pass validation, update the CdB in the next nightly batch update run.

The CdB is accessed by most Government Departments. It is mainly used as a reference point of information to assist them in their business processes. The CdB is also the main driver for Government Departments to eliminate the use of Civil Status certificates where these are required by Government Departments to deliver a particular service. Such services include the issuing of passports, issuing of identity cards, application for public examinations, etc., thus facilitating the implementation of one-stop shop services where required. In the Justice domain the CdB is used to ensure a unique identification of litigants and also for the purpose of tracing address information for failed attempts at notification by court bailiffs or by postal services. The public benefited from this initiative as it has avoided the cumbersome mobility from one department to another to obtain such a service and enabled a number of electronic services.

The CdB is a strategic application wherein many data consolidation exercises are performed to improve the integrity of Government data. CdB data is in turn provided to a number of Government e-systems to ensure that person/address details of these systems will be consistent across all of Government.

The CdB has also served as the driver for the Data Architecture Standards for Government systems. This is a mechanism that had been put in place to ensure that new systems have to adopt the data standards issued by the governance body. The intention is that Government applications will be in a position to interface with each other through the application and enforcement of a single standard on how to handle and store personal and address information.

CdB data is considered as an important tool for all E-Government initiatives. This will facilitate the delivery of services from different service clusters, in a seamless manner to the public. The success of the CdB initiative is reflected in the level of integration achieved in most Government business processes to deliver quality services to the public in general, whilst at the same time reducing maintenance costs through the maintenance of a homogeneous set of personal and organisation data.

One of the main challenges in building such a database is not only to gather the primary information from different sources but to collate it into a consistent and single source of information. Therefore the building of this database is based on three pillars. Primarily the sourcing of the information from independent entities within government or any other interested party that can furnish this information. Then there is the actual database itself which enforces the architectural standards of the CdB and therefore ensures consistency in the data and finally the access layer that is controlled by the overall owner of the CdB and regulated by data protection legislation.

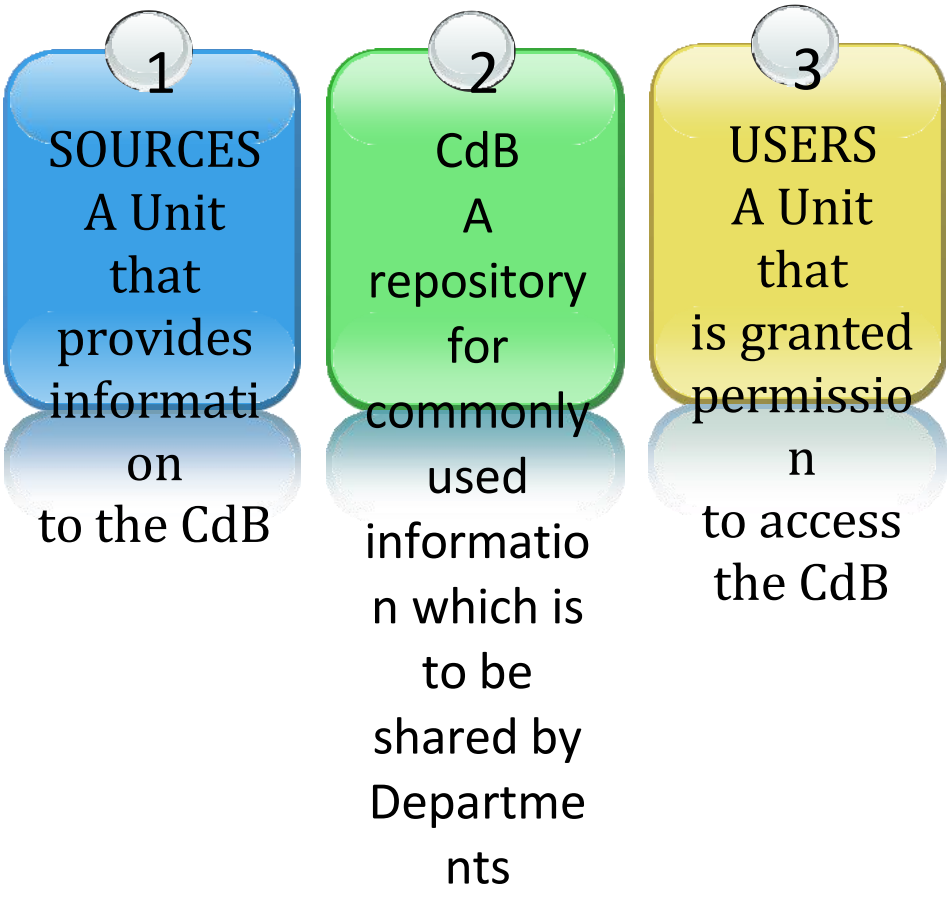


Figure 13 - The Three pillars of the CdB

As previously mentioned the information in the CdB information is sourced from a number of different entities as follows;

Person data – The Public Registry consisting of birth certificate information. This is the primary source for the unique identity number of each person. The identity number is the birth certificate number with the year appended onto it along with an identifier of the location of the registry. It is pertinent to note that a new born child will have an Identity number as soon as the birth is registered at the public registry. Foreigners can also register their foreign birth certificate at the Maltese public registry therefore obtaining an Identify number. Other alternatives exist for foreigners to have an identity number through the resident permit system.

Address structured data – citizens are not allowed to declare addresses that are not consistent with the information provided by the Malta Environment & Planning Authority (MEPA). The MEPA registers all street names, council names and areas. Therefore not only defining definthe structure of the address data but also the possible combinations. Therefore a person cannot be registered against a street name that does not exist in the MEPA database.

Linking persons to addresses – The link information is derived from the electoral office which publishes an electoral register on a prescribed basis. The electoral register is subject to the scrutiny of the political parties who may object to the registration of an individual in a particular address. In this case the person is summoned (using the registered address) to court to give oath of their place of domicile. If they do not show up for the sitting or the notification fails after a prescribed number of attempts then the person is in danger of being struck off the electoral

register and therefore loses their right to vote until the address is corrected. These act as a counter balance to ensure citizens are registered at the correct address.

Linking relations **–** This process takes place in the public registry at the time of registration of birth or marriage. The births are linked directly to the know parents, therefore identity number to identity number creating a hard link of the family tree. Marriages are also linked in a similar fashion. The information pertaining to the linking of family relations offers great potential in the area of Justice and Home Affairs.

Organisation data **–** This information is collected from the Value Added Tax department and contains a mixture of Limited Liability companies, registered partnerships and sole traders.

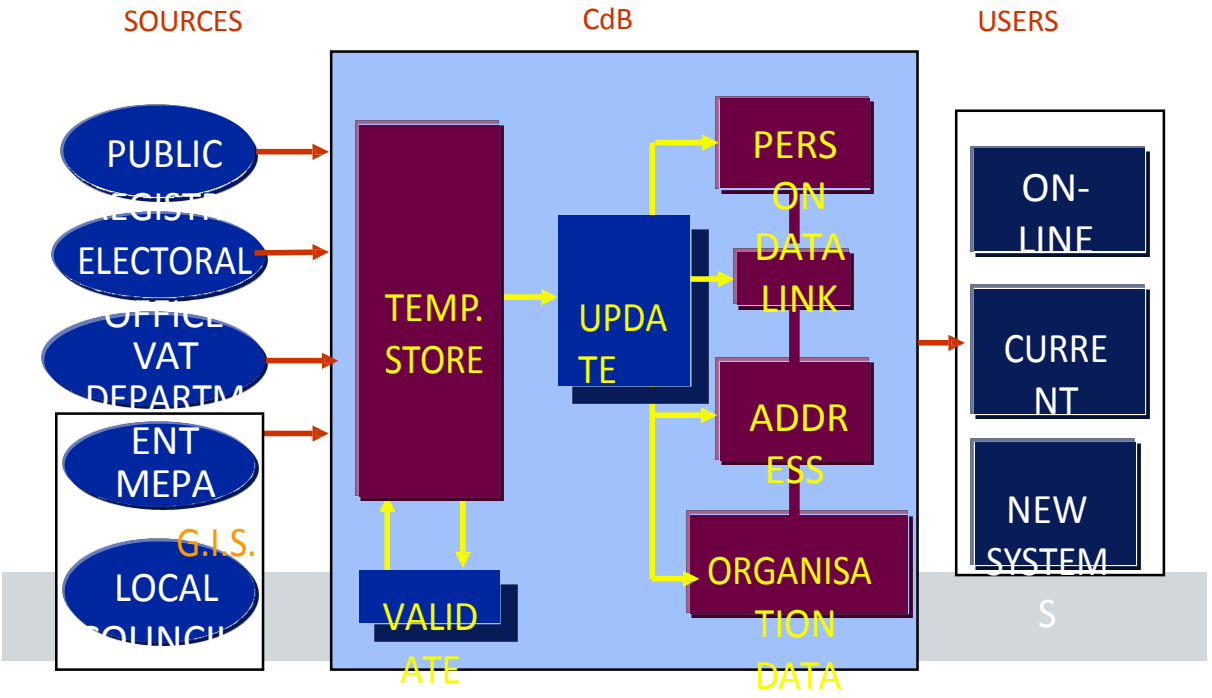


Figure 14 - Process of collating the CdB

6.1.1 Alternate systems

The CdB was built and refined over a number of years and as one can imagine still requires a small team to continuously improve on the data quality and monitor the status of failed updates. In spite of this we still encounter a number of instances where the information provided may not be correct. For example - a citizen remains registered at their previous address or uses an alternate address of a summer house. We have considered using alternate sources of information to continue to refine the collation of data and in particular target databases where the citizen has an interest to have the correct registered address.

Examples of this are the social security database where citizens make certain that the department has the correct address to ensure that any social benefits are received at the correct address. We are also considering links to the Employment and Training Cooperation database as this will allow the identification (through the ID Number) of the place of employment therefore allowing the bailiff to serve the documents during working hours at the person's place of work. Proposed changes to our legislation will empower the bailiff to request information from the employer on the working hours of the employee or any other information which will enable the court executive officer to establish when the person to be served will be at his place of work or at any such other place where service may be affected.

7 Payment Gateways

The write-up of the E-SUD system (Annex 1) that was provided for this assignment also cites issues that are being encountered as a result of the lack of a payment gateway. It is also mentioned that this is in the pipeline but there is a need for a standalone billing system for judiciary.

In Malta we have an electronic payment gateway (EPG) for government payment transaction and this is complemented by an eBills portal. The portal provides consumers of e-Government Services with a singular payment method that meets the highest industry security levels (PCI Data Security Standard - DSS) and provides a homogeneous payment experience across all services. This has been achieved through the implementation of a web service that supports both one-off transactions that are part of an online process and the posting of journal entries for electronic bill presentation and payment (EBPP).

One-off payment transactions originating from various e-Government services are processed through a singular, centrally hosted payment page. This method of payment ensures that Government departments have no access to credit/debit card details submitted by consumers. In addition the method ensures that in the event of banks mandating changes to the payment process, no code changes would be required to e-Government services. The myBills Portal allows the citizen to view bills originating from different Service Providers in a unified system. The citizen is allowed to settle any outstanding bill in part or full or schedule a recurring payment. Service Providers are provided with an application programming interface (API) that facilitates integration to back office billing systems for the posting of journal entries.

The use of the payment gateway is the de-facto method for all eGovernment payments but the use of eBills is optional and in fact the take-up of this service is lower.

Every government department is assigned a merchant account and this account is linked to the bank account that belongs to the department. Therefore the different national courts' administrations would have a separate merchant account and a separate bank account. This allows for easier reconciliation of payment. The eBills/EPG provides the reporting tools to allow this reconciliation to take place and brings together the transaction id of the electronic submission with the transaction ID of the payment. This further allows the reconciliation of the bank account when the statements are electronically received. Apart from the inherent capabilities of the EPG system no other specific accounting system has been put in place apart from the national accounting system. Once the reconciliation process has been finalised then a lump sum for the day is posted into the Government Accounting System.

A number of departments are also offering the possibility of payment through the major banks' online system. Here the bank allows its customers to select the department/service that they wish to initiate a direct payment to and the user is presented with a dynamic eForm. The eForm has a placeholder to allow the user to enter the reference to the electronic transaction being made. This therefore also facilitates the transaction traceability. The banks system returns a transaction ID to the user and this in turn is entered into the e-service as a temporary proof of payment.

A different approach to payments was taken in the European e-Codex project due to the cross-border nature of this project and the lack of a central European payment gateway. In this case users are given a number of different payment options according to the country that they are transacting with. Typically the user is given an IBAN account number and asked to electronically transfer funds into this account and then attach a digital copy of the payment transaction along with the other Court documents.

8 eForms/Workflow

Given the strong demand that is being felt for the creation of form based electronic interactions between the citizen/legal profession and the different Courts it may be advisable to consider the implementation of an eForms infrastructure that supports workflow mapping.

In Malta we have taken this approach for some of the electronic services that we offer and adopted the HP LiquidOffice eForms toolset, after a competitive tender process. The eForms infrastructure allows easy creation of forms and provides inbuilt integration with our e-Id and GPG (Payment) infrastructure. In addition to this, the eForms infrastructure allows user/developers to easily design and build a workflow for the form.

In the Justice area we have used this toolset for the lesser complex processes, such as the electronic submissions to the Small Claims Tribunal. The use of this tool has allowed us to develop 4 electronic forms (with payment facilities) over a four week period. Of course the eForms framework and integration with shared services (eID, Payment Gatway, CDb, SMS gateway) were already established at the time and the effort required was solely dedicated to building the functionality and testing.

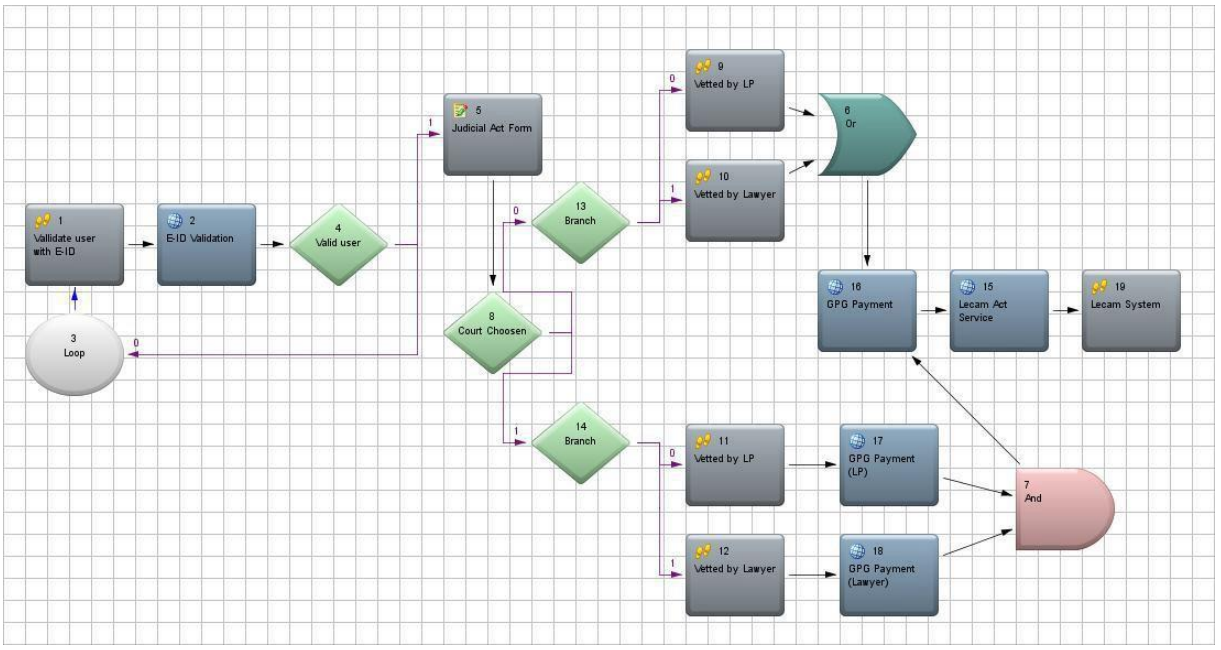


Figure 15 - eForms - Workflow Builder – e.g Judicial Acts

The tools also inherently provide a forms manager that allows citizens to monitor the status of any form that they have submitted. This therefore allows the citizen to be able to monitor the status of their submission. The department (in this case the Courts of Malta/Gozo) also has access to the forms manager that allows them to redirect the form back to the originator or accept and continue to process the form. In this case we had decided to continue the processing through the Courts Case Management application. If the submission is accepted then the Form data is transferred to the Case Management system through web services that were developed for this purpose. The design of the information in the Small Claims Form was aligned to the data types in the Case Management system therefore allowing a seamless transfer of information. The Small Claims case is then processed using the tools of the Case Management system (e.g sittings, verbals, hall allocation, and publishing of Judgement etc..) and any information held in the Case Management system is automatically extended to the citizen facing part of the Justice Website. Status updates are sent to the eForms infrastructure and the citizen can also view these in the Forms Manager portal.

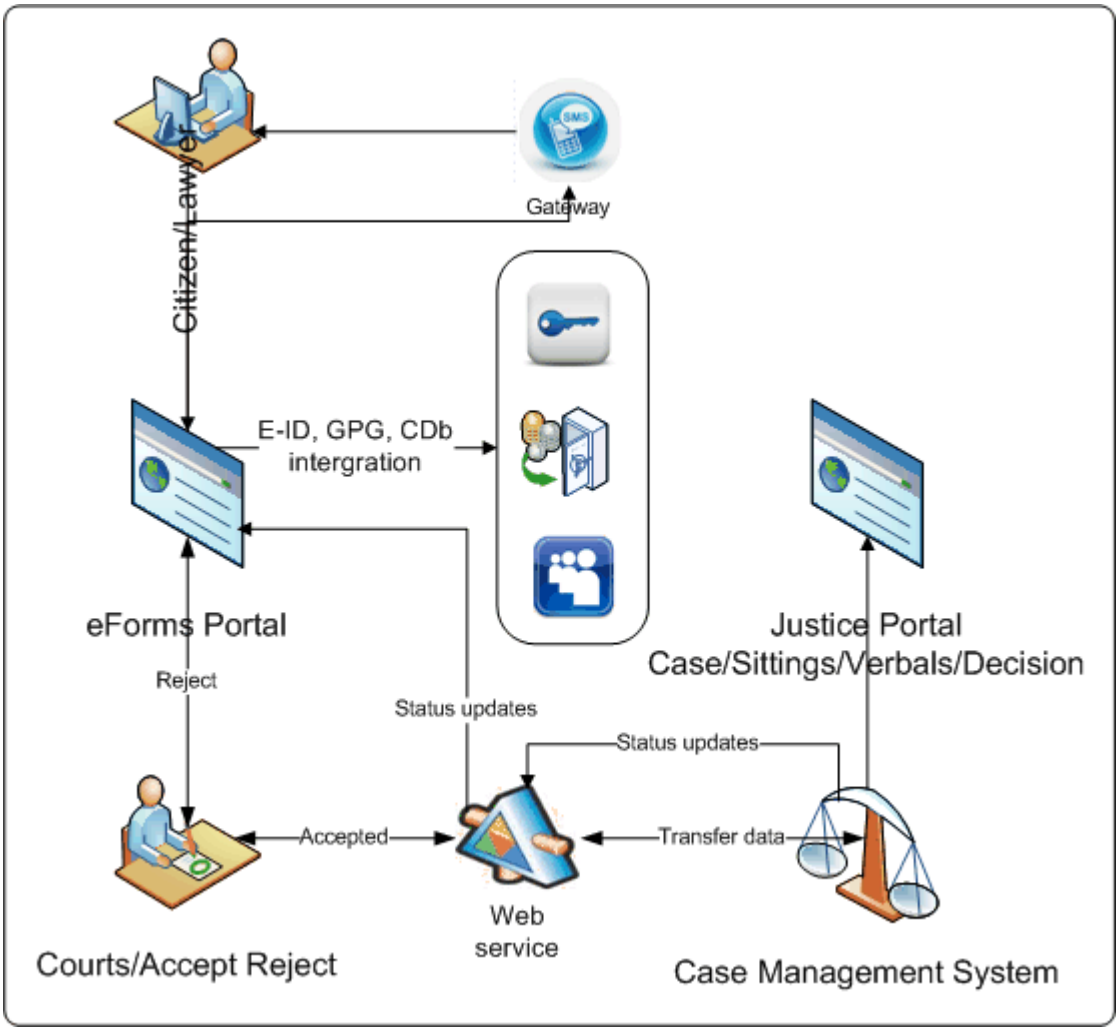


Figure 16 - Logical representation of eForms flow

Therefore the eForms tool sets provides us with an easy method to build eServices that require a workflow. In the Small Claims case we opted to continue to process the application in the Case Management System as we already had this tool in place. Alternatively we could have developed the entire system within the eForms infrastructure.

We have also adopted a strategy of divesting the responsibility of building the simpler eForms to the users at the Department. We provide the users with the initial training and technical setup and allowed them to build these new e-Services. This has allowed us to rapidly increase the number of electronic forms available to the citizens and professionals.

9 Sharing data

9.1 e-Filing vs e-Delivery (e-codex, X-File, Singapore site)

The two terms e-filing and e-delivery are often used interchangeably and therefore the meaning is often unclear. In this document the interpretation of e-filing is taken to mean a web-based portal where material can be submitted in digital forms or by uploading documents, whereas e-delivery refers to a technical solution that can carry structured or unstructured information securely and to an intended destination point.

e-Filing systems have been discussed in some depth in this document and therefore I will now focus on the transport layers that carry the information between different systems. A focus will be placed on two e-Delivery systems that are in use in Europe; the X-Road system that is used within the national domain of Estonia and the e-Codex e-delivery framework that is currently being piloted in a number of European countries. A considerable investment needs to be made to build an e-Delivery system and such a project should be undertaken as a holistic e-Government project rather than building an isolated framework to just cater for Justice Systems. Therefore the goal of an e-Delivery framework should be to establish a common transport infrastructure suited to the requirements of national e-communication between e-Government applications that reside in different domains.

Ultimately the e-Delivery must support the interoperable, secure and reliable exchange of structured, non-structured and binary data in both asynchronous and synchronous communication scenarios.

9.1.1 X-Road - Estonia

Estonia is a front runner in the development of e-Justice systems. In the early 1990 a strong focus was placed on the development of back-end systems that were used from within the confines of Government in a silo based fashion (i.e systems could not easily share data). The impact of this was felt by the early 2000 when there was a need to interconnect systems together so that government services could continue to evolve. Security of such inter-governmental exchanges of data was of course of paramount importance. The solution was to develop an e-Delivery system and the first version became available in 2001. The system was then evolved further in a step-wise fashion and further evolutions of functionality are still continuously being put in place.

The X-Road system is not only limited to inter-governmental exchanges but the public and private sector enterprises and institutions can connect their information system with the X-Road. This enables them to use X-Road services in their own electronic systems or offer their e-services via the X-Road. Joining the X-Road enables institutions to save resources, since the data exchange layer already exists. This makes data exchange more effective both inside the state institutions as well as regarding the communication between a citizen and the state. It is important to note that X-Road runs over the public Internet and therefore private/leased lines are not required to connect to the delivery system. Of course all data passing over X-Road is encrypted.

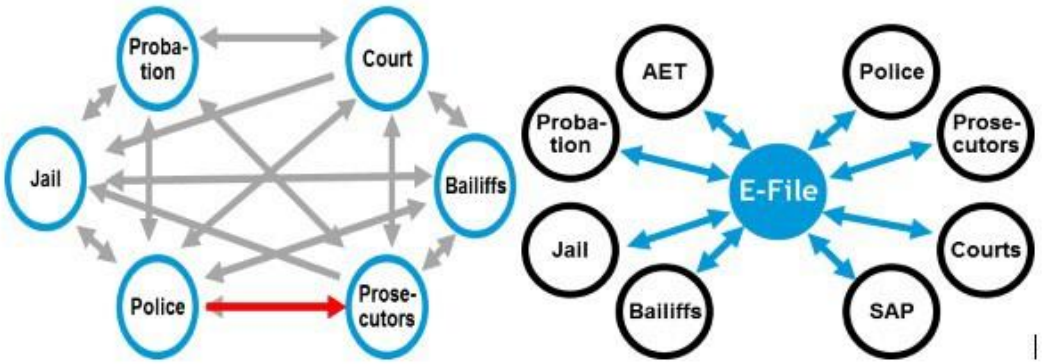


Figure 17 - Connectivity without vs with an e-Delivery platform

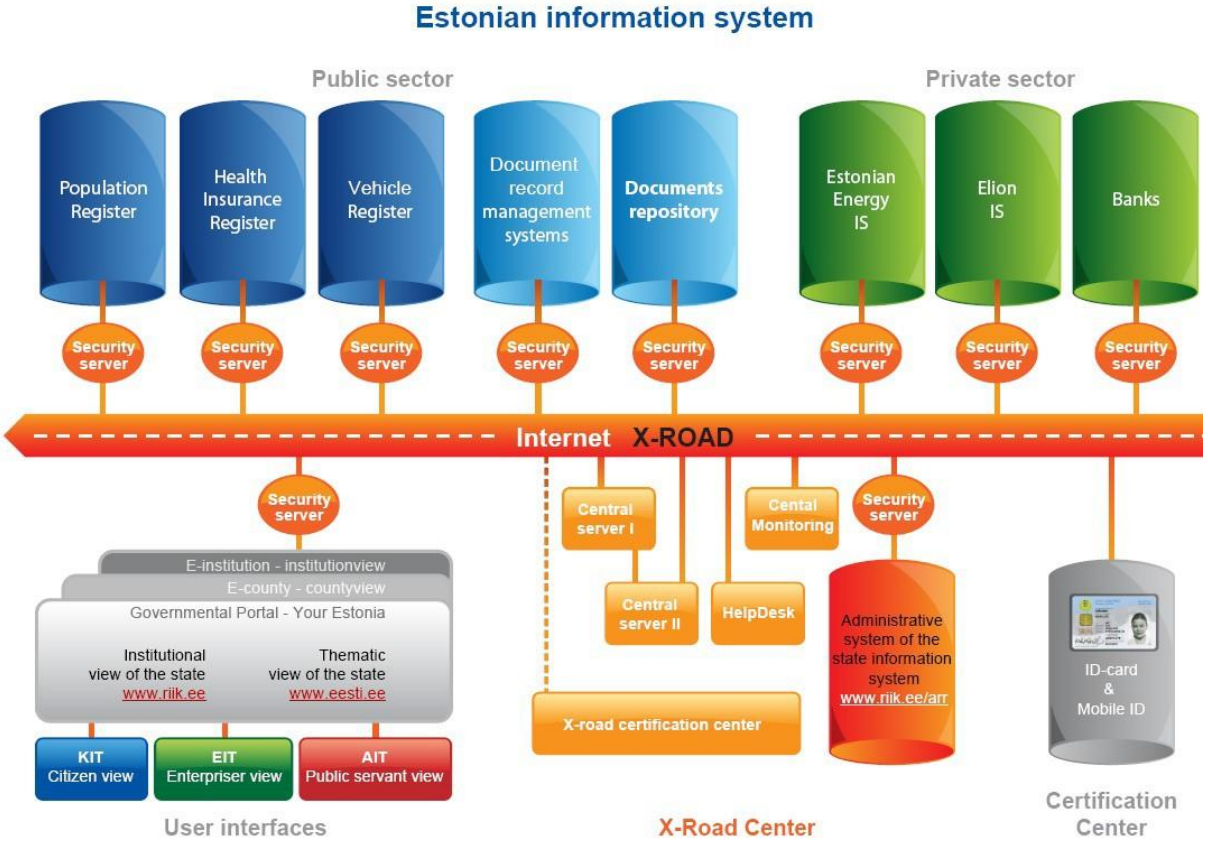


Figure 18 - Logical diagram of the X-Road e-Delivery system

The X-Road consists of three parts; technical, organisational and legal. From the technical point of view, the X-Road consists of identical security servers located at organisational network boundaries and a set of centralised services. The system is a peer to peer system with interoperability being enforced by centrally distributed software rather than standards. As an Organisational setup the X-Road is managed and funded centrally and legally. The X-Road is in fact enabled by a set of legislative acts issued by the Government of Estonia establishing clear

ownership rules around citizen-related data and stating that all government agencies using a legally significant information system must make that information system available to others using X-Road and X-Road only [38].

Any organisation wishing to share data with another organisation over the X-Road must register the service with the central X-Road team. The departments are issued a digital certificate that is used for both encryption of all communications and assuring that only authorised organisation has access to services. In addition to the agency certificates, server certificates are issued to allow for separation between server and organisation identities. This ensures that the web services exposed by one organisation can only be consumed by authorised organisation. The upkeep of this database is centrally managed by the X-Road team.

9.1.2 e-Codex

The aim of this project is to pilot an interoperability framework between existing European national judicial systems (i.e. for the cross border transmission of judicial documents, decisions, information, etc), addressing mainly the horizontal issues on the interoperability between Member States' activities, such as a secure network for the judiciary and e-Id management of the different stakeholders (e.g. judges, courts, lawyers, etc). This will help to rationalise and simplify judicial procedures between European countries (reduction of procedural deadlines and operating costs to the benefit of citizens, undertakings, legal practitioners and the administration of justice).

The project is now at an advanced stage and the e-Delivery component of the e-Codex know as the Gateway is now in production and carrying a number of pilot projects which include Small Claims, European Payment Order, Mutual recognition of Financial Penalties and the European Arrest Warrant.

The e-Codex architecture has been designed to work with national systems that are currently within the justice domain. These applications have been built to specific requirements of national legal systems and are not easily amenable to change by external factors. Therefore taking into consideration the investments previously made by Member States and the costs and evolution of such national systems, the e-Codex designers have avoided, wherever possible, to trigger the need for changes in the national ICT services that will communicate with the e-Codex gateway.

[38] Vabariigi Valitsus. Määrus nr.78. Infosüsteemide andmevahetuskiht. Elek- trooniline Riigi Teataja, Jaanuar 2011

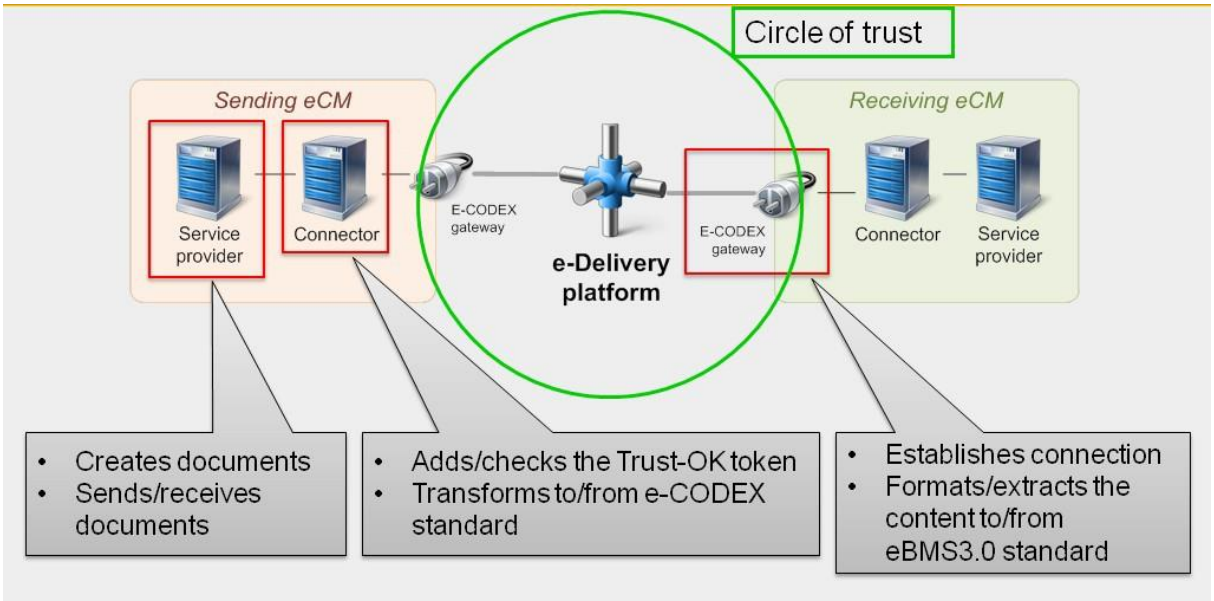


Figure 19 - The architecture of the e-Codex gateway

The e-Codex architecture can be broken down into three main components[39];

1. The e-CODEX Connector performs two main functions: 1) it transforms the outgoing documents received from the e-CODEX Service Provider from the national standard to the e-CODEX standard and adds a trust-ok token to the documents. The trust-ok token provides the results of electronic signature verification or a statement guaranteeing that the document was issued by an advanced electronic system that is capable of identifying the user and that ensures that the document is uniquely linked to the user and is created using means that the user can maintain under his control and any subsequent change of the data is detectable. 2) It transforms the incoming documents received by the e-CODEX gateway from the e-CODEX.
2. The e-CODEX gateways are national (and the e-Justice portal) "channels" or systems for data transmission between two communication partners. e-CODEX gateways are under the responsibility of the member state. The gateways are required to fulfil specific security requirements within their operation but also for the communication with others. These gateways act as interfaces between national systems (or the e-Justice portal) and the e-Delivery platform. Accordingly, they perform different functionalities, such as establishing a connection to other gateways and connectors, format the content of a message to be sent to the eBMS3.0 standard and extract the contents of a received eBMS3.0 message, providing a transport signature, providing a timestamp for outgoing messages and checking of the transport signature, providing of a timestamp and sending of an acknowledgment of receipt for incoming messages.
3. The e-Delivery platform is responsible for the secure and reliable transport of data and files from one e-CODEX gateway to another. To allow access to all potential users, the system will use the Internet with encryption to ensure a secure connection.

The e-Codex gateway was designed for system to system transportation of structured and unstructured information such as document attachments. In practice the same principles may apply at a national level and this e-Deliver platform could in theory function at a national level. The complex design is considered to create the need for the

[39] E-Codex D7.3 High Level Architecture Definition

maintenance of a multitude of solutions and agreements[40] and would therefore be pretty costly to maintain on a national budget. On the other hand the technologies applied and same principles would to the need for e-Delivery.

9.1.3 Conclusion

At a national level the X-Road solution would be the preferred option and is cited as a prime example of an e-Delivery service. Simpler solutions using point to point virtual private networks could be put in place but if a large number of point to point sharing of data initiatives were required then such a simple solution may prove to be unmanageable and difficult to secure.

If data sharing is constrained to a relatively small number of entities (for example Courts of first instance with a higher court) then one can consider other options such as storage on shared tenancy whereby the information can be accessed securely by both entities over a VPN. Therefore rather than transfer data from one entity to another a single copy of the data is maintained and by both entities with the relative audit maintained for traceability purposes. Cloud services would provide an excellent hosting mechanism for databases to be shared in this manner. In the United Kingdom cloud services are being extensively used by Government “Cloud First" approach to IT. Of course the UK stipulates a number of conditions for the provision of the service including that the data stored on the cloud is physically hosted within the European Union.

[40] e-CODEX Deliverable 7.1 Governance and Guidelines Definition

10 Connectivity options – Internet vs private networks

Security is a critically important issue for e-Justice. Without adequate security in place none of the foreseen e-Justice systems and services can be used in real-life environments. The objective is to create an adequately secure operational environment that is commensurate with the risk levels and operational costs involved.

It is only natural that any e-Justice system would be connected to a network and this would today, by default, be the internet, at least in the case where connectivity needs to be achieved by citizens or legal professionals. There are a number of security concerns that are often voiced when the prospect of connecting entities (Courts) to one another, for example, in the case of shared databases or during the transmission of data between entities and their respective hosting services.

It is inevitable that as the systems in Uzbekistan continue to mature further that this requirement becomes an issue which could prove to be very costly to maintain across a broad spectrum. Governments have traditionally created private government networks to ensure that their data is not exposed to intolerable risks but this trend is proving to be too costly to maintain. It is pertinent to note that as encryption technologies advance the true advantages of a private network when compared to the costs involved have diminished over the years.

In the European context the European Commission had set-up a private network known as S-TESTA and this network is shared between all European member states. S-TESTA was deemed to offer an appropriate solution as it is isolated from the Internet and allows officials from different Ministries to communicate at a trans-European level (up to EU restricted) in a safe and prompt way. This network has an operational budget of 7.5 million Euros for 2015. It is imperative to note that this system is used for 90 EU applications, where secured and reliable information is required between related administrations in the EU[41]. A new generation of network is being planned by the European commission and this will be known a TESTA NG. In light of this advancement the European Commission conducted a survey amongst member states and it was found that although theoretically confidentiality and integrity can be achieved via the appropriate mechanisms over a public network, in practice application owners impose the implantation of private networks. It was additionally noted that from a security standpoint, the use of internet as an alternative transport network would be acceptable for a majority of the stakeholders.[42]

Unless already provided for via a government wide network the Uzbekistan Justice systems will need be part of a Wide Area Network and a decision would need to be taken on the optimal and most feasible and cost effective method of implementing this.

We can therefore use the S-TESTA network for comparison purposes of a private network against the use of an internet based network. Here reference is made to the ISO standard 25010, specifically paragraph 4.2.6. In this standard various aspects of security are specified; confidentiality, Non-repudiation, Accountability & Integrity, Authenticity.

41 http://ec.europa.eu/isa/documents/actions/more-about-action-2.4_en.pdf

42 https://www.enisa.europa.eu/activities/Resilience-and-CIIP/cyber-crisis-cooperation/conference/2nd-enisa-conference/presentations/pieter-wellens-digit-the-stesta-infrastructure.pdf

At this stage one would need to examine the data that needs to be transmitted via this network and how this data is classified. The European Union uses the following classification schedule.

- **TRÈS SECRET UE/EU TOP SECRET**: information and material the unauthorised disclosure of which could cause exceptionally grave prejudice to the essential interests of the European Union or of one or more of the Member States;
- **SECRET UE/EU SECRET**: information and material the unauthorised disclosure of which could seriously harm the essential interests of the European Union or of one or more of the Member States;
- **CONFIDENTIEL UE/EU CONFIDENTIAL**: information and material the unauthorised disclosure of which could harm the essential interests of the European Union or of one or more of the Member States;
- **RESTREINT UE/EU RESTRICTED**: information and material the unauthorised disclosure of which could be disadvantageous to the interests of the European Union or of one or more of the Member States.

Typically in the EU, most Justice related data would fall under the EU Restricted classification, of course this assumption eliminates the rare exceptions where the data in question, by its particular nature, warrants a higher security level. Article 10 of Council Decision 2011/292/EU on the security rules for protecting EU classified Information states that approved cryptographic product must be used when handling data classified as restricted. To explain this further one must view the OSI model as depicted hereunder;

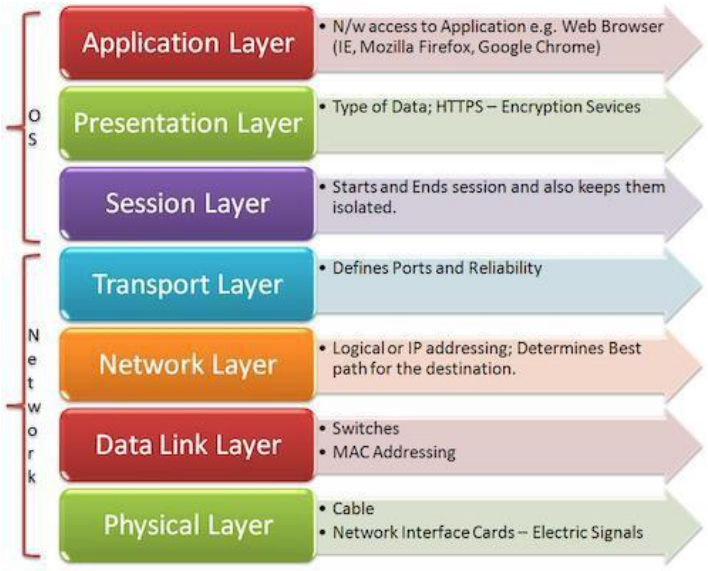


Figure 20 -OSI layer

Security of S-TESTA is amongst other provisions, provided by the IPSEC protocol (in the network layer of OSI model) and it is assumed to run over totally private network. There are a number of advantages associated with running over a private network and these include;

- Availability of the network can be contractually agreed.
- Bandwidth can be guaranted
- Failover and alternate network routes can be purchased therefore further augmenting availability.

These advantages need to be weighed against the cost of having a private network in place and potential difficulties of up scaling the network if required.

With the technologies that are available today security can be implemented in the session and presentation layer of the OSI model using TLS (Transport Layer Security) and 2-way SSL (Secure Sockets Layer) protocols. This security can also be provided in layer 3 (for Internet) through VPN (Virtual Private Network) technologies.

Therefore while a private network through leased lines are still considered to be more secure and have a potentially higher availability than using VPN over the internet there is a growing trend to move to the later solution due to the costs associated with the private network implementation.

The subject of course merits an in-depth study which takes into consideration the security classification of the data and the state of the national network infrastructure and takes into consideration other socio political factors

11 Other Issues

The following is my understanding of other issues that have been noted in relation to the development of the E-SUD electronic services.

Issue	***Comment***
The volume of work required to "systematized more than 256 types of cases/applications and their respective minimal data which were uploaded to the E-SUD." And the future maintenance costs to keep these updated.	Referring to output 1 we can note that in the Singapore eLitigation system the lessons learned was that *"Not all forms can be digitised - It was not practical to create dynamic eForms for all instances and they therefore focused on the prime documents that would provide the best reusability of information."*
SMS notifications are limitation to a relatively small number of symbols that can be sent via SMS, which limits the text of notification	We generally either just send status updates with the Case Number or else send a URL to the location on the web site (E-SUD) where the information can be found.
Inefficient mechanisms of delivering court correspondence to other parties due to incorrect addressing.	Please see section 1 .
Due to differences between document flow in courts and document flow in ministries and agencies, regular e-doc flow system could not be used in courts.	Consider use of eForms and Workflow tools as per section 8 eForms/Workflow
Future enhancements – Bailiffs	Additional Enhancement - Consider giving the citizen access to the notification status of the attempts made by the Bailiff and the end result of the notification. This will in effect act as a self controlling mechanism if Bailiffs are not being effective and diligent in their work. Refer to Fig 7 below showing a screen shot of the Maltese online notification status that is available to the citizen to view the notification status of their documents.
Issues with starting appeals electronically - As per legislation of Uzbekistan, external user can submit a request to state officer who is authorized to file a protest on court decision. If state officer submits protest, then the procedural rules start to apply	The state office should use the E-SUD system to start the process and lodge the appeal electronically. Ownership of the appeal can subsequently be transferred to the concerned party and become available in their E-SUS cabinet.
Authentication/Identification issues	Please refer to section 1
Payment Issues – online payment	Please refer to section 7 Payment Gateways

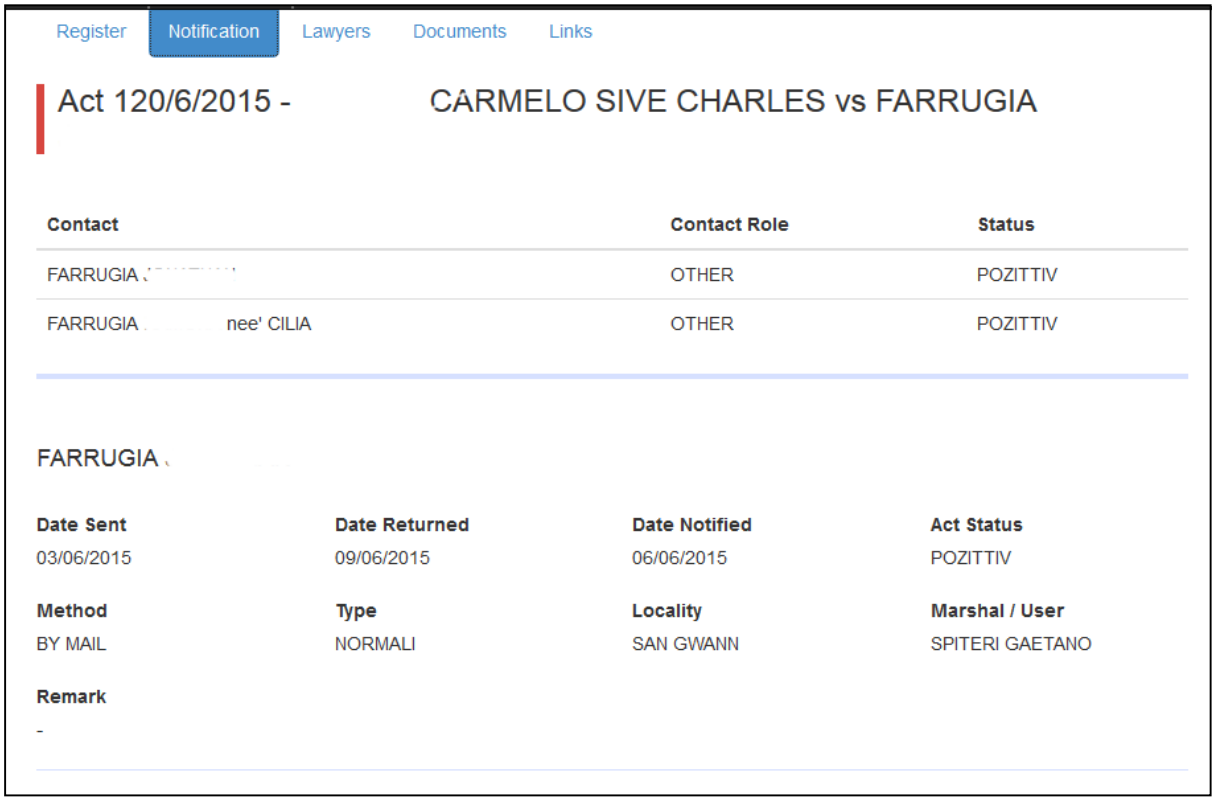


Figure 21 - Citizen facing status screen of Judicial Document notification.

Annex 1 – Background Information on E-SUD

E-SUD is a national e-justice system for the civil courts of the Republic of Uzbekistan. Elaboration of the E-SUD was initiated within UNDP and Supreme Court of the Republic of Uzbekistan joint 'Civil justice reform: Effective court management' project. As of December 10th, 2014 E-SUD is successfully installed and tested in Zangiota interdistrict court on civil cases. Term E-SUD stands for 'electronic court' in Uzbek language.

On March 21st 2012, Resolution of the President of the Republic of Uzbekistan 'On steps for further introduction and development of modern information communication technologies' (# ПП-1730) contained a list of information systems to be elaborated and introduced in Republic of Uzbekistan. This list also contained 'Adliya-2' (Justice-2) – a set of information systems including:

- 'Court activities';
- 'Court documents';
- 'Unified network of Judicial Department'.

As per description goal of these information systems is to gather, process, systematize and store information on court activities, court decisions etc.

This Resolution served as a starting point for elaboration of information systems for courts of the Republic of Uzbekistan. Later this Resolution of the President was amended in light of adoption of new Resolution of the President where new deadlines for elaboration of these information systems were set (Resolution of the President # ПП-1989).

Later the same year two Decrees of President of the Republic of Uzbekistan were adopted (# УП-4455 dated July 18th 2012 and # УП-4459 dated August 2nd 2012) where the goals of information systems were described in more detail.
For instance, one of these Decrees (# УП-4455 dated July 18th 2012) provided that economical courts should introduce e-doc flow system enabling, in particular:

- online filing of statements of claims, motions and annexes thereto to courts via 'electronic means of data exchange';
- notification of litigants via 'electronic means of data exchange';
- sending to litigants court rulings and other correspondence via 'electronic means of data exchange'.

Provisions of the second Decree (# УП-4459 dated August 2nd 2012) were further detailed in Decree of Cabinet of Ministers of the Republic of Uzbekistan (# 346 dated December 10th 2012). Summary is below in table.

Tasks:	**Expected results**
submit proposals on organization of electronic court proceedings, including: video- and audio recording of court proceedings as well as new types of stenography of court proceedings	effective usage of features of modern information technologies
elaborate 'Court activities' and 'Court documents' information systems aimed at gathering, processing, systematization and storing information on court activities, court decisions.	ensuring efficiency of legal proceedings (litigation) by gradual transition to paperless and automated workflows
upgrade web-sites of the courts in view of need to provide services related to online filing of statements of claims, motions and annexes thereto to courts via 'electronic means of data exchange'	increasing efficiency of interaction of courts with legal entities (companies) and citizens via 'electronic means of data exchange'

Tasks:	Expected results
upgrade web resources of courts in view of need to mandatory publication of decisions of economical courts	increasing efficiency of interaction of courts with legal entities (companies) and citizens via 'electronic means of data exchange'
enable notification of litigants and sending to them court rulings and other correspondence via 'electronic means of data exchange'	improving mechanisms of notifying of legal entities (companies) and citizens within court proceedings
introduce and use of corporate email systems and e-doc flow systems based on usage of digital signatures	ensuring protected delivery of correspondence, legal acts in electronic form, decrease paper usage in delivering documents

It also needs to be pointed out those abovementioned legal acts, stated following purposes of introducing information technologies in courts:

- ensuring wide transition to electronic system, including Internet, which omit direct contacts between government, state controlling agencies and legal entities, omit official circumlocution and corruption (# УП-4455 dated July 18th 2012);
- increasing level of computerization and efficiency of usage of computer technologies in courts (Decree of Cabinet of Ministers # 346 dated December 10th 2012);
- increasing number and quality of interactive services provided by courts to business entities and citizens (Decree of Cabinet of Ministers # 346 dated December 10th 2012).

Later in 2013 another Decree of President of the Republic of Uzbekistan (# УП-4570), contained a provision that required elaboration and introduction to court activities, improved, simplified, based on usage of modern information technologies statistical forms, aimed at gathering, storing of full, reliable and authentic information on court activities, which can be used for adoption of complex measures on further improvement of court proceedings, court activities.

All of the abovementioned were taken into consideration in elaboration of E-SUD national e-justice system for civil courts. At present E-SUD is being successfully used in Zangiota interdistrict court on civil cases for hearing and settling undisputed claims (fast-track litigation) and module for hearing and settling disputed claims is being finalized. Average ration of undisputed and disputed claims heard and settled by court of Uzbekistan is approximately
80 to 20.

E-SUD MAIN FUNCTIONS

Web portal

Web portal of E-SUD, requires registration/authorization of applicant (litigant). Initially developers tried to establish following means of registration/authorization in E-SUD:

- using email confirmation;
- using short message service;
- using digital signature.

All these means of registration/authorization in E-SUD were finalized and tested. But using short message service required additional funds which are not available in judiciary. For this reason this mean of registration/authorization in E-SUD is currently not used.

Using digital signature is constrained by absence of centralized pool of issued digital signatures by different digital signature centers. Or absence of 'public key infrastructure'. In its absence E-SUD has to get access to databases of all digital signature centers. Moreover, digital signatures are not widely used in Uzbekistan. Therefore this mean of registration/authorization in E-SUD is also currently not in use.

After registration in E-SUD, applicant gets access to his working space (virtual cabinet) in E-SUD. Working space (virtual cabinet) allows applicant to use functions of E-SUD, for instance

- Filing applications to court;
- Receive notification of new court decisions, ruling and other procedural acts adopted by judge;
- Download/print court decisions, rulings and other procedural acts adopted by judge within application;
- Track the changes in their application.

E-filing

As it is mentioned above, filing applications to courts remotely, without visiting the court premises is one of the major goals set in Decrees of President. This goal has been achieved in E-SUD. Initially idea was to limit E-filing function to simple uploading of statements of claims and other documents submitted to courts on the web-site. Later developers proposed to enhance

E-filing by requiring applicant (litigant) to enter some (required minimal) data on filed application. This feature of the E-SUD enables gathering data on filed applications at the moment of application to courts. Required minimal data on filed application is the data that summarizes the application itself and make preliminary assumptions on the case. It is also expected that in perspective, this data can serve as a criteria for search mechanism when conducting research.

The problem was that required minimal data on cases that fall under jurisdiction of civil courts was not systematized. Therefore elaboration of E-SUD, required developers to a) systematize cases that fall under jurisdiction of civil courts and other application that can be filed to civil courts, b) identify required minimal data on each case of application. At the moment developers identified and systematized more than 256 types of cases/applications and their respective minimal data which were uploaded to the E-SUD.

E-notification

Once applicant submits his/her application, E-SUD notifies applicant of any change in his/her application. From developers point of view E-SUD contains 3 types of e-notification mechanisms:

- Working space (virtual cabinet) of applicant. Any step taken by judge in course of reviewing, hearing settling the filed application is reflected in working space (virtual cabinet) of the applicant automatically. Therefore applicant (litigant) can get access to any information on his/her case immediately without visiting court.
- Sending notifications to email of applicant. E-SUD can send to email of the applicant a) simple message notifying applicant that there was a change in stage of reviewing, hearing settling in his/her applicant, b) simple message notifying applicant of newly adopted and posted on working space (virtual cabinet) court decision, ruling etc., c) copy of the court decision, ruling etc., adopted by judge and published on working space (virtual cabinet).
- Sending short message to cell phone of the applicant. E-SUD can send SMS to applicant. But there are 2 limitations. First limitations is that this feature will require additional funds that are not currently available in judiciary. Second limitation is related to relatively small number of symbols that can be sent via SMS, which limits the text of notification.

Online tracking of cases

This feature of the web-portal is available via working space (virtual cabinet) of applicant. Case management systems (the ones which are most popular in Uzbekistan) are not connected to outside web resources i.e. is not connected with the web-site. One of the advantages of the E-SUD is that case management system and web-portal are parts of one system. In other words, anything that is done in case management system of E-SUD is automatically reflected on the web portal of E-SUD.

Registration of defendant (additional parties)

One of the differences between document exchange in state agencies (government bodies) and courts is that (generally) in document exchange between citizen and state agency (government body) communication involves one citizen only. In document exchange between citizen and court, process can be initiated by one party and in

there course of court proceedings court involves other parties (i.e. defendant). As a matter of fact, one of the biggest issues of paper-based court proceedings in Uzbekistan is related to inefficient mechanisms of delivering court correspondence to other parties (i.e. defendant). At present, civil courts use post services to deliver judicial correspondence. Usually this results in delays, sometimes because defendant or other party does not stay at the address mentioned by claimant in his application to court, sometimes because of poor quality of postal services.

Currently parties other than claimant can be registered in E-SUD to get electronic access to the case (application) via E-SUD, by judge upon their request.

Case Management System (CMS)

Case management system of E-SUD can be described as back office of the E-SUD where judges and court staff conduct their daily operations. CMS requires using digital signature by judges and court staff. Below is brief description of main features of CMS of E-SUD.

E-document flow

CMS is first of all e-doc flow system. As any e-doc flow system it aims to automate steps like registration of incoming/outgoing correspondence, assignment of internal extensions to correspondence, as well as introduce paperless document flow in court. Initial idea was to create software that would cover all aspects of document exchange within court and within courts of different level of judiciary. Due to differences between document flow in courts and document flow in ministries and agencies, regular e-doc flow system could not be used in courts. CMS of E-SUD also contains unified calendar of court proceedings.

Samples of court rulings (automated document formation) and document processing

As a part of e-doc flow system, CMS of E-SUD has a feature that aims to simplify judges' work regarding composition of various court rulings. Up to date more than 100 samples of court rulings were elaborated and uploaded to CMS of E-SUD. Moreover 7 types of court rulings are composed by system automatically based on information from database and information entered by judge. Automatic composition of court rulings is planned to be conducted further in nearest future.

E-doc flow system of CMS of E-SUD is a 'closed circuit' software that enables judges and court staff to compose court decisions and court minutes without using external software like MS WORD. This feature also enables automated uploading of court rulings, decisions and minutes to database of E-SUD once there are signed/secured by judges' digital signature.

Automated delivery of judicial correspondence
Since all of the court rulings, decisions and minutes are uploaded to database, E-SUD can automatically send various types of notifications to parties who are registered in E-SUD.

E-reporting

Court reporting is based on gathering and compilation of information on court activities within in a certain period. Estimations show that preparation of court reports can take up to 3 working days of a judge each month. E-SUD allows preparation of court reports in one mouse click. Moreover, E-SUD gathers more detailed information on each type of case. This information is much wider that information that is reflected in court reports. It is expected that

E-SUD can serve to research civil cases in more detail.

FUTURE PLANS

Plans regarding E-SUD, based on achievements of the 'Civil justice reform: Effective court management' project and as per 'Rule of law partnership in Uzbekistan' include following:

1) Replicate E-SUD in additional 8 inter district courts on civil cases.
As per agreement with Supreme Court, eight pilot courts for installing and test run of the E-SUD will be conducted were identified. All of these courts are located in Tashkent city and Tashkent region. While replication and test run of E-SUD will enable project team to popularize E-SUD, it will also help to identify additional bugs and mistakes and take measures to eliminate them as they appear.

2)*Introduce online payment of state fees tool within E-SUD.*
As per legislation of the Republic of Uzbekistan when filing a case with court, applicant (claimant) must state fee for reviewing and hearing the cases in accordance established with fee schedule. At present, E-SUD requires applicant (claimant) to file a scanned copy of the receipt of payment of state duties when filing a case. Obviously, this mechanism can make E-SUD less attractive.

Planned for elaboration online payment of state fees tool will include a) calculator of state fees, b) online payment system, c) tool for automated formation of bank document where all necessary information will be included and applicants who wish to pay state fee in cash, can bring this document to bank. Main issues here is that, online payment of state fees tool will require creation of standalone billing system for judiciary.

3)*Develop, test and introduce usage of additional module of E-SUD on interaction (electronic data exchange) with bailiffs.*
Justice is delivered when the court decision is enforced. Proper enforcement mechanisms guarantee that court decisions are enforced in timely and efficient manner. Therefore one of the goals of the E-SUD is to deliver the court decisions not only to parties but also to appropriate state authorities which are responsible for enforcing court decisions. Moreover, As per in latest Presidential Decree (# 4570), necessity of strengthening judicial control over enforcing of court decisions was stressed.

So it is expected that this module of E-SUD will enable:
- delivering court decisions and/or court orders to bailiffs in timely manner
- delivering court orders regarding compulsory collection of state fees from party(ies) to bailiffs in timely manner;
- ensuring timely reporting from bailiffs on the progress of enforcing court decisions and/or court orders, with particular attention on a) status of enforcing procedure b) sums collected, c) court decisions and/or court orders that were rejected without enforcement, d) court decisions and/or court orders that were not and/or can not be enforced (legal grounds) etc.

4) Develop, test and introduce usage of additional modules of E-SUD on reviewing civil cases in appeal, cassation and supervisory instances.
System of civil courts in Uzbekistan is composed of 3 levels: a) 1st level – courts of first instance inter district (district) courts, b) 2nd level – regional courts which can hear cases as courts of first instance (specific types of cases and cases that regional courts withdraw from courts of first instance based on workload of the latest), as courts of appeal, cassation and supervisory (in practice however, regional court mostly act like courts of appeal and cassation) and c) Supreme Court of the Republic of Uzbekistan, which like the regional courts can handle the cases of all four instances (in practice however, Supreme court mostly reviews cases as supervisory instance).

Basically, the idea is to establish vertical connection between civil courts of different levels so that the exchange of electronic cases (cases in electronic format) will be enabled. Advantage for the external users is that, they can file petitions for review (in any instance) can be filed using single portal of the E-SUD on the internet and there will be not need to attach additional documents (like decision of courts of first instance).

Major issue here is that document flow in supervisory instance does not start with application of external user. As per legislation of Uzbekistan, external user can submit a request to state officer who is authorized to file a protest on court decision. If state officer submits protest, then the procedural rules start to apply. Prior to that, rules of regular document flow apply to request on filing protest. In other words, document flow in supervisory instance is a mixture of regular and procedural document flow.

a) *Integrate E-SUD with a) centralized databases of physical persons and legal entities*
b) *web-site of the Supreme Court of the Republic of Uzbekistan and*

c) with e-government services portal of the Republic of Uzbekistan (my.gov.uz).

As per E-governance plan of the government of Uzbekistan, it is planned to introduce a centralized database of physical persons and legal entities where each physical person and legal entity will be provided with unique identification number. Integration of E-SUD with these databases, will help to solve the issue related to authentication of applicants within E-SUD as well as to identify contact information of other parties involved in civil case. If these databases will contain official email address and/or official mobile phone, E-SUD can automatically obtain this information and use its own tools to deliver court notifications, ruling and decisions.

Besides E-SUD, project is also planning to elaborate new website of the Supreme Court of the Republic of Uzbekistan. Main goal under this activity is to increase quality of the information reflected on the website and increase the user-friendliness of the web site. It is planned to include description of E-SUD on the website of Supreme Court as well as links to E-SUD website. Pretty much the same is planned for the e-government services portal of the Republic of Uzbekistan (my.gov.uz).