E-signature and e-services in Albania

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Abstract

Objectives

Since 1997, several numbers of directives have been applied to put in power the use electronic signatures in the electronic document.

In Albania there has been approved a number of laws and bylaws regulations in this field and in 2009 was established the supervisory authority for electronic signatures, the National Authority for Electronic Certification. In this article will be analyzed the current situation of the usage of e-signature in public and private sector. Then will be reviewed the e-governanment systems using electronic signatures. At the end will be given recommandations stated in the Value section below.

Prior work

In June 2014, was approved the new European Regulation known as e-IDAS. Since Albania is non-EU member state aspirant to be member of EU, there is a need to have a mechanisms for building paperless procedures in different sectors. Some efforts to implement e-documents at institutional level are pending, do to the need to use digital signiture and digital seal.

Approach

In order to capture the evidences in this article are used the methods of observation and case study of e-custom, e-prescription and e-permit systems in Albania as well as some draft studies done from international institution. In order to analyze benefits of using e-signature will be shown case studies from EU countries like Austria, Italy, Germany, the Netherlands and France.

Results

As information technology is developing rapidly, it is necessary to apply innovative, simple and secure methods, such as remote methods. This method, treated as a new concept in European regulation, is used by some EU countries. In this article will be shown the benefits of the remote method and how to apply it.

Implications

This article contains implications for the groups of academics, who can use the statics and case studies in order to improve and update their lectures; for researchers who can take to another level the recommendations and for the practitioners who can update their knowledge on e-signature and e-services in Albania.

Value

This article gives recommandations for building a customs system or mechanism for e-documents accompanying import goods, as well as recommendations for increasing the standards of service delivery to the public and private sectors and general recommendation for the use of methodology in the region (replicability aspect) and guidelines for public administration and business how they can improve public services for citizens in the right and secure way.

Keywords: e-prescription system, e-permit system, e-custom system, remote methods.

1. Introduction

Since 1997, several numbers of directives have been applied to put in power the use electronic signatures in the electronic document. The publication of European Directive 1999/93 / EC (Directive 1999/93 / EC of the European Parliament and of the Council on a common framework for electronic signatures) in January 2000 gave a huge impact to the drafting process of legislation, imposing a framework of common member states and those adhering be one of them. During legislative drafting process has also been provided information on recommended technologies and solutions of electronic signatures , which represent equivalent procedures to in hand traditional signature. The normative structure dictated by European Community legislation has included different signatures or more precisely different levels of signatures.

The key of success stands on building trust in the online environment and remain a challenge to economic and social development. Lack of trust, in particular because of the perceived lack of legal certainty, makes consumers, businesses and public authorities not confident toward the use of electronic transactions and adopt new services.

Law No. 9880 of 25.2.2008 "On Electronic Signature" was approved and opened the way for secure electronic transactions in the Republic of Albania. This is based on EC Directive 1999/93 / EC, which until December 2015 has been the only basic rule that has defined the entire legal framework underpinning the EU Member States' legislation on electronic signatures.

The adoption of the law was followed by the establishment of a supervisory authority for electronic signatures, the National Authority for Electronic Certification, which started its activity in 2009.

In June 2014, was approved the new European Regulation no. 910/2014 "On Electronic Identification and Trustee Services for Electronic Transactions in the Internal Market", which supersedes the 1999/93 / EC Directive - also known as e-IDAS; which aims to increase trust in electronic transactions in the domestic market, providing a common basis for secure electronic interaction between citizens, businesses and public authorities, enhancing the effectiveness of public and private online services, electronic business and electronic commerce in The European Union.

This regulation entered into force on 1 January 2016. Until June 2016, Member States have undertaken initiatives on internal legal regulation, which impacts the above-mentioned Regulation and standards in its support.

Aiming to adopt the the EU legislation with that of the country, Albania in 2015 adopted Law no. 107/2015, "On electronic identification and trusted services".

This law aims to increase trust in electronic transactions in the domestic market, guaranteeing secure electronic interaction between public authorities and citizens, businesses, enhancing the effectiveness of public and private online services, e-business and e - commerce.

The use of secure electronic interaction means enables the public and private sector to rely on electronic signatures and e-identification, for public services and to make it easier for businesses and citizens to access and benefit their services online.

European Regulation 910/2014, of the European Parliament and of the Council of the European Union, which also abrogated EC Directive 1999/93 / EC, except that it has regulated the field of electronic identification and other trusted services (electronic stamps, electronic broadcasting, e-mail) has not changed the scope of the electronic signature field. For this reason, the transposition of this Regulation in the field of electronic signatures was also unnecessary, as Law no. 9880, dated 25.02.2008 "On Electronic Signature", precisely regulates this field, in full compliance with the regulation.

The law forces the Certification Service Provider to guarantee data retention and to secure the privacy of the individual, thereby increasing the confidence in the use of electronic signatures. Also, the law points out the principle that personal data should be processed in accordance with the European Data Protection Directive (Directive 95/46 / EC dated 24.10.1995). This directive strengthens the data protection rules for Certification Service Providers issuing electronic certificates. The Certification Service Provider is obligated to collect personal data only through the subject or through its approval through a third person authorized by him. Also, the Qualified Trustee's Service Provider should only ask for the necessary information that is needed to issue the certificate and must use them only for this reason or for the maintenance of the certificate. The person who is applying is informed of the use of his data and the manner of using the qualified certificate in writing.

1.1. Qualified service providers in the Republic of Albania

The National Authority for Electronic Certification and Cyber Security (NAECCS), is the responsible body for the supervision of the Law no. 9880, of 25.2.2008 “On Electronic Signatures”, Law no 107/2015 “For Electronic Identification and Trust Services” and their implementing acts.

The Authority seeks to ensure security and reliability for users of electronic signatures, electronic identification and trusted services, as well as the oversight of international technical standards to ensure quality and safe products.

The National Authority for Electronic Certification and Cyber Security (NAECCS) has published specific regulations for the accreditation process and electronic identification and trusted services registration procedures.

All Trust Providers and Assessment Bodies operating in the Republic of Albania are required to be accredited and audited by NAECCS.

The registry containing those subjects is published in the official website of NAECCS (http://www.cesk.gov.al), together with relevant links to all issued certificates, revoked ones etc.

There are two accredited Trust Providers:

- The National Agency for Information Society (NAIS), which offers these services for all public employees, free of charge. The public employees can get the qualified certificates which generate identification and electronic signature.

- ALEAT offers the service of qualified electronic certificates, for citizens, in the national ID Card's contact chip, which provide the generation of electronic identification and electronic signature. The issuance is fully automated for ID cards produced since February 2014. Usage of these certificates is voluntary, as citizens can choose not to use them, thus revoking them on behalf of the provider immediately. Actually, all citizens that have an ID card issued prior to February 2014 can be equipped with the certificates free of charge at Aleat Office application offices. According to latest reports from the company itself, there have been 784 303 electronic certificates issued in the ID cards.

NAIS (National Agency for Information Society) develops, administers and maintains public key infrastructure and issues qualified certificates to public administration, private entities, e-prescriptions bassed in USB Token solution.

The cryptographic key management infrastructure of NAIS aims to provide solutions (products and services) for the security of gevermental network and devices, partof it is Public Key Infrastructure - PKI.

PKI consists of products and services that provide and manage digital certificates X.509 for public key encryption. Certificates identify a person or device specified in the certificate and attach this entity to a certain public / private key pair.

Information systems and applications that support the services and activities of NAIS require the following security mechanisms:

- Authentication
- Authorisation
- Integrity
- Confidentiality
- Non-rejection

These services are available on most network security components such as workstations, devices such as firewalls, routers, web servers, server databases and application servers. The activity of these components is provided and completed using public key encryption.

The IT security services provided by the PKI include:

- Generating / storing / recovering cryptographic keys,
- Creating, updating, renewing and distributing certificates,
- Generating and Delivering Certificate Revocation Lists (CRLs)
- Management of directories that publish materials related to certificates,
- Updating, renewing and changing the key of a certificate,
- Initialize / assign / manage hardware (tokens) that contain certificates

- Functions of management system (ex: security audit, management of
- configuration, archiving, etc.)

Security solutions based on public key, the security solution that IT is a direct result of the safe and reliable operation of PKI, including sites, equipment, staff and procedures.

1.2. Types of Certificates and Level of Security

Certificates generated by PKI of NAIS identify the person specified in the certificate and attach this person to a public / private key pair. Generated certificates are created and managed by public key X.509 Version 3 for use in applications that require communication between computer-based systems.Such applications include but are not limited to:

- e-mail,
- transmission of unclassified information,
- Signing of electronic forms,
- Signing of electronic documents and contracts,
- Authentication of infrastructure components such as Web servers, firewalls, and routers.

Certification Authority (CA) NAIS applies four security levels for issued certificates, depending on:

- Types of applications that can be used with these certificates.
- Type of entity for which the certificate was issued (person or device)
- Private keyholder retention method from Subscriber - device (SmartCard) or file,

as well as four certificate classes:

Class 1 Digital Certificates

Certificates issued at this level of security are intended for individuals only. They can be used to protect unclassified information in all types of networks (public, classified, intranet of NAIS) in all types of applications. The private key is created on the device (token) or smartcard.

Class 2 Digital Certificates

Certificates issued at this level of security are intended for individuals only. They can be used in all types of applications to protect sensitive, but unclassified information in all types of networks (public, intranet of NAIS, or secret), or secret information, but only on intranet classified networks and internal network of the organization. The private key is created on device (token) or smartcard.

Class 3 Digital Certificates

Certificates issued at this security level are intended only for devices and servers. They can be used in all types of applications to protect unclassified information in all types of networks (public, intranet of NAIS, secret).

Class 4 Digital Certificates

Certificates issued at this security level are intended only for devices and servers. They can be used in all types of applications to protect sensitive information, but classified in all

types of networks (public, NAIS intranet, secret), or confidential information, but only classified intranet networks and network internal organization.

Actually NAIS has issued in total 9668 qualified certificates, for the civil servants at public administration. Also, there are issued electronic stamps and qualified certificates for businesses and private individs.

ALEAT has created an e-security platform for its customers to facilitate role-based access, secure authentication and qualified electronic signature. The security services include a Public Key Infrastructure, which has a Certification Authority operated by Aleat (CA). The policy requirements on the operation and management of the CA issuing Certificates are defined in the Aleat CPS document such that Subjects certified by the CA and Relying Parties may have confidence in the reliability of the Certificates.

The CA ensures that evidence of Albanian Citizens identification and the accuracy of their identity and associated data are correct since they are consultated and retrieved from the Albanian NCR interface.

The CA issues two types of Certificates and their limits are:
1. Authentication Certificates – for use in a specified validity time (the same validity as the Albanian IDC) and to be used only for authenticating the citizen through his national IDC.
2. Electronic Signature Certificates – for use in a specified validity time (the same validity as the Albanian IDC) and to be used only for digitally signing a document through the citizen national IDC.

According to digital signature laws and regulations, signing is the only appropriate use for qualified digital certificates. All events involved in the generation of the key pairs are recorded. This includes all configuration data and registration information used in the process. Audit logs are retained as archive records for a period no less than twenty (20) years for audit trails files, and no less than twenty (20) years for key and digital certificate information.

ALEAT offers qualified electronic certificates for citizens (e-certificates), which are installed on the citizen national ID Card contact chip. Release is fully automated for new identity cards produced since February 2014. The use of these certificates is voluntary, as citizens may choose not to use them, revoking them on behalf of the provider immediately. For citizens who have an ID card issued before February 2014, they install free certificates at Aleat offices. From January 2014 until now, 784 303 electronic certificates have been issued on Citizen Identity Cards, which through the card readers enable the execution of various transactions.

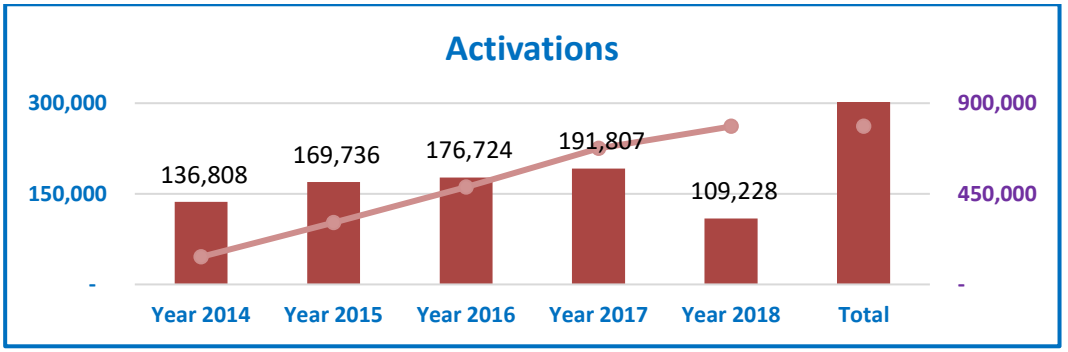

Fig. 1. Statistics of issued Qualified Electronic Certificates for Citizens 2014-2018
Source: NAIS

2. E- services and their benefits

The rapid growth that information technology has undergone in recent years set the pace for an electronic revolution that led to the emergence of electronic services. It was in the mid-1990s when some Internet service providers began providing dial-up access, thus making the broader electronic services available to mass consumers.

In this paper, we will determine the electronic services as "made up of all the interactive services offered on the Internet using advanced telecommunications, information and multimedia technologies". It is clear that the impact of the Internet on the creation of electronic services has been revolutionary for providers and customers and tires.

Electronic services offer a unique opportunity for businesses to offer new models for service design strategies and new service development. First, all service providers now have more distribution options to compete in the market.

Secondly, many new services can be offered more economically with greater geographical reach and variety of products.

2.1. e – services

The e-services concept (abbreviation for e-services) is a remarkable application of the use of information and communication technologies (ICT) in different fields. However, providing an accurate definition of electronic service is difficult to achieve as researchers have used different definitions to describe e-service. Despite these various definitions, it can be argued that they all agree on the role of technology in facilitating service delivery.

We may well adopt Rowley's [1] approach, which defines electronic services as " works, efforts, or performances, the dissemination of which is mediated by information technology. This electronic service includes the e-tailing service element, customer support and service delivery." Regarding public electronic services, public agencies are the service provider and citizens and businesses are the recipient of the service. The service delivery channel is the third demand for electronic service. The Internet is the main distribution channel for electronic services, while other classical channels (eg telephones, call centers, public kiosks, mobile phones, television) are also considered.

Meanwhile, Rust and Kannan [2] defined electronic services as "providing services on electronic networks", while for the EU, electronic services are "services delivered over the Internet or an electronic network". All of these definitions emphasize the component of electronic communication services. They describe the case of a service generated by ICT in which the service is generated by computer programs executed on the computer systems of the provider.

2.2. Benefits of e-services

Benefits are an important part of motivating the use of electronic services. The potential benefits of consumers coming from the use of electronic services can be divided into utilitarian (related tasks) and hedonic (self-experience).

The benefits of using electronic service users tend to be more rational because consumers in an electronic service context are seen as goal-oriented, and the hedonic aspect is not seen as important in most e-bidding. Hedonic motives for the use of electronic services are scarce and are considered as most important in leisure services [3]. Examples of utility benefits are time and cost savings, greater control over service delivery, more reliable information provision, access to data and support services that are not available in another business, reduced time reception, the highest level of adaptation [4], ease of location [5], efficiency, flexibility [6] and new or enhanced new services. Moreover, consumers can find technology-based options that are attractive because of ease of use, more convenient than alternatives, or allows consumers to intentionally Avoid contact with the provider's staff [7], [4]. Examples of hedonic consumer benefits are fun or pleasure from using the technology [7] and positive satisfaction [6].

Benefits are grouped into 7 categories: Time Savings; Access to accurate information; comfort; Monetary benefits; Social contacts; control; Ease of use.

- Time savings

Customers find e-services attractive because they provide opportunities to save time. Electronic services allow the service to be performed faster or more efficiently than traditional interpersonal alternatives. Dabholkar [7] proposed that speed is an important attribute of consumer appreciation and the use of electronic services. Although speed was not found to be important, other studies have identified speed as an important determinant of preference for electronic service in general [8] or self-scanning in particular.

Time saving is also considered as the most important factor for service selection among all dimensions related to customer attitudes towards electronic services. Saving time within electronic services is also seen as a relative advantage compared to human resources delivery services [4]. According to time allocation theory, consumers who consider their time as a precious resource can operate under time pressure and can use electronic services as a way to optimize their precious time [9], [10].

- Accessing accurate information

Information quality is one of the key determinants of user perception about use and ease of use [11]. He classified the dimension of information quality in two appendices: "The Benefit of Content" and "The Suitability of Information". "The usefulness of content" was seen as uniqueness, relevance and timeline of information. Also, personal data are determined to be part of the perceived benefit of mobile marketing.

"Adequacy of information" is seen as the inconsistency and completeness of information. Internet users also value and require additional services such as company information, professional advice, research reports, hyperlinks on important web sites, contact information and archives. Examples of benefits from information-related electronic services are the most reliable dissemination of information, access to data and support services in a way that was not previously offered and a higher perceived level of adaptation [4].

- Comfort

Comfort is often related to three key aspects such as time, efficiency and accessibility. First, ease is related to a time aspect. The opportunity to access the online shop at any time, at the most convenient time of purchase and opening [5] and without time is perceived as an aspect of online shopping convenience.

Secondly, comfort is related to the efficiency resulting from low cost of research, time saving and delivery speed.

Third, convenience is associated with accessibility as location convenience [5] and the ability to buy anywhere.

- Monetary Savings

Reibstein [12] found that price is an important criterion of choice for most online clients. Previous research also shows that cost savings is one of the benefits of online shopping.

The process of evaluating, purchasing and using the internet service can lead to monetary savings in terms of lower product or service prices or lowering service costs. The cost involved in the service process can either be monetary or time-bound, energy or psychological. Consumers prefer self-service, perceived cost savings as critical critical factors in the service process. The customer saves money in terms of lower service tariffs when using the electronic service.

- Lack of social contact

Lack of social contact has also been found as one of the benefits of e-services). Electronic services give consumers the ability to access services without any contact with sales people. Buyers should not worry about negotiating with sellers or concerns about others about them, as online shopping offers consumers the benefit of deliberate avoidance of contact with the provider's staff.

However, lack of interaction with a service employee can also be a problem for some customers, especially those who try to avoid machines [12].

- Control

Perceived control is described as the amount of control the customer thinks he / she has during the service meeting Dabholkar 1996. Some empirical findings show that individual features relate to the need to control or perceive the ability to control the transaction process.

Consumers who prefer self-service also perceive control as a critical factor in the service process. Dabholkar [7] proposed that those consumers who enjoy self-service also perceive greater control and higher quality of service, which also directly affect the purpose to use the option. Moreover, the value of the service can also be increased by increasing perceived control. Electronic services offer the customer the ability to control the business.

- Ease of use

Earlier studies on consumer capability and self-efficacy show that client knowledge and the ability to use electronic services are critical factors for the success of electronic services. For this reason, client ability and self-efficacy are also likely to have a convincing effect on his / her response to electronic service. If the e-service is not easy to use and the customer does not have the capability to use it, it may have a negative effect on the adoption of electronic service.

3. Current situation of the usage of electronic signature in public and private sector in Albania

Electronic communications are becoming more and more an important part of all developments of Albanian society. Public administration structures, services and the private sector require for modernization and fast and secure communication. The electronic signature satisfies the majority of the communications security criteria such as the integrity of the data sent, secrecy in the network, identifying the sender / receiver, an acknowledgment of receipt / delivery of data in electronic form. By fulfilling these criteria, users enjoy all the advantages of using trusted services.

Communication through information technology means requires high legal and technical standards in the transmission of data between users over a secure network, the security of which is guaranteed by trusted services. Also the use of trusted services, obtain increased transparency of online services, reduction in financial costs, timestamp sending and receiving, abbreviation of a settlement cycle and avoid delays and obstacles, reduction of the time of the internal circulation and external documents, any electronic document is automatically ranked by keeping them as simple as possible. The use of secure electronic means enables the public and private sector to rely on electronic identification for public services, to make it easier for businesses and citizens to have access to their online services.

3.1. Public sector

Nowadays, many public services have moved from physical to electronic services, wherever used in the public or private sector. However, in relation to physical transactions,

those that are carried out in the virtual environment, through electronic signatures, are still rare.

NAIS also operates as a qualified provider of trusted services, which issues qualified certificates generating electronic signatures for public and private sector employees as well as as a provider of public electronic services through the unique e-Albania government platform.

In the case of printing the document generated by the system with electronic signature has a two-dimensional code which makes it possible to verify the authenticity of the document with the online copy stored on the e-Albania portal.

The printed document with two-dimensional code is a copy of an electronic document (electronic ally sealed or signed). According to the respective law, it has the same legal effect and probative value as a written document signed by hand.

Today, trusted services find a widespread use of public services through the government portal, e-Albania, where citizens can apply and benefit from electronic documents without having to wait in line for getting the service. There are about 3 million electronic user accesses from citizens and businesses.

This portal currently offers a total of 1268 electronic services. There are 68 services that use electronic signature and 54 services where is used electronic stamp. Altogether, there are currently about 9,668 qualified certificates issued to the public administration / private sector, which generate electronic identification, electronic signatures and electronic stamps. This indicator demonstrates the ever-increasing tendency of using safe products and tools and maximizing the commitment of institutional instruments to ensure citizens' integrity, according to international standards.

Transactions carried out by citizens on the unique government portal for the benefit of an electronic administrative document with signatures and electronic stamps is 2 179 638, since the implementation of the CoMD no. 495, dated 13.9.2017 "On the Approval of the Rules for the Benefit of Electronic Public Services".

Table 1. Statistics of transactions and services for September – December 2018

SERVICE	No. of trasactions (until Dec 2017)	No. of trasactions (Jan-Sept 2018)
Authorization for reinstatement of the driving license	15	342
Family certificate	169,287	962,317
Certificate of Birth	1,719	5,791
Certificate of marriage	1,993	12,618
Certificate of Death	296	1,424
Personal certificate	27,115	182,064
Registration certificate	167	5,492

Provide coordinated information for any real estate	61	62
Simple / Historical Extract (Business)	5,585	64,591
Simple / Historical Extract (Citizen)	1,305	13,641
Generating the Health Card	7,690	133,286
Official information assets for individuals and institutions	25,885	114,760
Confirmation of the active condition of the vehicle	9,682	70,639
Consult the card of real estate	18	145
Release copy of assets file	149	690
Release copy of the cadastral map fragment	37	141
Issuing ownership attestation	62	166
Issuance of certificates (negative / positive)	44	433
Registration or deletion of legal mortgage	-	1
Online verification of the legal status of ownership and other immovable property data	18	66
Certification of payment of self-employed contributions to agriculture	2,987	9,614
Retirement certificate	872	13,854
Certification for driving permission	363	1,856
Proof of payment of obligations	6,764	42,311
Proof of payment of contributions by the entity	1,768	17,216
Proof of payment of contributions to the individual	24,005	182,608
Proof of tax liability	1,240	7,395
Certificate of Investor Registration	148	397
Certification as unemployed jobseekers	7	149
Status verification (active, passive including date)	989	13,449
Turnover certification for the last 3 years	1,478	30,371
Total	291,749	1,887,889

The impact is apparent directly in the significant reduction in the number of people waiting in line in the offices of public institutions, which are printing 3 times less documents in hardcopy or are following the practice of online certification only. The number of certificates issued to the civil status offices has dropped by 3 times by saving the citizens 64,000,000 lek, as well as the online self-provision of tax verifiers has saved businesses 500,000 hours (about 60 years) waiting in line, avoiding other bureaucratic actions that would bring other business costs.

Other 5 types of documents will be added soon of 54 electronic documents, such as copy of the permit and license from the Business Center, Certification for voluntary insured persons by the social insurance institution, Certification of debts from UKT and OSHEE for the government: and businesses etc.

Currently, the identification process in the electronic systems through which the services are provided is carried out with a user name and password, as shown below:

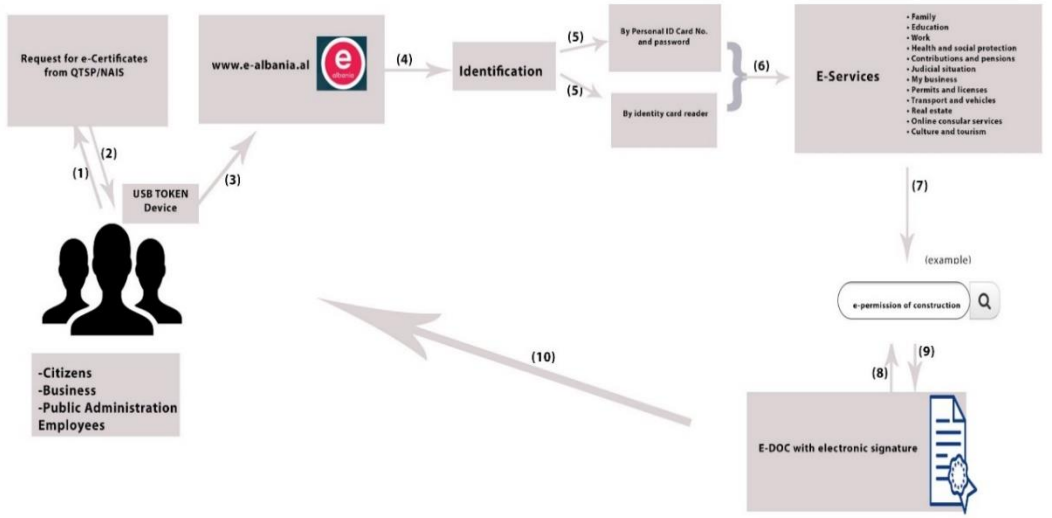

Fig. 2. Graphic presentation of the usage of electronic public services
Source: NAIS

3.2. Private sector

In the first place for the use of electronic signatures in the private sector are the services offered through the second tier banks. Referring to the bank's register, published on the official website of the Bank of Albania, 16 banks currently operate in the market, but only some of them have begun to operate in some services using electronic identification and electronic signature, thus ensuring data integrity of citizens.

It should be noted that the level of security used by second-tier banks is low in relation to the sensitivity of transactions with other banking services. The transaction execution is performed through the Secure Sockets Layer (SSL) security protocol, which has also increased security breaks. Against this background, in order to increase transparency towards the bank's customers, some banks have begun to apply electronic identification and signatures in certain services for performing various transactions.

Specifically operate live Raiffeisen Bank, Societe Generale Bank, Union Bank, NOA (8 branches) and Intesa Sanpaolo Bank .

While three (3) others are on the test platform and in the beginning of 2019 are expected to apply live with electronic identification and signatures, some services in the banks: AADF, Kredo Finance and BKT.

According to the ALEAT, 41 563 electronic transactions were made in the second tier banks, which enable the electronic identification and signing service.

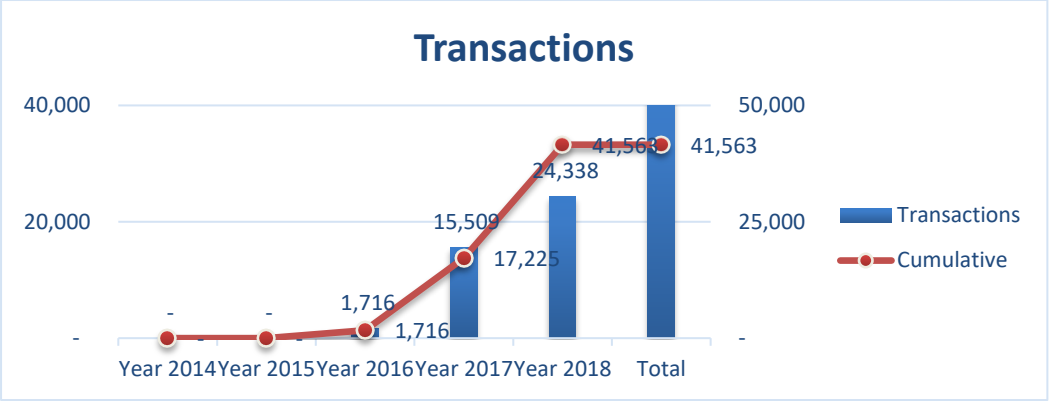

Fig. 3. Statistics of Electronic Transactions with Second-Tier Bank
Source: ALEAT

4. Case studies for successful electronic signature implementation

This case studies have been analysed in collaboration with experts provided by RESPA. From the list of the systems which use electronic signature in Albania, in this article will be shown:

- e-Permits System
- The National Registry of Civil Status
- e-Customs systems, and
- e-prescription system

4.1. e-permit system

The e-permit system is operational since 1 September 2016. Through this system it is possible to apply and benefit from the construction permit and the use of public spaces. This electronic service provides the online application for building permissions through the e-Albania portal for the following types of permits:

- Application for issuance of a construction permit
- Application for the issuance of a construction permit by category including permission for a new construction, demolition or additional construction in existing construction
- Request for issuing a preliminary statement for performance of works
- Request for extension of the construction permit deadline
- Application for issuance of permit for revision of permit conditions
- Application for permission to change the activities and / or functions of the individual unit
- Request for issuance of a certificate of use
- Application for change of the construction permit subject

4.2 National registry of civil status

The National Civil Status Register keeps and updates civil status data, register act of birth, marriage and death of of Albanian citizens and based on updated databases are issued

family certificate, personal or birth certificate; Marriage Certificate; Certificate from Act of birth; Certificate from act of marriage; Certificate from Act of death.

Until 2017, Albanian citizens should go to the civil status offices in to ask for and retrieve the above-mentioned documents. The service waiting queues in these offices were long and only within official time Given that a number of administrative and other procedures require the registration of documents with different certificates issued by the national registry of civil status, according to the Ministry of Interior, (Authority body) the number of certificates issued by the offices throughout the country in one year are about 4.5 million.

During the implementation of DCM 495/2017 "On the adoption of rules on the use of electronic services", a total of 1 364 624 certificates have been issued by the Civil Status System for Citizens and Public Administration, who have applied according to different requirements for other administrative procedures for citizens.

4.3. e-Customs system

Altogether, there are 8 electronic services of the General Directorate of Customs and can be accessed by businesses through the e-Albania portal.

The business has access to the customs system through the qualified certificate that generates identification / electronic signature, issued by QPTS / NAIS (National Agency for Information Society) and completes online documentation. This is a step that leads to customs without paper. All documentation submitted here go to the Customs Evaluation Office".

List of customs services provided through e-Albania:

- Authorization for Temporary Exclusion Allowance
- Profile modification in the Sicpatrace system, additional supplier
- Profile modification in the Sicpatrace system, additional product category
- Authorization for temporary exemption regime with partial exemption
- Authorization for customs warehousing arrangements
- Authorization for active processing mode
- Authorization for passive processing mode
- Application for administering a fiscal magazine (excise tax registration).

From the implementation of this system, each document is signed by electronic signature and until September 2018 the number of these documents reaches 104,000. So in just about 6 months, the number of secure transactions in this system is growing.

4.4. E-prescription system

This system will bring a radical change in either service to patients, but also to control the whole process until the drugs are delivered at the pharmacy.

NAIS in 2017 has carried out the transfer of services to a third party (Compulsory Health Insurance Fund - CHIEF), for the service of e-prescription.

The transfer of services includes:

- The process of identifying the certificate holders
- Submitting the relevant equipment, where a qualified certificate is stored.
- The generation of qualified certificates is carried out by the PKI-NAIS itself.

The intended use of electronic prescriptions is the generation, transmission, and fulfillment of medical prescriptions based electronic infrastructure, replacing the use of paper prescriptions. electronic prescriptions based on the successful experience of EU countries, allows the doctor to create and transmit electronic prescriptions and pharmacist execute electronic prescription order. The e-prescription system allows the CHIEF to monitor, control and reimburse the electronic prescription.

5. General recommendations on improving public services for citizens in the right and secure way.

The newest method applied by countries such as Austria, Italy, Germany, the Netherlands and France is the remote signature service, where authentication of users is done through mobile phones, tablet, and so on. without the need to connect to devices such as a USB token or smartcard.

There are many benefits from electronic remote signing:

1. No need for electronic devices
2. No need for users to install applications or plug-ins
3. All encryption keys are managed by the service provider and automatically without user involvement
4. Higher security
5. All signing actions and authorizations are recorded centrally
6. Reduced costs

All this is accomplished by a Qualified Provider of Trust Service who meets the system security requirements specified in the international ETSI standards as well as CEN EN 419 241-1.

The use of secure products (electronic identification, electronic signature, electronic seal, electronic mail,) and electronic document guarantees secure electronic communication in the virtual world in which society today is part of it.

In addition, regarding the recognition of foreign products, issued by EU countries, the Authority should establish a system / application in which all data on qualified service providers operating in the EU countries should be updated with the Trust List with reference data (rot, etc.) as well as with the domestic ones. The system / application will be accessible through the official website of authority for all citizens / companies and public institutions. it takes every citizen / business / institution to verify the legitimacy of an e-issued document from an institution / foreign company, an EU country, just login to this system / app and through his will verify who issued the electronic signature accompanying the document, the time of signature from the respective subject, the validity of the signature

and that of the document. All this process should be detailed through the drafting of a regulation for the verification of local and foreign electronic signatures.

The system / application will mostly serve the verification of documents accompanying the goods, when they are electronic, from the General Directorate of Customs. This system will facilitate all verification procedures of electronic documents and will avoid the responsibility of verification by the administration employee or customs agent performing the declaration procedures on behalf of the business.

Given the trade processbetween the countries of the region, regarding the economic development of these countries in terms of the movement of goods from one country to the other, which are accompanied by electronic documents, it is recommended to link the agreements between all the countries of the region (Non EU member) for mutual recognition of the trusted services of these countries.

By signing such agreements, another interoperability system can be built with all the countries in the region, in which the integration of the data of Qualified Providers of Trust Services, operating in the countries of the region, necessary for the verification of the electronic signatures they issue. The system will be accessible from all countries and will enable the verification of electronic signatures in real time without any additional costs.

Finally, the use of secure products (electronic identification, electronic signature, electronic seal, electronic mail,) and electronic document guarantees secure electronic communication in the virtual world in which society today is part of it.

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