



Turvalisus
ja eID võimalused
tulevikus

SK AASTAKONVERENTS 2013

7. NOVEMBER 2013

The cooperation between Azerbaijan and Estonia in Asan İmza /Mobile ID implementation with SK, Cybernetica, EMT and other partners

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07.11.2013 Tallinn, ESTONIA

www.asanimza.az



Why we need e- or m-Government in Azerbaijan?

“One of the reasons that we introduced e-government is to boost the fight against bribery and corruption. “

Ilham Aliyev,

*President of the Republic of Azerbaijan
(closing speech to a cabinet meeting)*

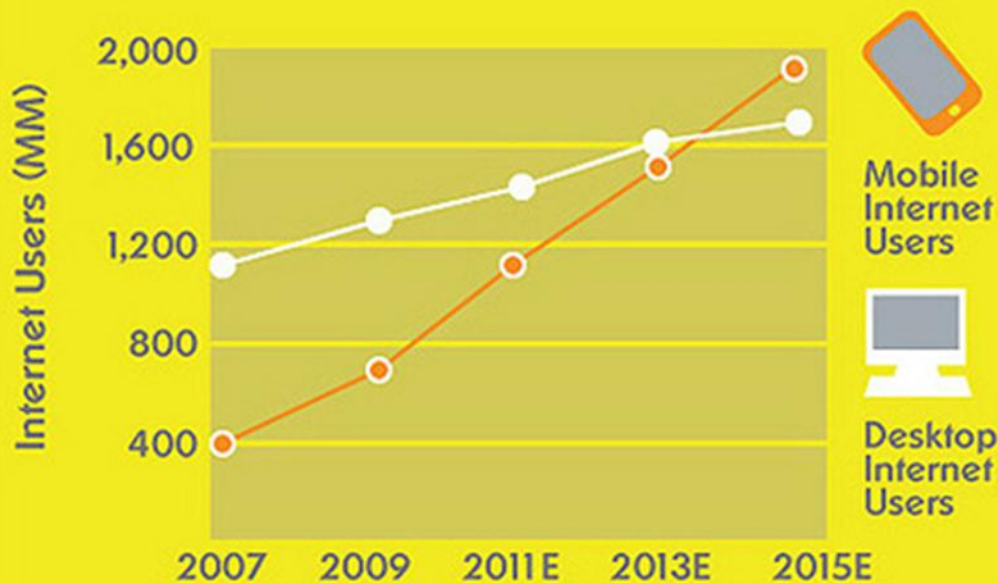


*The President of Azerbaijan signs the
Mobile-ID (Asan Imza) certificate*

Moving from e-Gov to m-Gov

By 2014, mobile internet should take over desktop internet usage

Global Mobile vs. Desktop Internet User Projection, 2007 - 2015E



* Gartner Group

Goal of setting up PKI infrastructure in Azerbaijan

- ✓ Provide citizens, governmental officials and entrepreneurs with Digital-ID for authentication and digital signature
 - ✓ Mobile-ID for casual users
 - ✓ Digital ID-card for heavy users



ANYWHERE, ANYTIME, ANYHOW

Access to ANY service by ANYBODY

Stakeholders

- ✓ Certification Authority (ASXM)
- ✓ Mobile-ID Service Provider (B.EST Solutions)
- ✓ Mobile Operators (Azercell, Azerfon, Bakcell)
- ✓ End-users
- ✓ End-user Service providers
 - ✓ e-Government
 - ✓ Banks
 - ✓ ...

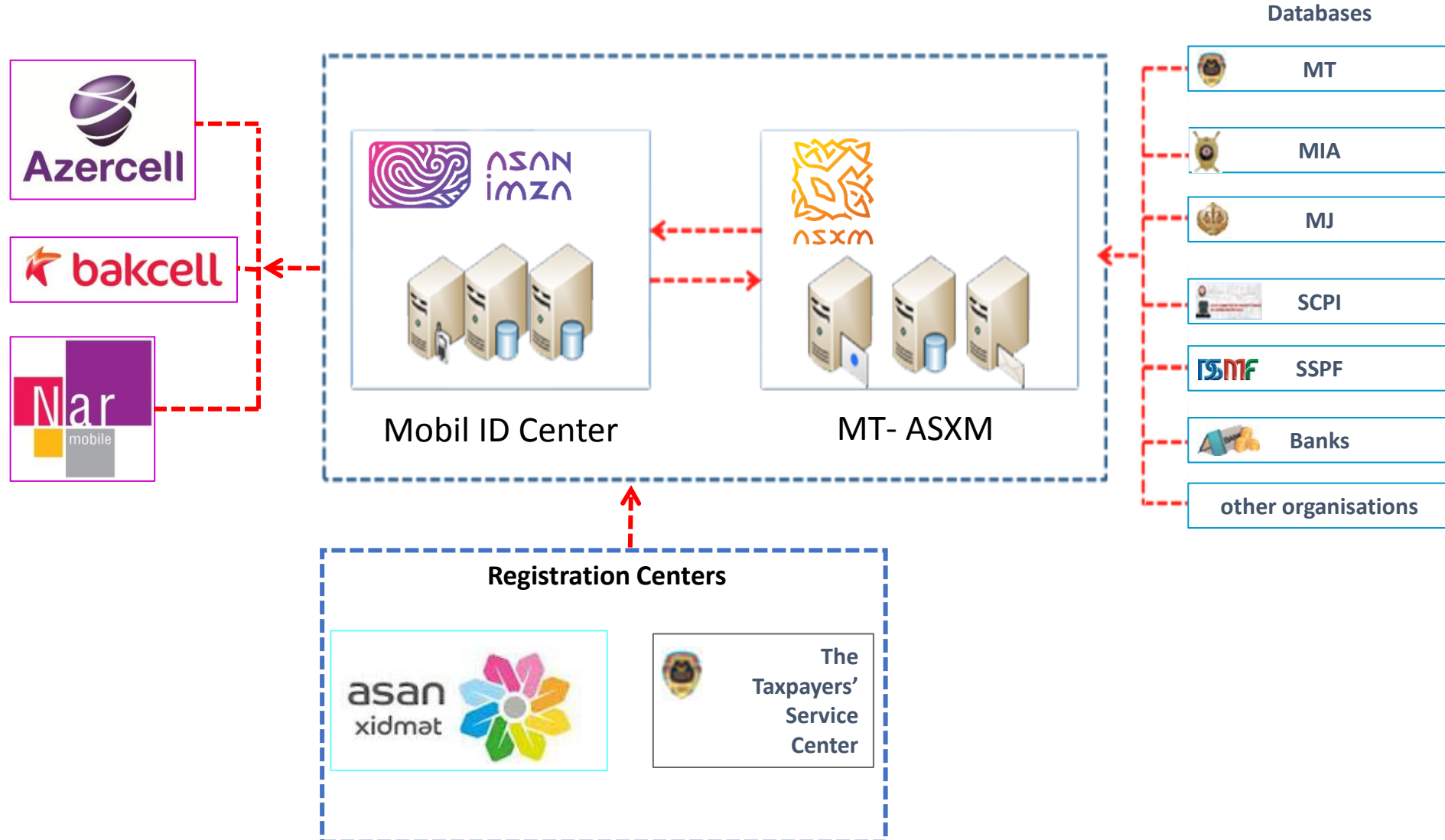
Asan İmza

mark for **modern** Azerbaijan

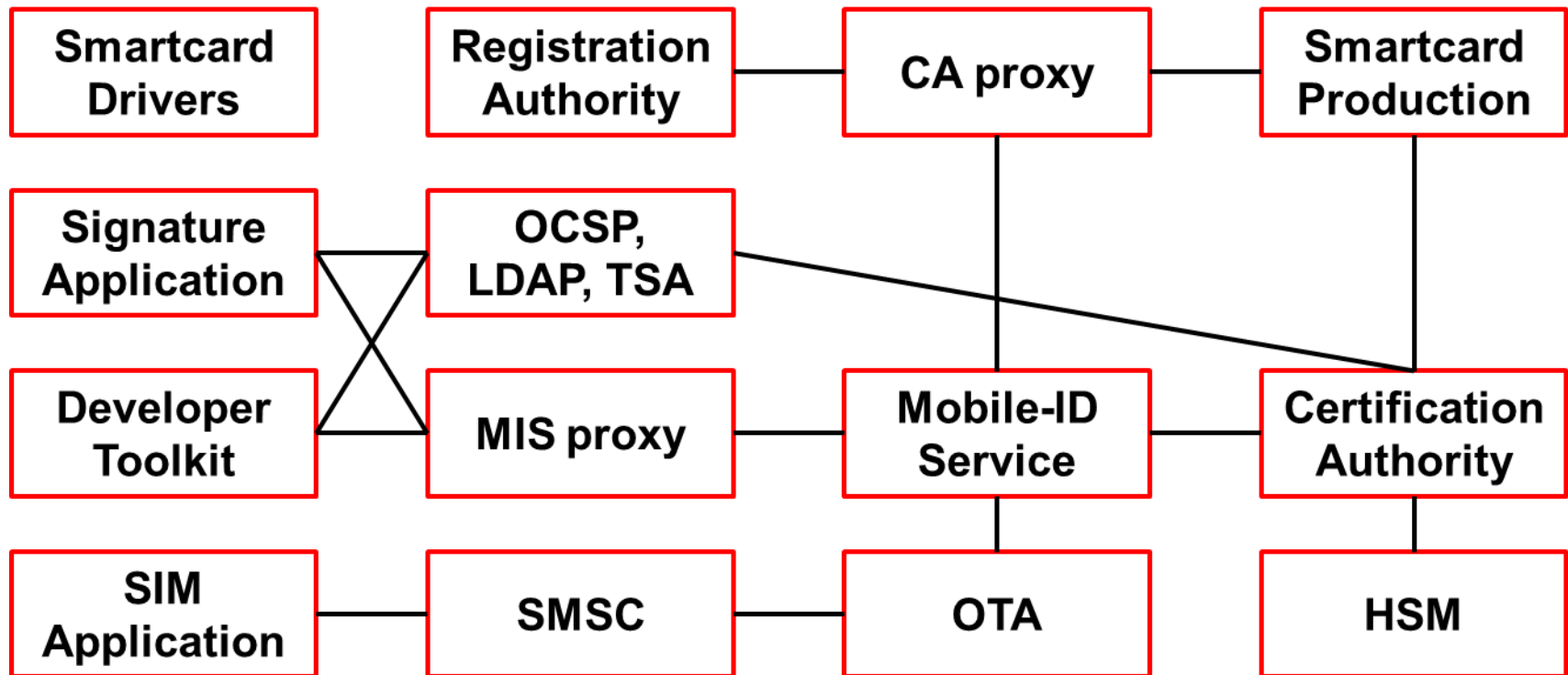
Asan Imza – unified authentication



Interconnection scheme



Technical Solution



Implementation

- ✓ Components of the complete system
 - ✓ Existing components of the Estonian PKI (customized)
 - ✓ End-user software (SK, Finestmedia)
 - ✓ Smartcard drivers (SK)
 - ✓ COTS components
 - ✓ Certification Authority software (EJBCA)
 - ✓ OTA platform (Gemalto)
 - ✓ SIM application (EMT + Gemalto)
 - ✓ Smartcards (Trüb)
 - ✓ Custom components
 - ✓ Smartcard production system (Cybernetica)
 - ✓ Mobile-ID services (Cybernetica)

Prerequisites for implementation

- ✓ Organization for Certification Authority
 - ✓ In Azerbaijan - Ministry of Taxes
 - ✓ Strong organization, good IT capabilities, good client management
 - ✓ Has a need for authentication and digital signature – first client for the system
- ✓ Mobile Network Operator
 - ✓ In Azerbaijan – Azercell, Azerfon, Bakcell
 - ✓ Minimal investments are needed – new type of SIM cards, small changes in business processes



Implementation

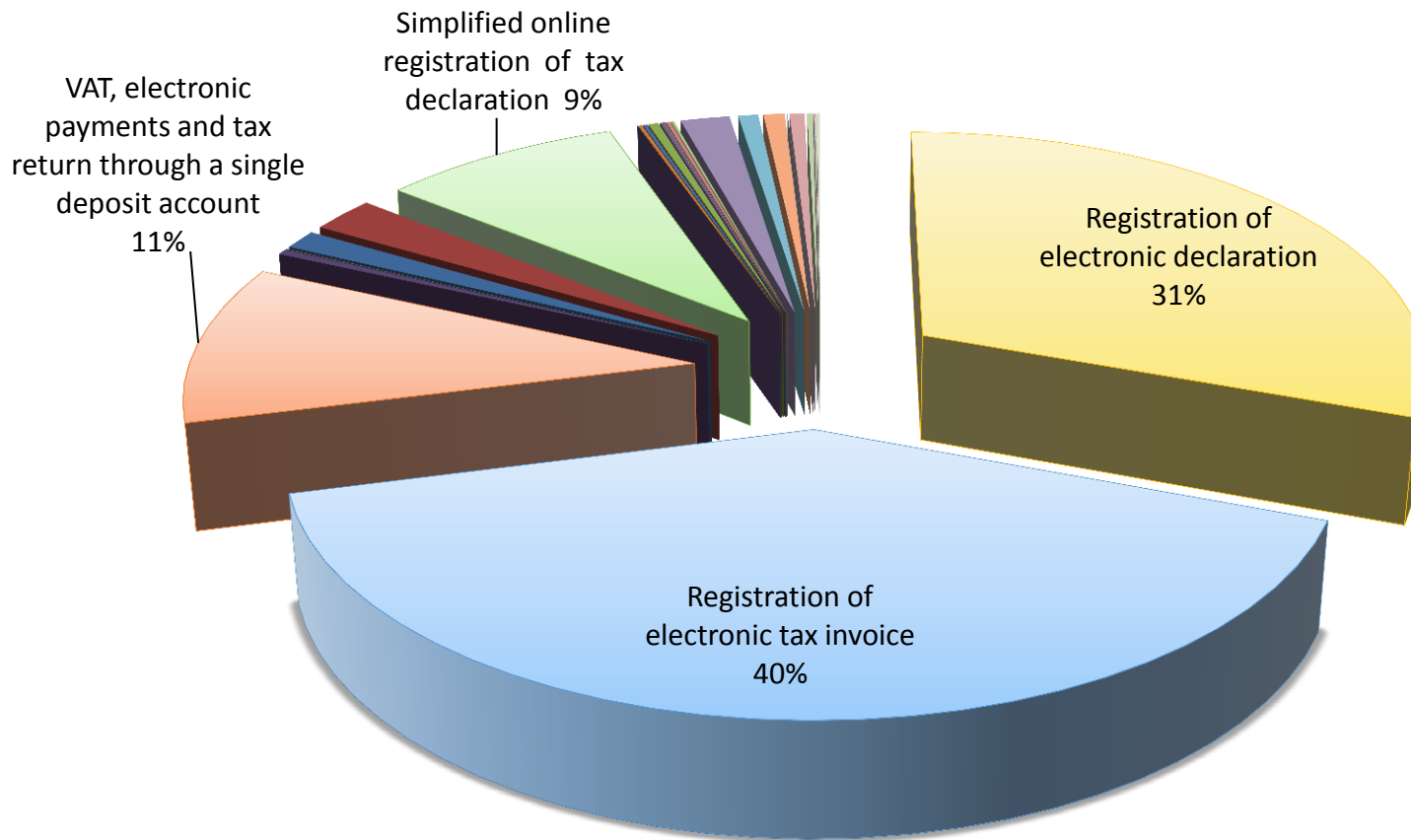


- ✓ Can be done in 6 months
- ✓ Challenges are not technical
- ✓ Finding suitable business model
- ✓ Implementing additional security measures
- ✓ Implementing organizational changes

Asan Certification Authority (CA), the Ministry of Taxes of Azerbaijan

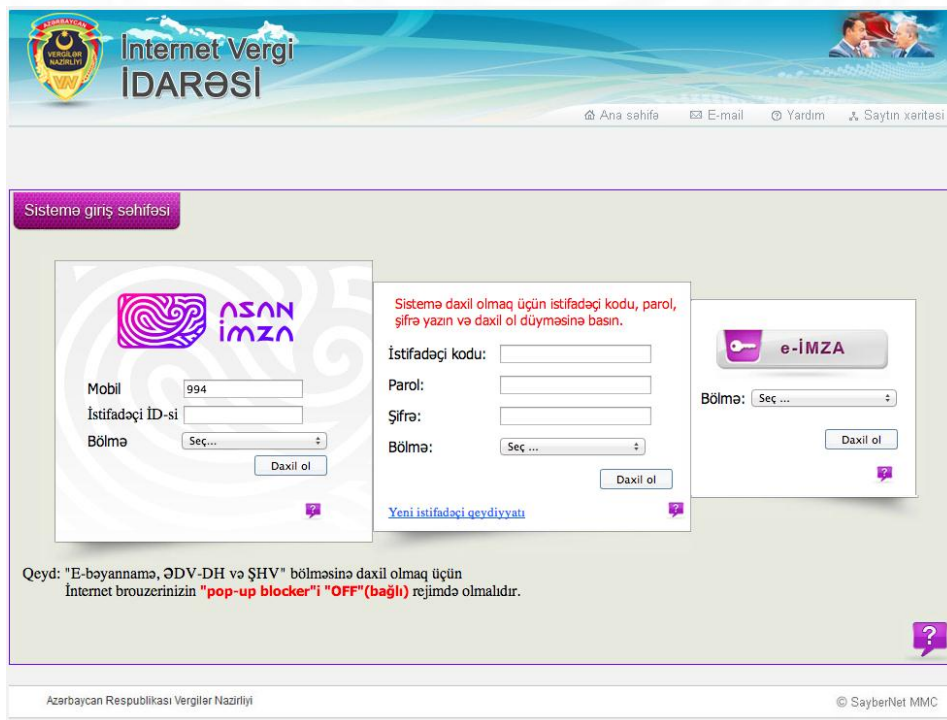


Automated Tax Information System- AVIS e-services statistics



The total usage of e-services in 2012 was **17 339 262**

E-services portal of Ministry of Taxes



The screenshot shows the 'Internet Vergi İDARƏSİ' (Internet Tax Office) portal. The header includes the Azerbaijan Tax Authority logo and navigation links: Ana sahifə, E-mail, Yardım, and Saytın xəritəsi. The main content area is titled 'Sistmə giriş sahifəsi' (System login page). It features a login form with fields for 'Mobil' (994), 'İstifadəçi ID-si', and 'Bölmə' (Seç...). A 'Daxil ol' button is present. To the right, there's a section for 'İstifadəçi kodu', 'Parol', 'Şifrə', and 'Bölmə' (Seç ...), with a 'Daxil ol' button. A 'Yeni istifadəçi qeydiyyatı' link is also visible. A note at the bottom states: 'Qeyd: "E-bəyannamə, ÖDV-DH və ŞHV" bölməsinə daxil olmaq üçün İnternet browserinizin "pop-up blocker"i "OFF"(bağlı) rejimində olmalıdır.' The footer mentions 'Azərbaycan Respublikası Vergilər Nazirliyi' and '© SayberNet MMC'.

Internet Tax Office



The screenshot shows the 'MOBİL VERGİ İDARƏSİ' (Mobile Tax Office) app interface. The status bar at the top shows 'AZE - AZ...', signal strength, Wi-Fi, time '18:39', and battery '58%'. The app header includes the Azerbaijan Tax Authority logo, 'MOBİL VERGİ İDARƏSİ', and a 'Haqqında' button. The main content area has a large 'Giriş' (Login) button with a right arrow. The address bar shows '10.22.12.90:8070/mgwtdp/'.

Mobile Tax Office

Mobile Tax Office login



10.22.12.90:8070/mgwtdp/#

Geri Sistemə giriş

MOBİL VERGİ İDARƏSİ

Mobil No +994502310851

PIN 23GV3UP

Giriş

Login page



10:55

MOBİL VERGİ İDARƏSİ

ASAN İMZA üçün PIN 1 kodunu daxil edin:

Cancel OK

Daxil olmaq?

Cancel **Accept**

PIN 1 authentication

Login process



10.22.12.90:8070/mgwtdp/#

Geri Onlayn sistem

- Onlayn ödəmə >
- E-karg >
- E-vhf >
- SHV-yə baxış >

Mobile e-service

Payment of taxes and dues

PIN 2
e-Signing

Təsnifat	114313 Digər hüquqi ş
Borc	10.00
VÖEN	2900543862
Adı	ƏLİYEV VAQİF ƏVƏZ
Təsnifat kodu	111111 Muzdlu işlə ələ
Məbləğ	5.00

Ödə

Payment Order

MOBİL VERGİ İMZA

ASAN İMZA üçün PIN 2 kodunu daxil edin:

Cancel OK

İmzalamaq?

Cancel **Accept**

Signing

Azərbaycan Respublikası Mərkəzi Bankı
HÖKUMƏT ÖDƏNİŞ PORTALI

Vergilər Nazirliyi

VAQİF
ƏLİYEV 2900543862 111111* 0.40 5.00
ƏVƏZ

0.40 5.00

Kart nömrəsinin ilk 6 rəqəm: 416973

İmtina **Ödəniş**

APUS

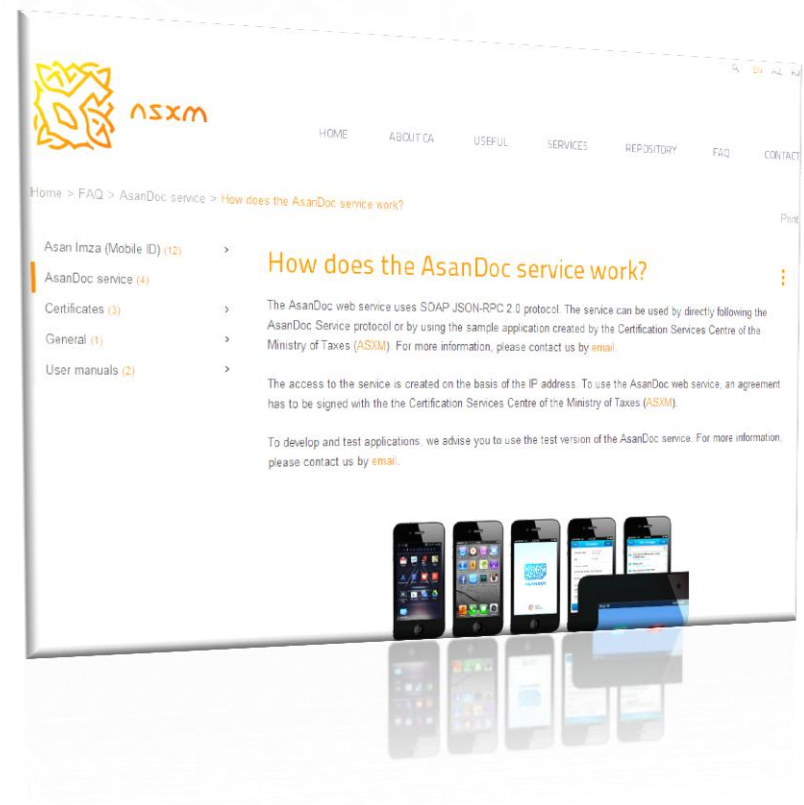
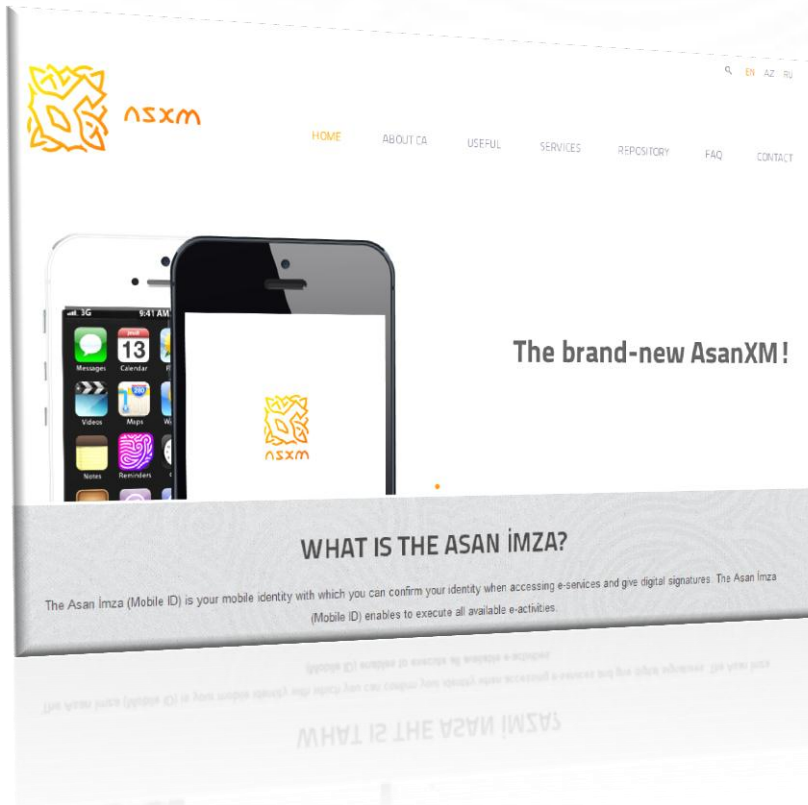
the State System
of Utility accounting and Payment

asxm.e-taxes.gov.az

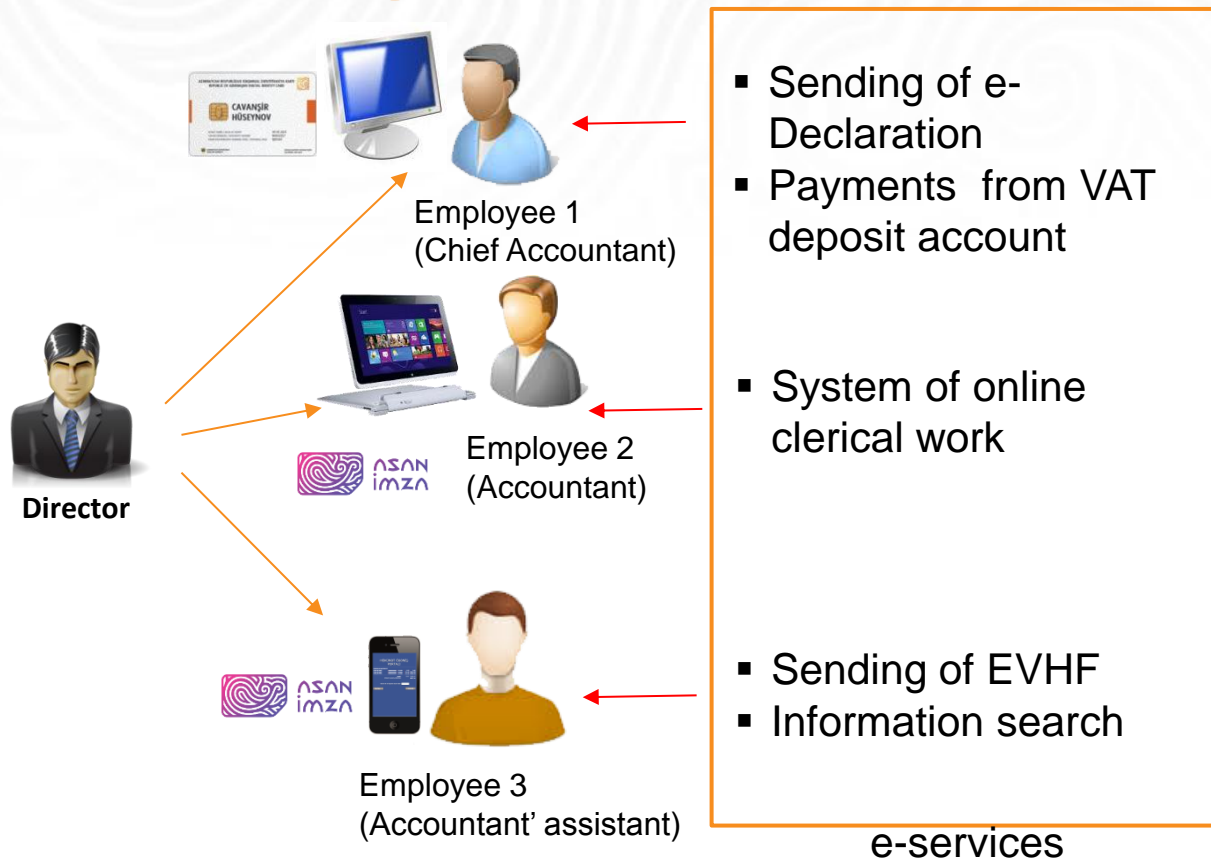


ASXM web page

www.asxm.e-taxes.gov.az



New system eliminates limit in the number of users working at the same time



In the new system the Director could assign to any employee with e-Sign appropriate authority.

Other mobile services



You mobile identity
Accessing e-services
Giving digital signatures

- Personal account view;
- Online clerical system services:
 - ✓ Online registration of physical persons,
 - ✓ Rapid registration of the legal entity,
 - ✓ VAT registration, etc.
- **More than 50 e-services** in Ministry of Taxes

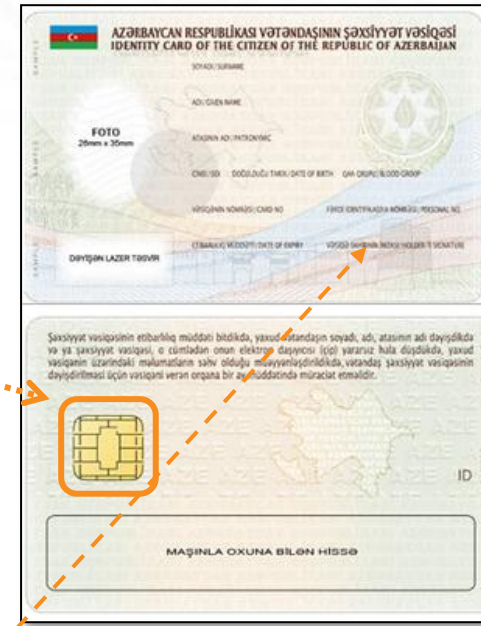
Digi ID card and new ID card

Digi ID



Ministry of Taxes

New ID Card (2015)

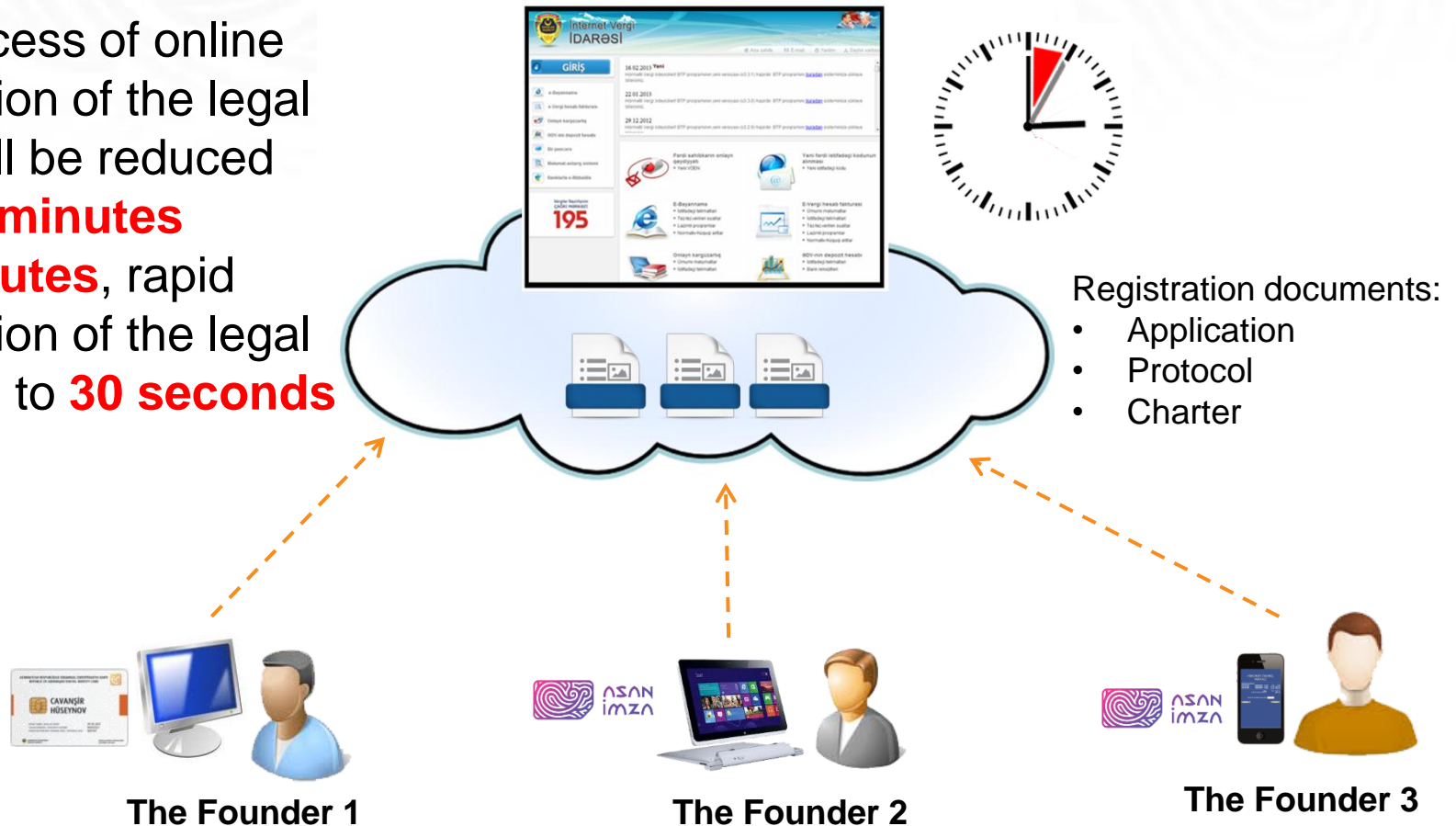


Ministry of Internal Affairs

Personal Identification Number

Online registration of legal entities (new system)

The process of online registration of the legal entity will be reduced from **30 minutes** to **1 minutes**, rapid registration of the legal entity up to **30 seconds**



Asan İmza (Mobile iD)

Azerbaijan Asan Imza in 2013

- ✓ On the market since July 2013 as the first SIM based digital identity in Azerbaijan
- ✓ Asan Imza SIM is issued firstly by MNO Azercell (TeliaSonera), after Bakcell and Azerfon joined
- ✓ Our digital signing software supports not only Mobile ID but also ID card
- ✓ During 2 months have been issued more than 20 000 Mobile ID certificates and more than 600 000 transactions
- ✓ There are over 400 000 tax-payers in Azerbaijan
- ✓ Over 90% of declarations submitted by taxpayers to the Ministry of Taxes is sent in electronic format

Available e-services using Asan Imza

- ✓ Ministry of Taxes more than 50 e-services incl.:
 - ✓ e-invoice system
 - ✓ e-deposit system
 - ✓ state registration of commercial entities online (legal and physical incl. automated registration service)
- ✓ State www.e-gov.az portal more about 500 e-services (launch on Nov)
- ✓ Payment portal www.hesab.az (launch on Nov)
- ✓ First IPO in Azerbaijan, buying stocks with Asan Imza
- ✓ Central Bank and Banks (launch on Nov)

Asan İmza - SIM-based digital signature

- Asan İmza uses SIM cards that are evaluated at the EAL5 level: higher than required by international standards.
- Most secure, surpassing the required EAL4+ level and going as high as EAL5
 - Signing keys are stored in the secure SIM card that is installed into phone
 - The keys are protected using the separate PIN codes and user has total control over the keys
- Can be used for the governmental communication
- Can be used with all phones: both simple ones and smartphones
- The positive feedback from end-users, fast authentication and signing process, going over to ECC (Elliptic Curves Cryptography) in the beginning of 2014



Benefits of Asan Imza



PC, tablet PC, Smartphones



Specific SIM card for Asan Imza
(front)



Specific SIM card for Asan Imza
(backside)

After activation of the certificate service could be used on any computer or mobile device with Internet connection. No card reader, no ID card, no special software required.



Card reader



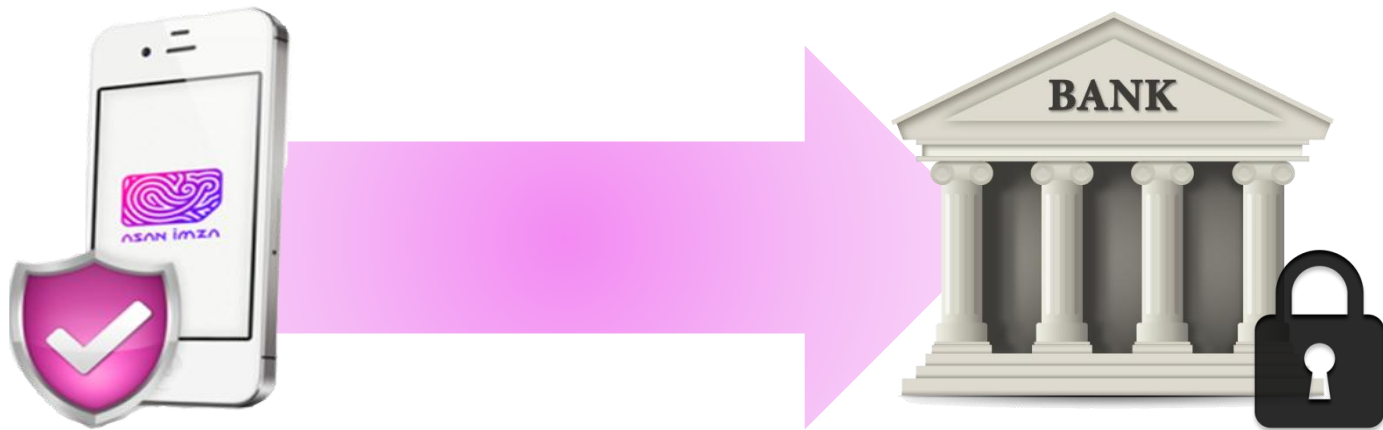
ID card



Driver

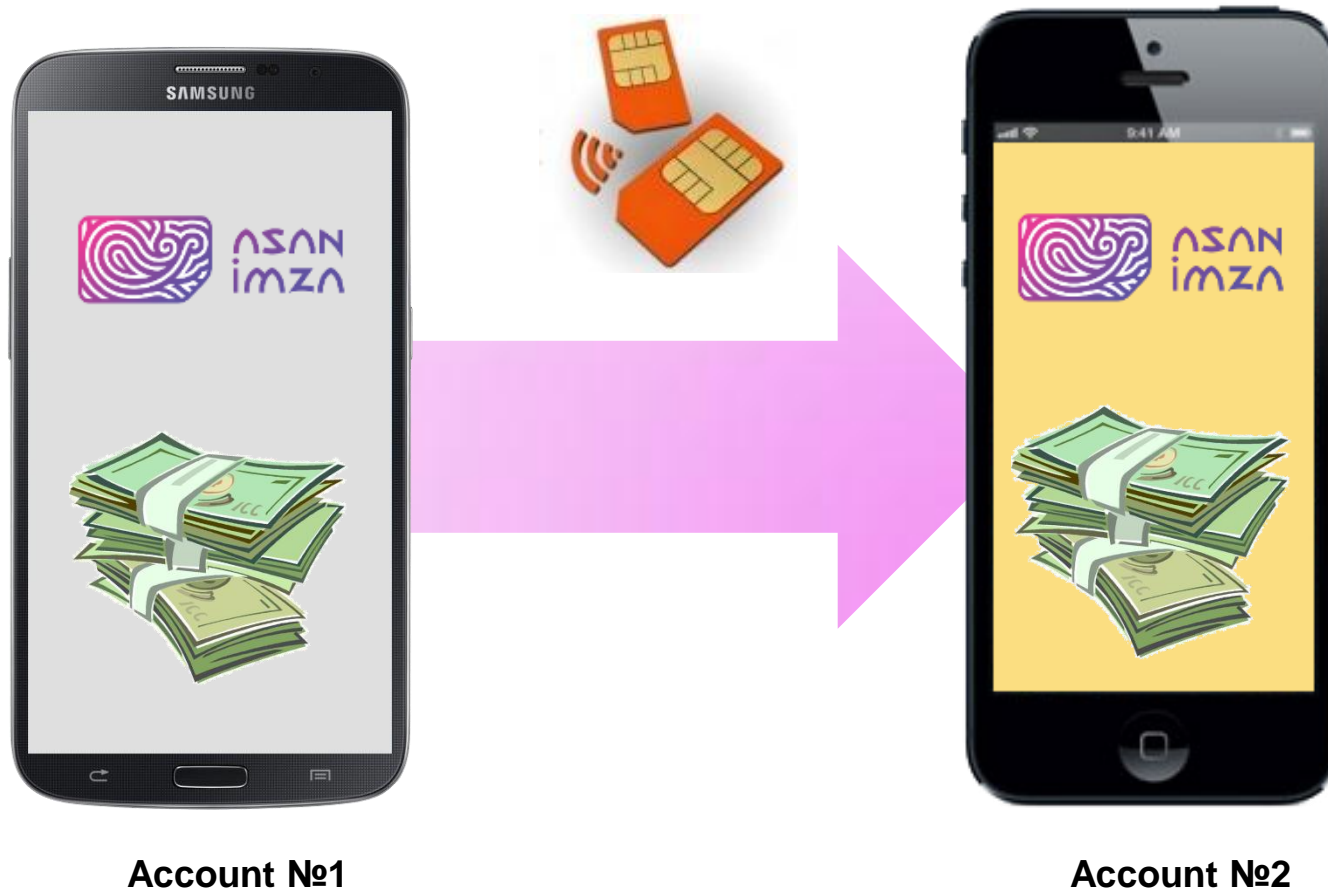
M-Banking with Asan İmza

Mobile ID (Asan Imza) will make significant influence in Internet/Mobile banking development in Azerbaijan. Going to implement unified standard for banks integration with Asan Imza.



Money transfers via Mobile bank systems

NFC payments with Mobile ID



AsanDoc software family



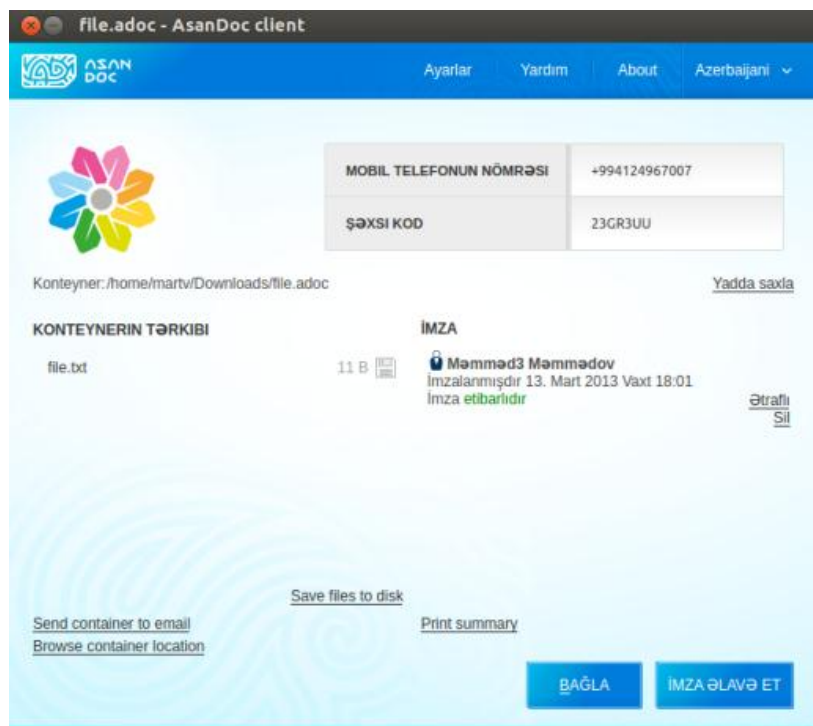
AsanClient – for document signing (PC only)



AsanDoc – for document signing (mobile devices)

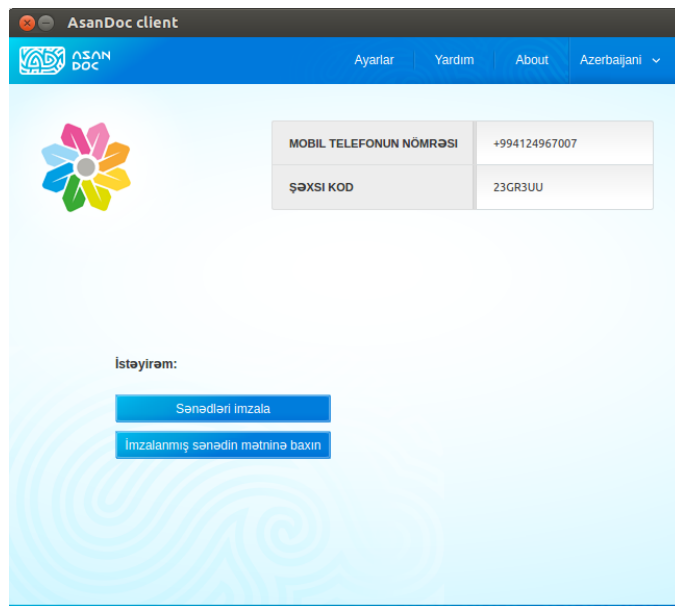
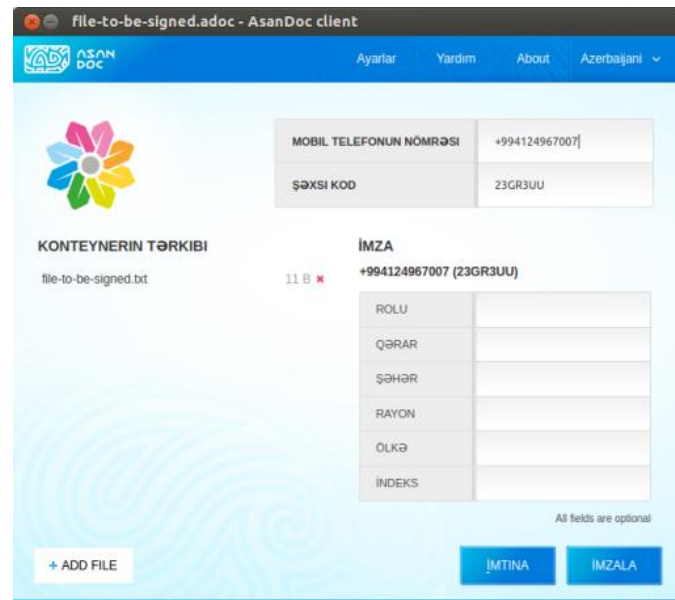
* **AsanDoc** supports Azerbaijani, English and Russian languages

AsanClient



AsanClient supports the following OS on PC:

- Windows
- Unix
- MacOS



AsanDoc

Mobile devices:



▪ iOS

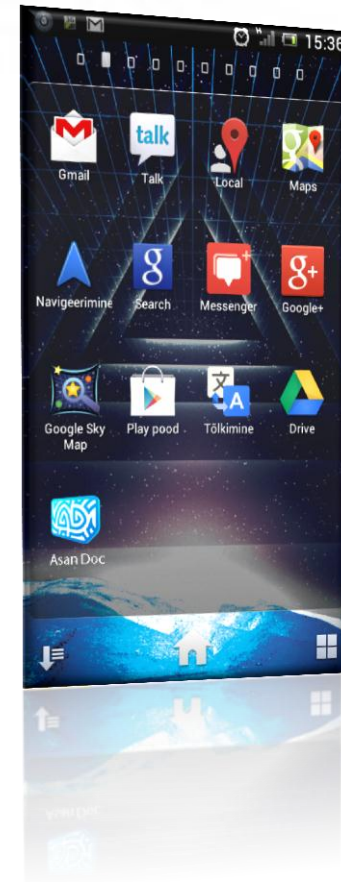


▪ Android

iOS



Android



Compliance with European standards

Digital integration with Estonia

Compliance of the new system with European standards gives the opportunity for mutual recognition of electronic signatures between Azerbaijan and Estonia (the European Union generally) in the future. And this will enable establishment of joint ventures and contracts signing via Internet.

First pilot with SK and Signwise.



Partners of the project in Azerbaijan

- ✓ The active participation of Ministry of Taxes, Ministry of Communication and Information Technologies and State Agency for Public Service and Social Innovations in the project of Asan İmza – the successful example of the Private and Public Partnership in building m-Government and stimulating non-cash payments in Azerbaijan



Partners in Estonia

- ✓ In the current project were involved different Estonian companies



THE DIVISION

ICEFIRE



Asan Imza – Happy to share



ASAN
imza



Story of the ASXM sign





www.asanimza.az

Thank You!

<http://www.youtube.com/watch?v=AWE56ufvDxQ>