



**Turkish ID Card
And
Electronic Authentication System in
Government**

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- Requirements for Turkish eID
- Main Project Targets
- Main Elements of Authentication System
- Security Levels of Authentication
- Facts About eID Card and System
- eID Card Deployment and Project Milestones
- Questions & Answers

- Turkish Prime Ministry Circular published on 4th July 2007:
 - Single eID card for citizens,
 - Covers all authentication functionality,
 - Use of biometrics,
 - First application in the area of the Health and Social Security Insurance services,
 - Pilot deployment in a city of middle-sized,
 - After self-confidence of the system, apply to meet the other governmental institutions and ministries needs.

USERS

Ministry of Labor and Social Security,
Ministry of Health,
Ministry of Internal Affairs (*General Directorate of
Civil Registration and Nationality*)

ADMINISTRATOR

The State Planning Organization ,

SUPPORTER

Turkish Mint,

IMPLEMENTER

TUBITAK – UEKAE

History of THE CIVIL REGISTRATION SYSTEM IN TURKEY



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- **eTransform** program prepared by the State Planning Organization in order to convert the traditional government business processes into electronic environment.
- **eCitizen**: Taking the benefits of citizen to the center of eGovernment business processes.
- **eApplication**: Developing government portal for eApplication.

1. Proof of identities.
2. Confirmation of the public services given by the governmental institutes.
3. Agreement on citizen who would receive public services.
4. Preserve privacy and civil liberties.
5. Reduce fraud and identity theft in electronic transactions.
6. Quickly verify ownership or eligibility to services,
7. Supports simplification at the administration and modernize public services.
8. Developpe a common Elektronik Authentication System which make use of eID.

1. There is common encouragement on use of e-Sign at eGovernment applications.
2. Ministry of Interior and Ministry of Justice intensively use of e-Sign in their bussines.
3. It is a must for integrity of documents.
4. Turkish eID card supports Qualified Certificates. But citezens should pay for certificates.



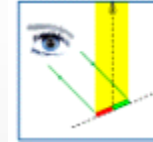
1. There are more than 60 countries who do not requires VISA from Turkish citizens.
2. Every mounth the amount of VISA free countries increases.
3. Northern Cyprus, Syria, Jordan, Lebanon accepts ID cards from Turkish Citizens.
4. Turkish eID cards is compliant with ICAO 9303.

Access Control Point of View

1. Every Governmental/Private institution make use of electronic access.
2. Ministry of Education requires student access control to courses,
3. Cinema and Stadium environments requests quick checks .
4. Turkish eID make use of Mifare protocol.



Security Features of eID (1. level)



Guilloche

Relief

OVI

Rainbow

MLI

DOVID/OVD



Sign

Security Features of eID (3. level)



UV



DOVID/OVD

Main Project Targets



TÜBİTAK
UEKAE

- Implementation of the “Smartcard Operating System”,
- Implementation of the “Smartcard Microprocessor”,
- Prototype development of “Secure Card Access Devices” for several purposes & environments,

- Desktop use,
- Mobile use,
- Home use.



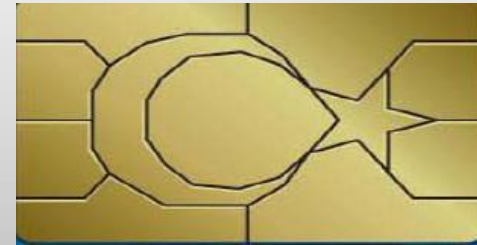
- Defining and Implementing “Secure Electronical Authentication System” for eGOVERNMENT environments,



- Implementing “Card Management System” for *General Directorate of Civil Registration and Nationality*

Nationally Designed Smart Chip

- Designed for eID, Driving License and Car registration card uses.
- CC EAL 5+ evaluation continued.
- RSA 1024/2048 support.
- DES/3DES support.
- SHA1/SHA2.
- True random number generator.
- Compliant with ISO 7816



- Designed for multipurpose use.
 - Government.
 - Bussines.
- CC EAL 4+ certificated.
- EMV evaluation continued.
- ISO 7816 & ISO 14443 TipA support



Secure Card Access Device



- CC EAL 4+ certificated,
- Secure transactions over internet,
- Security of private information of card holder,
- Ethernet/USB/Serial interface,
- Use of Secure Access Module-SAM,
- Support for extended access control:
 - Chip Authentication,
 - Terminal Authentication.
 - Verification of Finger Biometrics.
- Authentication and digital signing,
- Ease to install and use,
- Several type of devices;
 - Mobile, home type, desktop type, etc.

Some Types of Secure Card Access Devices




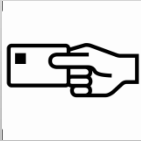
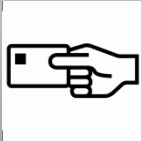

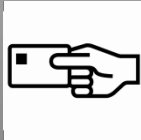
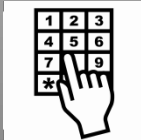
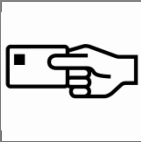
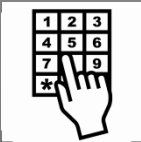




- National Institute of Standards and Technology (NIST) based authentication.
 - NIST Special Publication 800-63-1 Electronic Authentication Guideline,
 - Production of Authentication Assertions.
- European Citizen Card (ECC) CEN/TS 15480 based authentication.
 - CVC support,
 - Authentication of applications, servers, devices ...

Main Elements of Authentication System

- **Citizen's eID Card** : Contains identity information, finger prints (or finger veins) and real authentication certificates.
- **Secure card Access Device (Authentication End Point)** : Where the authentication takes place securely.
- **Authentication Servers** : Where the results of authentication keep and evaluated. Authentication assertions are sent to public service providers server securely.
- **eID Policy Server**: Where the security levels of authentication defined, validity duration of the authentication stored and the authentication policies of the institutions are held.

Security Levels of Authentication

Security Level	Factor
1	
2	
3	 + 
4	 + 
5	 +  + 

- 220.000 eID cards issued.
- eIDs are used at Hospitals, pharmacy and Social Security system.
- All types of card material management and issuing system is tested.
 1. Health and Security Sector is going to integrate,
 2. Finans Sector,
 3. e-Government Portal,
 4. e-Bussines, 

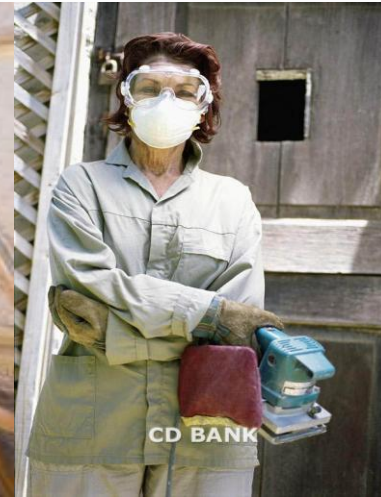
- Biometric usage at Europe:
 - Police and security institutions can use biometri for criminal purpoces.
 - It is used for identification not for authentication.
 - Travel purpoces.
 - For eID authentication PIN and cards are used.
 - Rare usage of biometric in eveyday life.

Use of Biometrics at eID in Turkey

- Turkish citizens share their card PINs with other people.
- Governmental institution make sure of citizen who request the service.
- For most of the services a biometric authentication is required.
- Same is the case at Japan and South Korea at Banking environments.



Cultural Differences Between East and West Affects Biometrics



Experiences from the Pilot Environment

- Use of biometrics those citizens under 15 and above 65 years old are not obligatory. (% 47,5 of the population).
- %5 of the citizens could not give or use their biometrics for several reasons.
- Only %48 of the population can make use of biometrics in their everyday life.
- The TAR for finger prints are (%70-85).
- The TAR for finger vein are(%90-96)?.
- If used together the TAR are almost %99.



- The pilot of eID will be finished on 1 November 2010.
- All the technical specifications will be shared with institutions and industry.
- The tender documents will be prepared with related institutions.
- The project budget will be accepted until December 2010.
- February 2011 the awards will be open.
- Whole installation and training phase will be established during 2011.
- The first eID will be issued to citizens within January 2012.
- Within 3-5 years whole card issuing process will be completed.

Thank you for your attention



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