e-Transformation Turkey Project:
Information Society Strategy and e-Government in Turkey

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Information Society Department
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Agenda

• Information Society Indicators
• e-Transformation Turkey Project
  – Studies prior to the Project
  – Background information
  – Organizational Structure
• Information Society Strategy
  – e-Government in the Strategy
• e-Government in Turkey
  – e-Government Policy
  – Major e-Government Applications / Projects
  – Ongoing e-Government Applications / Projects
  – Some of the Main Achievements
• Legal Framework
ICT Sector Profile

- Market size: from 10.3 billion USD in 2002 to 21.8 billion USD expected in 2009
- Broadband coverage almost 90%
- Internet gateway capacity up from 4.35 Gbps in 2004 to 206.5 Gbps in 2008

ICT Usage Statistics

<table>
<thead>
<tr>
<th>Service</th>
<th>2002 (end)</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed Line Subscriber Penetration Rate (%)</td>
<td>30</td>
<td>24</td>
</tr>
<tr>
<td>Mobile Telephone Subscriber Penetration Rate (%)</td>
<td>33.3</td>
<td>89</td>
</tr>
<tr>
<td>Broadband Subscribers Penetration Rate (%)</td>
<td>0.05</td>
<td>9</td>
</tr>
<tr>
<td>Internet User Penetration Rate (%)</td>
<td>5.7</td>
<td>38.1</td>
</tr>
</tbody>
</table>

Central Government Investment in IT (2009 prices)

- 267 million USD for 203 projects in 2002
- 590 million USD for 244 projects in 2009
Number of Web Sites

- May 2003: 2,260 government related web sites
- April 2010: 21,792 government related web sites
- # .tr web sites: +216,000
### Networked Readiness - World Economic Forum

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td># of Countries</td>
<td>115</td>
<td>122</td>
<td>127</td>
<td>134</td>
<td>133</td>
</tr>
<tr>
<td>Turkey</td>
<td>48</td>
<td>52</td>
<td>55</td>
<td>61</td>
<td>69</td>
</tr>
</tbody>
</table>

### e-Readiness Ranking - The Economist

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2006</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Countries</td>
<td>64</td>
<td>68</td>
<td>70</td>
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<tr>
<td>Turkey</td>
<td>45</td>
<td>45</td>
<td>43</td>
<td>43</td>
</tr>
</tbody>
</table>
## Turkey in e-Government Benchmarks

EU, 20 Basic Public Services Maturity Level, Cap-Gemini, 2007

<table>
<thead>
<tr>
<th></th>
<th>All 20 Services (%)</th>
<th>12 Citizen Services (%)</th>
<th>8 Business Services (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>69</td>
<td>57</td>
<td>86</td>
</tr>
<tr>
<td>EU 27+</td>
<td>76</td>
<td>70</td>
<td>84</td>
</tr>
</tbody>
</table>

Sept 2007; EU 27+: EU27, Turkey, Iceland, Norway, Switzerland
Studies and Initiatives prior to e-Transformation Turkey Project

- Ministry of Transport (1999): TUENA – Masterplan for Turkish National Information Infrastructure
- Turkish Informatics Assembly (May 2002)
- Prime Ministry (2001-2003): e-Turkey Initiative

- Lisbon Strategy, 2000
- e-Europe (+) Initiative
e-Transformation Turkey Project (1)

  Public Management Reform → e-Transformation Turkey Project
- The Project initiated in February 2003 with Prime Ministry Circular (2003/12, 27 February 2003)
  3 main goals of the Project:
  - Achieving **efficiency and effectiveness** in e-Government projects
  - **Coordination** of information society activities
  - **Alignment** with EU in ICT
- SPO, responsible institution
- Information Society Department, established in **March 2003**.
e-Transformation Turkey Project (2)

- Two Action Plans prior to the Strategy
- Information Society Strategy and Action Plan
  - covers 2006-2010 period
  - 111 actions
- Institutional Structure
  - e-Transformation Turkey Executive Board
  - e-Transformation Leaders
  - Advisory Board

Lisbon Strategy renewed in 2005; i2010
Organizational Structure

Minister of State

Executive Board
(9 members)

State Planning Organization

Transformation Leaders Board
(42 members)

Information Society Department

Advisory Council
(26 members)

Members
1- State Minister (SPO)
2- Minister of National Education
3- Minister of Transport
4- Minister of Industry and Trade
5- Undersecretary of Prime Min.
6- Undersecretary of SPO
7- Undersecretary of Mo Interior
8- Undersecretary of Mo Finance
9- Chief Advisor to Prime Minister
Information Society Strategy Preparation

• International procurement (2005)  
  (Peppers & Rogers Consultancy)
• Participatory approach
• Questionnaires
• Interview with firms and NGOs
• Citizen survey
• Business survey
• Workshops

• Strategy was put into implementation in July 2006
• Integrated into 9th Development Plan, Medium-term Programs and annual programs
Turkey’s Information Society Approach

- Citizen Focused Service Transformation
- Social Transformation
- Modernization in Public Administration
- ICT Adoption by Businesses

GLOBALLY COMPETITIVE IT SECTOR

COMPETITIVE, WIDESPREAD AND AFFORDABLE COMMUNICATION INFRASTRUCTURE AND SERVICES

R&D AND INNOVATION
1. Social transformation
2. ICT adoption by businesses
3. Citizen oriented public service
4. Modernization of public management
5. Globally competitive ICT sector
6. Competitive, widespread and affordable telecom infrastructure and services
7. R&D and innovation in ICT
1) Citizen Focused Service Transformation

- Citizen focused approach
- Service transformation
- Communication management
- e-Government applications

- Some of the Key Actions
  - Health Information System
  - Education and Information Portal
  - e-ID Card
  - Address registry
2) Modernization in Public Administration

- **Objectives**
  - Shared Technology Services and Infrastructure
  - Effective Procurement Management
  - Data and Information Management
  - Electronic Communication
  - Human Resources and Competency Development
  - Security and Privacy of Personal Information

- **Some of the Key Actions**
  - Dissemination of e-Government Gateway Services
  - Usage of Open Source Software in Public Institutions
  - Shared technology and services (e-Government Gateway, call center, secure government intranet, etc.)
  - ICT project implementation and competency development in public institutions
Principles:
• participatory, transparent and accountable e-government structure
• interoperable and integrated electronic public services based on sharing of information and documents within and among the agencies
• focused on the needs and life cycles of citizens and businesses
• secure, one-stop, continuous and multi-platform service provision

Four basic databases/the backbone:
1. Real person database- single ID number (realized)
2. Legal person database- single ID number (pilot realized)
3. Address records database (realized)
4. Title deeds information system (underway)
e-Government Gateway

- one stop shop, integrated, multi-channel (internet, mobile, call centre) service delivery platform
- common platform for identification and payments
- launched in December 2008 with 22 services
  - currently, 163 services of 22 agencies
- mobile portal launched in October 2009
Central Census Management System (MERNIS)
  • Unique ID number for all citizens (over 130 million records database)

Identity Sharing System (ISS)
  • ID data sharing platform through web services
  • More than 2,500 agencies, both public and private, signed protocols to use the system
  • PM Circular dictates public agencies do not require citizens to submit ID records and address information and obliges them to acquire this information through ISS

Address Record System
  • Citizens address records are integrated with MERNIS through ID numbers
Major e-Government Applications / Projects (3)

National Judiciary Informatics System (UYAP)

• aims to ensure fast, reliable and robust judicial system
• comprises all of the courts, public prosecutors, prisons, other judicial institutions and other government departments
• serves 40,000 officials and judges, 66,000 lawyers and for all citizens
• litigate online case, reach and examine case information
• inform citizens of their cases through SMS
• Ministry of Justice announces 2.7 billion € savings with 22 applications of UYAP
Major e-Government Applications / Projects (4)

Internet Tax Office

- online tax declarations and payments
- online payment of motor vehicle taxes and traffic fines
- 99% all tax returns are declared online
- OECD study shows unit cost of tax revenue collection decreased from 2 $ to 0.35 $
Police Network and Information System (POLNET)

- covers 684 locations
- internal applications (26 main applications, 51 search programs and 26 local applications)
- some online applications:
  - passport application
  - driving license (application and information on penalty points)
  - denounce on public order and security
  - search for lost persons
Major e-Government Applications / Projects (6)

Accounting Office Automation Project (Say2000i)
- Network for communication and data transfer for over 6,000 users in 1,660 auditing branches and 39,500 budget offices throughout the country
- All financial transactions are processed online and followed in real-time

e-Budget
- Online demand for budget allocation for public agencies
- Keeping real-time track of budgetary spendings
Major e-Government Applications / Projects (7)

Customs Modernization Project

- facilitate legal trade and prevent illegal trade by using ICT
- customs formalities are carried out in a computerized media in real-time
- 100% of all customs transactions are processed electronically
- about 6.3 million import and export declarations were transacted in automation (2009)

e-Document in Foreign Trade

- foreign trade transactions, with a standardized “e-Document” in order to create effective, efficient, fast and reliable e-Business infrastructure
- a “Single Window Environment” for all information and all relevant parties
Social Security e-Declaration Project

- social security premiums of employees declared online
- pay the premiums electronically
- verify payments made and outstanding balance
- more than 90% of the firms send their declarations online
Turkish Foreign Investment Portal

- Guide for foreign investors on:
  - starting a business,
  - cost of doing business,
  - taxes and incentives,
  - special investment zones,
  - demography and labor force,
  - business environment and business legislation
  - infrastructure,
  - economic outlook
- Investment Support and Promotion Agency assists investors in Arabic, Chinese, English, French, German, Italian, Japanese, Korean, Russian, or Spanish as well as Turkish
Major e-Government Applications / Projects (10)

KOBINET for SMEs

- Information about business environment (marketing, management, taxes, human resources, internet and technology, finance, insurance and labor regulations)
- Information about firms, online business offers
- 22,915 members
- Provides user ID, password, e-mail address,
- Web pages in 7 languages as free of charge

Tourism Portal

- Information on history, heritage, life-culture, travel guide, where to go and business
- Balloon, golf, museums, congress, yachting, hunting, bird watching, mountaineering, paragliding, diving, winter sports, caving, thermal resorts, highlands, youth tourism, botanical species, faith tours
Electronic Signature and Certification Authority

- Electronic Signature Law is effective since 2004
- electronic signature has the same legal effect as that of a handwritten signature
- Public Certification Authority (PCA) for public agencies
- 3 private electronic certificate service providers

**Mobile electronic signature**

- introduced by a Turkish GSM operator
- initial applications in banking, customs, justice and some local administrations
## Major e-Government Applications / Projects (12)

<table>
<thead>
<tr>
<th>Application</th>
<th>Website</th>
</tr>
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<tbody>
<tr>
<td>Central Census Management System (MERNIS)</td>
<td><a href="http://www.nvi.gov.tr">www.nvi.gov.tr</a></td>
</tr>
<tr>
<td>Identity Sharing System (ISS)</td>
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</tr>
<tr>
<td>Accounting Office Automation Project (Say2000i)</td>
<td><a href="http://www.muhasebat.gov.tr">www.muhasebat.gov.tr</a></td>
</tr>
<tr>
<td>e-Budget</td>
<td><a href="http://www.bumko.gov.tr">www.bumko.gov.tr</a></td>
</tr>
<tr>
<td>Customs Modernization Project</td>
<td><a href="http://www.gumruk.gov.tr">www.gumruk.gov.tr</a></td>
</tr>
<tr>
<td>e-Document in Foreign Trade</td>
<td><a href="http://www.dtm.gov.tr">www.dtm.gov.tr</a></td>
</tr>
<tr>
<td>Social Security e-Declaration Project</td>
<td><a href="http://www.sgk.gov.tr">www.sgk.gov.tr</a></td>
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</tr>
<tr>
<td>Tourism Portal</td>
<td><a href="http://www.goturkey.com">www.goturkey.com</a></td>
</tr>
<tr>
<td>Electronic Signature and Certification Authority</td>
<td><a href="http://www.kamusm.gov.tr">www.kamusm.gov.tr</a></td>
</tr>
<tr>
<td>Mobile electronic signature</td>
<td><a href="http://www.btk.gov.tr">www.btk.gov.tr</a></td>
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Ongoing e-Government Applications/Projects (1)

e-ID Card
• electronic citizenship cards including biometric elements
• pilot implementation is started
• will be deployed countrywide in 2011

The Land Registry and Cadastre System (TAKBIS)
• set up in 379 land registry offices and 30 cadastre offices
• provide accurate, valid and reliable land information
• keep land registry and cadastral survey maps updated

Electronic Public Procurement System
• online procurement announcement, submission of tender documents, tender results, clearance of bidders
• medical equipment and consumables info bank for submission of bids
• online catalog and purchase from the State Supply Office
• the State Supply Office uses e-procurement for its own purchases

Central Information System for Legal Entities
• unique ID number for all legal entities and one-stop application for establishing a new business
e-Health
  • National Health Information System Project
  • Online Health Services - Appointments
  • Family Medicine Information System
  • Tele Medicine

e-Employment
  • electronic platform for unemployed and employers searching for work and labor
  • online submission of work and labor demand
  • search for both employers and unemployed

e-Invoice and Accounting Ledgers
  • initiated in February 2008, provides huge savings both for public and private
  • since its inception over 718 million second copy of invoices printing has been saved
  • 16 registered users

Culture Portal
  • interactive information portal on Turkish culture, history and tourism
Some of the Main Achievements (1)

Interoperability & Standards for e-Government

- Guide for Interoperability
- Guide for Public Agency Web Sites
- A unique number for all citizens and ID Sharing System
- Reference for electronic document management (TSE 13298)
- Public Electronic Certification Authority (e-signatures)
Some of the Main Achievements (2)

Education
• Broadband access to 36,082 schools and agency (2009)
• VSAT internet connection to 4,917 schools (2009)
• 94% of primary and 100% of secondary school students have broadband access
• 29,000 IT classrooms

Student Information System
• Parents are able to reach information on grades and average of their children and any other information needed

Public Internet Access Points (PIAPs)
• 1,850 PIAPs
Some of the Main Achievements (3)

Software Sector

- Main policy tool for software sector is “Technology Development Zones” where the software companies comprise more than 60% of total number of companies located in these zones.

- The number of established Technology Development Zones is 37, among which 26 are actively operating and more than 9,102 researchers are employed. (February 2010)

- The other mechanism, the Law No 5746: Supporting Research and Development and Innovation Activities has come into force in March 2008.

- This law regulates incentives provided in the field of R&D and innovation.

- Incentives:
  - R&D expenditures discount,
  - income tax exemption and
  - insurance premium support
Legal Framework (1)

Basic information society legislation
• Right to Information Law (2003)
• Inclusion of cybercrime in the Criminal Code (2004)
• Electronic Signature Law (2004)
• Amendments in the IPR Law
• Universal Service Law (2005)
• Law No. 5651 on regulating broadcast in Internet and combating crimes committed through such broadcast (2007)
• Electronic Communications Law (2008)
• Secondary legislation on telecommunications

Other legislative framework regarding IT and e-Government
• Public Procurement Law (2008)
• Census Services Law
• Law No.5942 amendments in the Traffic Law No.2918
• Circulars regarding the payment of taxes online, social security related law and by-laws…
Legal Framework (2)

• Draft Data Protection and Privacy Law (pending in the Parliament)

• e-Commerce related works regarding the harmonization of 2000/31 EC is underway

• Draft law covering partial amendments for various e-government services
Thank you...

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