Measuring E-Gov Progress

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Outline

- Tunisian e-Gov Strategy and Program
- Evaluation of e-Gov on-line Services
- A Measurement Framework
- Conclusion
e-Gov in Tunisia

3 Major Phases:

Phase I (80-90’s) : Informatization of Major Administration functions

Phase II (Late 90’s-2003) : Pilot Phase «Communicating Administration »

Phase I (80-90’s) : Informatization of Major Administrative functions

- **Interministerial Applications:**
  - Personnel Management, Payroll
  - Budget

- **Common Applications**
  - Mail, Cars, Inventory, etc.

- **Sectorial Applications**
  - Customs
  - Tax System
  - Public Debt
  - Local Government
  - Etc.
Phase II (Late 90’s-2003) : Pilot Phase «Communicating Administration »

Legal Environment:
- Legal Value of electronic document
- Electronic Signature
- Certification
- Privacy

Institutional Environment
- Specialized ministerial committees (coordination, strategy, …)
- Telecom Authority
- Internet Agency
- Certification Agency
- IT security agency
Phase II: Pilot Projects

- SICAD: On-line Information on Administration services (citizen, firm…)
- On-line Trade Intermediation
- On-line corporate tax declaration
- On-line postal services: (e-dinar, e-billing, e-money order, web telegram, e-flowers)
- Virtual University
- Virtual School
- On-line enrollment in higher education
- Etc.

- E-Administration Ministerial & Technical Committees (strategic & technical coordination)
- Generalization of on-line services by 2009
- Citizen centric e-administration
- Consolidation of phase 2 Pilot projects
- Adoption of a Priority Program for Public on-line services:
  - All Phase II pilot Projects
  - E-procurement
  - Birth Certificates
  - Administration Portal: [www.bawaba.gov.tn](http://www.bawaba.gov.tn) (links to all government sites and on-line services)
  - All administrative forms on-line
- Capacity building
Evaluation of e-Gov on-line Services: EU methodology

e-Europe Initiatives

- e-Europe 2002
  - Generalize access to basic public services by 2003
- e-Europe 2005
  - Insure that public services are interactive (where relevant) and accessible for all.

Annual Evaluation through Web Based Surveys Related to 20 Basic Public Services

- 12 Services for Citizens
- 8 Services for Businesses

Ref: Work By Capgemini: Online Availability of Public Services: How is Europe Progressing, June 2006
# 20 Basic Public Services

<table>
<thead>
<tr>
<th>Citizens</th>
<th>Businesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Taxes</td>
<td>Social Contribution for employees</td>
</tr>
<tr>
<td>Job Search</td>
<td>Corporate Tax</td>
</tr>
<tr>
<td>Social Security Benefits</td>
<td>VAT</td>
</tr>
<tr>
<td>Personal Documents (Passp)</td>
<td>Registration of a New Company</td>
</tr>
<tr>
<td>Car Registration</td>
<td>Submission of Data to the Statistical Office</td>
</tr>
<tr>
<td>Application for Building Permission</td>
<td>Custom Declaration</td>
</tr>
<tr>
<td>Declaration to the Police</td>
<td>Environment-related Permits</td>
</tr>
<tr>
<td>Public Libraries</td>
<td>Public Procurement</td>
</tr>
<tr>
<td>Birth and Marriage Certificates</td>
<td></td>
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<tr>
<td>Enrollment in Higher Education</td>
<td></td>
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<tr>
<td>Announcement of Moving</td>
<td></td>
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<tr>
<td>Health-related Service</td>
<td></td>
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</tbody>
</table>
Indicators

On-line availability

On-Line Sophistication

- Full availability on-line
- Clustering of Services
  - Income-generating services
  - Registration services
  - Returns
  - Permits and Licences

Comparison between Supply and Use of On-line Services
Levels of Sophistication

- **Online Sophistication**
  - **Transaction** (full electronic case handling) 100%
  - **Two-way interaction** (Electronic Forms) 75%-100%
  - **One-way interaction** (downloadable forms) 50%-75%
  - **Information** 25%-50%
  - **No online service** 0% - 25%

- **EU (18) 78%**
- **EU (28) 75%**
- **EU (10) 69%**
On-Line Sophistication by Country
Evolution of Levels of Sophistication
On-Line Sophistication: Citizen/Business

- Public services for citizens:
  - EU(18): 62
  - EU(28): 68
  - EU(10): 71

- Public services for businesses:
  - EU(18): 81
  - EU(28): 86
  - EU(10): 88
Evolution of Levels of Sophistication Business/Citizen
On-Line Full Availability: Citizen/Business

- Public services for citizens:
  - EU(18): 37
  - EU(28): 36
  - EU(10): 33

- Public services for businesses:
  - EU(18): 74
  - EU(28): 67
  - EU(10): 55
Comparison Between Supply & Use of On-Line Services for Citizens

![Graph showing comparison between supply and use of online services across various countries.]
Comparison Between Supply & Use of On-Line Services for Businesses
Tunisian e-gov services on-line sophistication: Rough Evaluation

Level 1: Information
- Bawaba (portal), Examination Results, Tax Information

Level 2: One-way Interaction
- SICAD,

Level 3: 2-Way Interaction
- Job Search, University Orientation, Firm creation

Level 4: Full electronic Handling
- Corporate Tax for Medium to large size firms (mandatory)
- Integrated Trade Intermediation (multi-stakeholders cooperation)
- University Registration (mandatory)
- Virtual University

A Thorough Analysis is about to be carried out Requirement for a choice of a set of indicators!!!!
A Measurement Framework

Academia Research Network: ARN: Created in June 2004 by UNECA

- Get African Academia involved in Building Information Society

5 Groups and research areas:

- Capacity Building
- Enabling Environment
- African Languages + Content
- ICT Industry and Services
- Measuring African Information Society
Work of African ARN Group on IS Measurement

- Review of Existing Initiatives
- Review of Implementation Results
- Reference Model
- Analysis & Comparison of Indicator Initiatives
- Propose a Set of Indicators
  - Penetration
  - Usage
  - Impact
- Sustain National Effort to Implement an IS Measurement System
Reference Model (CSI): Basic Components

- **Enabling Environment** (I)
- **Infrastructure & ICT Sector** (II)
- **Infostructure & Content production** (III)
- **Readiness & Capacity Building** (IV)
- **On-line services, availability & usage** (V)
<table>
<thead>
<tr>
<th>CSI</th>
<th>CSI Domains</th>
</tr>
</thead>
</table>
| A/ Enabling Environment | Country profile  
Economy & Market environment  
Institutional System  
E-Strategy  
Educational and Research Environment |
| B/ Infrastructure & ICT Sector | Fixed & Mobile Phones  
Informatics Infrastructure  
Internet  
Security  
IT-Sector |
| C/ Infostructure & Content Production | Media and on-line availability  
Type of Online Content  
Content production |
| D/ Readiness & Capacity Building | Digital Literacy  
Perception, confidence, barriers for the access and usage of ICT  
ICT in Education (E-education)  
ICT for Research (E-research)  
Training ICT personnel  
R&D in ICT |
| E/ On-line Services, Availability & Usage | E-Government  
E-Business  
E-Work  
E-Health  
E-Agriculture  
E-Entertainment  
E-Environment & Natural Resource Management |
## Comparison of Indicator Initiatives: Component Coverage

<table>
<thead>
<tr>
<th>Component</th>
<th>CSI</th>
<th>e-UIT, DAI</th>
<th>NRI</th>
<th>SMS I P</th>
<th>ORBi COM</th>
<th>SIBI S+</th>
<th>SCAN -ICT</th>
<th>Botswana</th>
<th>ESC WA</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/ Enabling Environnement</td>
<td>3</td>
<td>25</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>11</td>
<td>21</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>B/ Infrastructure &amp; ICT sector</td>
<td>12</td>
<td>15</td>
<td>25</td>
<td>13</td>
<td>29</td>
<td>17</td>
<td>59</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>C/ Infrastructure &amp; content production</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>10</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>22</td>
</tr>
<tr>
<td>D/ Readiness &amp; capacity building</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>43</td>
<td>15</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>E/Online services availability,usage</td>
<td>6</td>
<td>5</td>
<td>12</td>
<td>-</td>
<td>51</td>
<td>18</td>
<td>38</td>
<td>21</td>
<td>41</td>
</tr>
<tr>
<td><strong>TOTAL per initiative</strong></td>
<td><strong>25</strong></td>
<td><strong>48</strong></td>
<td><strong>42</strong></td>
<td><strong>17</strong></td>
<td><strong>133</strong></td>
<td><strong>62</strong></td>
<td><strong>152</strong></td>
<td><strong>62</strong></td>
<td><strong>178</strong></td>
</tr>
</tbody>
</table>
Proposal of a set of Indicators

- Only Penetration and Usage Indicators
- Framework: Reference Model CSI
- Approach: Complete SMSI-P (adopted internationally) with appropriate indicators chosen and/or adapted from various initiatives and a few new ones
- Result: 110 indicators
E-Gov Indicators

- On-line availability of government services for citizens (levels of sophistication)
- Usage of online Government services by citizens
- Citizen preference for on-line government services
- Availability of on-line government services for businesses (levels of sophistication)
- Business use of on-line government services
- Business preference for on-line government services
Tunisian Implementation Process

Work with The National Statistics Council (CNS): Special Working Group on IS indicators

- Select a Set of Indicators
- Translate the indicators into Specific Surveys
  - Household/Individual Survey
  - Business Survey
  - Government Survey
  - Sectorial surveys
- Define Frequencies and Assign Responsibilities of surveys to Agencies and/or Ministries

Submit outcome to the Council and Government
On-Going Work of ARN Group

Sustain National Statistical Council (CNS) Implementation Process

Work on Impact Indicators

- A proposal has been recently submitted to UNECA: 3 sets of Impact Indicators
  - Pertinent 194
  - Basic 101
  - Key 43

- Work with Tunisian CNS to consider some key Impact Indicators
Conclusion

- Need to Join Forces to Draw a set of e-Gov Indicators Adapted to Arab Region
- Need to Share Survey Methodologies
- Develop Web-based Analysis Tools
- Perform & Publish a Yearly Web Based Survey on E-Gov in Arab World
- Involve Academia and Create a Regional Network to Tackle Impact Studies

Thank You for Your Attention