eGovRTD2020 future scenarios

Building a vision for eGovernment in 2020

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Forecasting vs. scenarios

- Popper: “if you know it now, it is no future”
- Find new aspects of the future rather than extrapolation
- Capture possible (crazy) future ideas and generate scenarios
- Think the unthinkable
Underlying concept for scenario development

1. Scenario building based on a holistic approach

ICT Developments and Innovations → Government & Administration, Policies / Law → Economics, Efficiency and Effectiveness → Governments in 2020

Society (environmental factors)

2. Extraction of issues from scenarios and classification in respect to their uncertainty and impact on future eGovernment

Scenarios

Impact

Uncertainty

Low

High

Low

High

3. Validation of the workshop results and consolidation of aspects, extraction of three key dimensions

4. Synthesis of results into final eighth alternative scenario pictures
Results from scenario building
The 29 scenarios in core dimensions
Results from scenario building
Consolidation of scenarios into a set of final 8 scenarios

- Individualized society
- Government focus on core business
- Orchestrating government
- Empowering state
- Incident Politics
- Transition period
- Disruptive environment
- Stable environment
- Trust in government
- Distrust in government
- Government keeps on trying
- All inclusive government
- Ambient government

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**Abstract:** Government is all around. Citizens have a high confidence in government to effectively and efficiently settle issues for the common good. They are helped by a stable development of key environment variables.

### Core elements of scenario:

<table>
<thead>
<tr>
<th>Society and context</th>
<th>Government</th>
<th>ICT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europeanization</td>
<td>Cooperation between Europe’s governments</td>
<td>Communication across cultures</td>
</tr>
<tr>
<td>Standardisation</td>
<td>Central EU eProcurement</td>
<td>ICT as driver e.g. economic growth</td>
</tr>
<tr>
<td>High investments into education as prevention measurement</td>
<td>No physical contact (high quality of eServices)</td>
<td>Universal wireless networks</td>
</tr>
<tr>
<td>Internet communities</td>
<td>Political power at EU and local level raises, decrease at national level</td>
<td>Security standards</td>
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#### Government
- Cooperation between Europe’s governments
- Central EU eProcurement
- No physical contact (high quality of eServices)
- Political power at EU and local level raises, decrease at national level
- Transparent decision-making
- Public-Private Partnerships

#### ICT
- Communication across cultures
- ICT as driver e.g. economic growth
- Universal wireless networks
- Security standards
- Sector-specific regulation
- Service-oriented architecture
The most negative scenario

Incident politics
[Disruptive environment, distrust in government, government focus on core business]

Abstract. Two-class- society: On the one hand young, well-educated citizens always on the move and always on the run. On the other hand old citizens with only little understanding of existing ICT. Society has become largely individualistic, with only a small role for government that is distrusted. A disruptive environment is the reason why citizens demand security, and ICT is deployed for that purposes, as well as to increase the efficiency and effectiveness of government.

Core elements of scenario:

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<tr>
<td>Social exclusion, digital divide</td>
<td>Problems with providing essential services</td>
<td>Remote monitoring</td>
</tr>
<tr>
<td>Instable environment (terrorism, religious wars)</td>
<td>Restricted role in legal &amp; governmental issues</td>
<td>Implanted devices</td>
</tr>
<tr>
<td>Ageing society</td>
<td>Simplification of procedures and organisational structures</td>
<td>eParticipation</td>
</tr>
<tr>
<td>Privacy subordinated to security</td>
<td>Cooperation and common policy</td>
<td>eServices</td>
</tr>
<tr>
<td>Individualism and self-responsibility</td>
<td>Depersonalised interaction between government and citizens</td>
<td>Ubiquitous Digital Right Management</td>
</tr>
</tbody>
</table>
**Individualized society**

*Stable environment, distrust in government, government focus on core business*

People have become more and more individualistic and self-responsible. They want to get individual responsibilities as a mean to get the maximum out of their potential and for social security purposes. Government only takes care of essential facilities; because of the stable environment the private sector is in the position to compensate the lack of capacity of the public sector.

### Society and context
- Cosmopolitan
- Europeanization
- Data protection
- Stable environment
- Inclusive society
- Self-responsibility
- Individual networks
- Clans und cliques play an important role

### Government
- Legal power is fairly distributed
- Distrust in government
- Low Participation
- Outsourcing, Public-Private-Partnerships (e.g. health care)
- Focus on core business
- Flattened hierarchies

### ICT
- Monitoring technologies
- Dealing with information overload
- Context-based translation service
- Networks of contact using P2P exchange mechanism
- Information and knowledge management
- Personal broker
Disruptive developments that were predicted at the start of the 21st century did not occur or had only a modest effect on Europe’s societies. Because of the stable environment government adopts a facilitating, but limited role in society, which attitude is broadly supported.

**Society and context**

- Inclusive society
- Stable environment
- Integration of ageing society
- Europeanization
- Trust in government

**Government**

- Government focus on core business
- Outsourcing of non-core business (Public-Private-Partnerships) for
  - Cost efficiency
  - Service quality
- No personalised services
- Transparency (Legislation)
- Legal and social norms are not automated

**ICT**

- Mobility
- eCrimes and eTerrorism
- Technical standards
- Unique identity
**Government keeps on trying**  
*Stable environment, distrust in government, government focus on inclusive services*

Despite its efforts to be involved in the bettering of the quality of life at all fronts, trust in government is low. People experience a big gap between the technocratic government and their own skills and possibilities to take part in eGovernment.

### Society and context
- Europeanization
- Stable environment
- No digital and social divide
- Data protection
- Simplification of legal framework
- Multinationals get more power

### Government
- Governments competing with each other
- Decreasing national power
- Government focus on inclusive services
- Personalised services
- Public-Private Partnerships
- Low participation

### ICT
- Automated processes
- Networking of ICT-systems
**Transition period**

[Disruptive environment, distrust in government, government focus on inclusive services]

In a highly polarized world, governments focus on key state tasks. The socio-economic policy is aimed at individuals taking their own responsibility, a mentality that rests on great support in 2020’s society.

**Society and context**
- War on resources
- Rapid growth of world economy
- Critical international relationships
- Security vs. privacy
- Mobility and welfare
- Social divide
- Distrust in government

**Government**
- Outsourcing of (e)Services
- No user-centric service production
- Increased participation in decision-making

**ICT**
- Built-in technology and information infrastructure
- Transparency
- New, innovative participation mechanisms
- Global and local standards
- Open-Source-Software becomes less important, robust quality through proprietary software
Social state
[Disruptive environment, trust in government, government focus on inclusive services]

Society has changed dramatically because of demographic and security-related developments. Government has been able to catch up with the high expectations from citizens and fulfils a key role in the provision of eServices, using state of play technology. Government provides all inclusive services in order to fulfil the expectations of the public and to bring the instable environment under control.

**Society and context**
- Increasing social tension
- Job mobility
- European Union becomes common economy
- Crisis because of unequal resource allocation and welfare
- Privacy subordinated to security
- Huge shared service centres

**Government**
- eServices
- Investment in participation
- Back warding delivery of public services
- Media is still most important power in decision-making
- High quality and omnipresent service delivery
- Networking agencies
- Unique European identity

**ICT**
- Technical and legal measures for data collection and data processing
- Rights management: anonymous & encoded access to automated data
- Technology is transparent and does not disturb human interaction in a negative way

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Empowering state
[Disruptive environment, trust in government, government focus on core business]

In a rapidly changing, confusing world, citizens do not have much trust in public administration and hence become self-responsible. The government focus on their core business, however, persists in its role as caretaker for society but fails. There is a large social gap.

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<td>Individual mentality</td>
<td>Less protection of privacy</td>
<td>Security measurements</td>
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<td>Ageing society</td>
<td>Trust in government</td>
<td>Development of technical</td>
</tr>
<tr>
<td>Social divide (education, income)</td>
<td>No interest in decision-making</td>
<td>standards for identity management</td>
</tr>
<tr>
<td>Protectionism of economy</td>
<td>No transparency within the decision-making</td>
<td></td>
</tr>
<tr>
<td>Failure of Europeanization</td>
<td>Private parties are excluded from the service</td>
<td></td>
</tr>
<tr>
<td>Mobility in Europe</td>
<td>delivery process</td>
<td></td>
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<td>Intensive international tensions</td>
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Gap Analysis

State of Play:
- Topics of Interest
- Dimensions

Input for the Gap Analysis

Scenarios:
- Topics of Interest
- Dimensions

Step 1: Identify commonalities and gaps in commonalities

- Diverging understanding
- Insufficient results from current research
- Understanding interrelationships / interdependencies
- Identify further need of current research

Step 2: Identify gaps between the scenarios and the state of play

- Identify topics of interest emerging in the scenarios but not in the state of play
- Evaluation of comprehensiveness of all relevant topics of interest

Step 3: Assess gaps according to their relevance and impact to the governance model

- policy formulation
- policy execution
- policy enforcement

Step 4: Develop gap storylines to convey the need of targeted research in specific eGovernment themes

- for gaps ranked as high / very high
- to argue the need of future research emerging from the scenarios, and risks and weaknesses in current research
Research gaps identified in a number of dimensions (1/2)

- Lean Government
- Incident Politics
- Competition among nations / regions
- Transparency
- New Types of Governance
- Government Network
- Information and Knowledge Management
- ICT as driver
- Ubiquitous systems
- eParticipation
- One European identity & Worldwide Identification/authentication & use of Biometrics
Research gaps identified in a number of dimensions (2/2)

- Automatic monitoring and enforcement
- Ontology and Semantic Web
- Crisis Management
- Intellectual property
- Globalisation
- Cyber wars and crimes
- Virtual borders and citizenship
- Changing public values
Extraction of 13 research themes

- Trust in eGovernment
- Semantic and cultural interoperability of public services
- Information quality
- Assessing the value of government ICT investments
- E-participation, citizen engagement and democratic processes
- Mission-oriented goals and performance management
- Cyberinfrastructures for eGovernment
- Ontologies and intelligent information and knowledge management
- Governance of public-private-civic sector relationships
- Government’s role in the virtual world
- Crossing borders and the need for governance capabilities
- eGovernment in the context of socio-demographic change
- Data privacy and personal identity
Example of research roadmap for trust in eGovernment

1: Studies to create understanding
2: Develop a framework
3: Risk assessment of the framework
4: Analysis of Costs and Benefits of increased trust
5: Create a legal basis for implementation
6: Apply the framework
7: develop a trusted pan-European model
Thank you for your attention!

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