



# eGovRTD2020: Roadmapping eGovernment 2020



**Melanie Bicking**



**Xiaofeng Ma**

# Overall project objectives

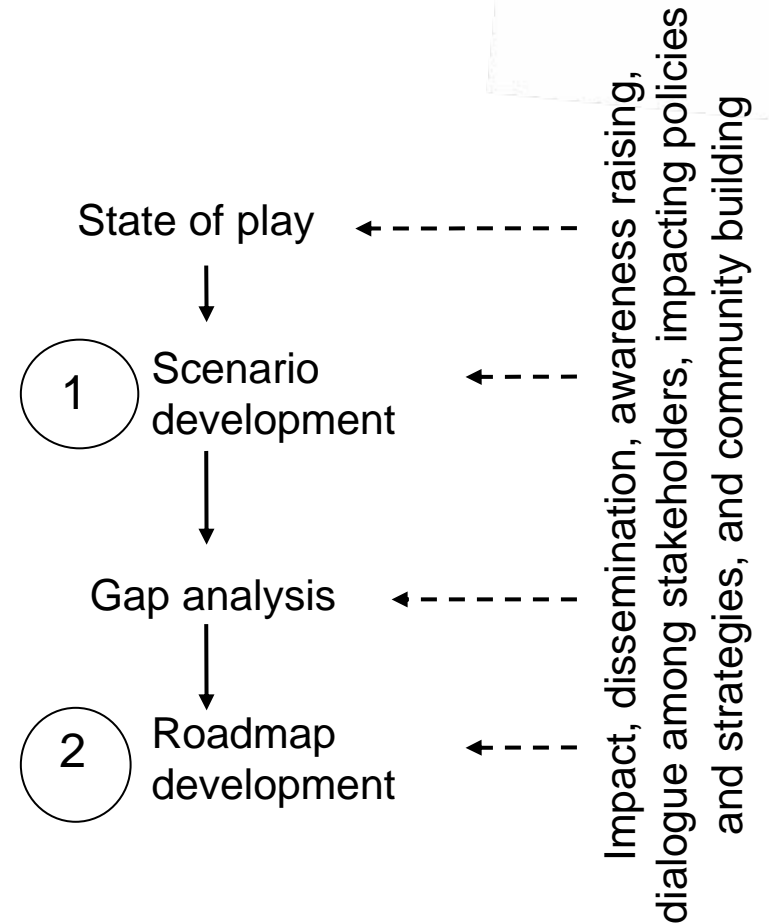
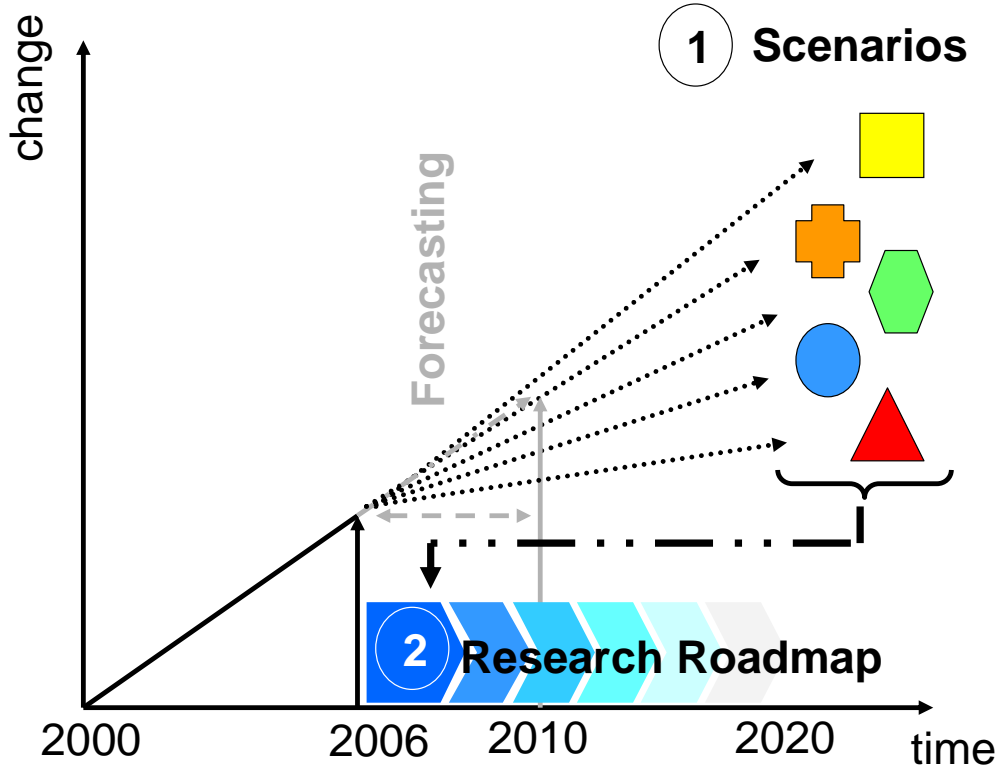


Contract no: IST-4-27139

- Identify and characterize key **research challenges** and an implementation model for dynamic governments in 2020
  - Develop **visionary scenarios** of eGovernment for 2020
  - Develop a **detailed research roadmap** for the transformation process
- **Vision**
  - transform the EC Government **landscape into a coherent community**
  - contribute to the development of the EC as a **leading knowledge society**



# Overall methodology



# Seven regional workshops for scenario building



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Region	Participants	# Scen.
Western Europe NL: Delft	4 Government, 7 Research, 8 Business	4
Northern & Baltic States LI: Vilnius	5 Government , 8 Research, 5 Business	3
Central Europe DE: Koblenz	2 Government, 13 Research, 4 Business	5
Central Europe AT: Linz	11 Government, 9 Research, 5 Business	4
Eastern European CZ: Prague	1 Government, 13 Research, 1 Business	4
Southern / Eastern Europe – SI: Bled	2 Government, 12 Research, 5 Business	5
USA: San Diego	2 Government, 23 Research, 1 Business	4



# Gap analysis methodology



**Step 1:**  
Identify commonalities and weaknesses of commonalities

**Step 2:**  
Identify topics of interest mentioned in the scenarios but not in the state of play

**Step 3:**  
Assess topics of interest according to their relevance (policy formulation, execution and enforcement)

**Step 4:**  
Develop story lines from the identified gaps in respect to the scenarios

# Short description of research gaps I



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## ■ Gap 1 **Lean Government**

- The conditions for efficient sub-contracting (outsourcing) to private sector with respect of general interest service requirement is a major issue. Research aiming at comparative legal and policy analysis could be useful as well as research on cooperation between private organisations and government
- Lack of studies about the efficiency of the cooperation through these Public-Private Relationships structures. Studies needed for the comparative analysis in various member states of such partnership
- Research is needed to identify and set up a portfolio of services which assess their potential for outsourcing and those which must be provided by governments.

## ■ Gap 2 **Incident Politics**

- The missing technologies for full automation of public-services have to be created as well as the solutions for some legal, social and ethical problems (e.g. privacy, security, etc.) have to be found. Full automation could help to solve the problem of increasing bureaucracy, but the ways how to re-qualify and re-use the free human resources must be found, contrarily there will be a huge bureaucratic resistance to front- and back-office reengineering. The software tools for the transparent political decision-making must be implemented

## ■ Gap 3 **Competition among nations**

- Lack of knowledge concerning the role of eGovernment policy and eGovernment services quality in the decision of citizens and companies to select a national government. The gap is related to the problem of identifying how ICT can help a government improve its attractiveness to citizens and organisation.



# Short description of research gaps II



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- **Gap 4 Competition among regions**
  - Lack of knowledge concerning the role of eGovernment policy and eGovernment services quality in the decision of citizens and companies to select a regional government. The gap is related to the problem of identifying how ICT can help a government improve its attractiveness to citizens and organisation.
- **Gap 5 Transparency**
  - The need to understand better what are the conditions of access and use of these data so that the rights of citizens and organisations guarantee by law can be protected and enforced . Also how government can in a legitimate way use ICT to provide services which add value the public data.
- **Gap 6 New Types of Governance**
  - Improving the supply of general interest services in a transparent way to citizens and companies including when activities are crossing national state borders. Research on how to imbed knowledge based application and models in eGovernment application to provide better services to the citizens and companies is highly useful.
  - A better understanding of new types of governance mechanisms enabled by ICT is necessary to deploy shared services in public service networks.



# Short description of research gaps III



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## ■ Gap 7 **Government Network**

- In order to achieve government system's integration and virtualization which enable creating one single access point, development and research programs should be further focused on defining, enabling cooperation among private and public agencies.

## ■ Gap 8 **Information and Knowledge Management**

- Lack of efficient information and knowledge management tools promoting and supporting citizens and companies to operate eGovernment services.

## ■ Gap 9 **ICT as driver**

- There is a lack of integrated research before, whilst and after the implementation process of new and innovative ICT to prevent and avoid misplaced investments and ensure quality standards of the implemented system.



# Short description of research gaps IV



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- **Gap 10 Ubiquitous systems**
  - Integrated research is needed to identify opportunities to merge the deployment of different ICT for government modernization purposes, particular at the back-office to increase efficiency and at the front-office regarding multi-channel access and inclusion issues.
- **Gap 11 eParticipation**
  - Lack of research concerning media competencies citizens will need to participate in policy formulation and decision-making process, and the deployment of ICT to support decision-making.
  - Lack of technical research concerning ICT dependency.
- **Gap 12 One European identity & Worldwide Identification/authentication & use of Biometrics**
  - further development and research programs focused on establishing one European identity system
  - Unique identification and authentication for all needed services are offered by chip technology in all areas of life.
  - future research and development programs should be focused on usage of chips and biometrics data in worldwide identification. Also, relating worldwide identification, privacy is becoming very important issue in the future.



# Short description of research gaps V



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- **Gap 13 Automatic monitoring and enforcement**
  - Automating monitoring for data collection and enforcement would be important future research topics. It is closely connected to privacy issues and remote monitoring dimension. In order to provide automatic judgment, intelligent judgment, control over information gathering and use, monitoring for data collection and decision making more research is needed in this field for the future.
- **Gap 14 Ontology and Semantic Web**
  - Common European eGovernment ontology and agreed European eGovernment glossary are not established. Common specifications for semantic interoperability are claimed in as being needed for instance through a regular eGovernment service terminology and service information model.
  - In regard to globalization, a need and likely a successful development of automatic translation machines will progress, which will help to bridge the distance between people speaking different languages. For assuring this, more research is needed to be focused in this field.
- **Gap 15 Crisis Management**
  - Lack of knowledge concerning the identification of critical situations with high impact on people life, health and property with huge economic and ethical consequences . The same is true concerning the impact on organisations . How ICT can contribute to detect , prevent and help government manage these situations.
  - Lack of knowledge on how different national and/or regional governmental agencies can better be coordinated in a efficient way using ICT system when natural disasters occur.



# Short description of research gaps VI



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- **Gap 16 Problems with social security and pensions**
  - Lack of knowledge concerning the evaluation of the efficiency of these services and lack of development of pan-European eGov services concerning the basic three public services: health care financing, state pension, state support for unemployed.
  - Lack of research about the psychological, societal, legal, institutional and economic aspects of using ICT to balance between security control and privacy protection
- **Gap 17 Intellectual property**
  - Lack of regulation according to the deployment of ICT regarding the access to and use of data, in particular intellectual property .
- **Gap 18 Globalisation**
  - Research is needed to identify and develop business models which cover the challenges eGovernment will face if Europe citizens continuing to become more mobile and the Europeanization will raise, and Globalisation will continue.





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# Short description of research gaps VII

## ■ Gap 19 **Cyber wars and crimes**

- Distrust in eMoney and raising occurrence of cyber crime result in needs for additional information and data security for eGovernment infrastructures
- develop concepts, methods and tools to detect and counteract corruption, crime and terrorism activities taking e.g. place via the Internet or being prepared via the Internet
- need for cooperation and networking information security policies on at least EU level
- focus on related domains like psychological, societal, institutional, legal or economic aspects which can prevent eCrime

## ■ Gap 20 **Virtual borders and citizenship**

- No research deal with issues like: What is virtual citizenship? What kind of virtual borders exist already and will come into existence? How will those virtual borders affect citizenship.

## ■ Gap 21 **Changing public values**

- The scope of public values research need to be expanded. Combining sources by different types of agencies situated in different (EU) countries and the relationship with public values is not explored yet.
- Public values vary from country to country which makes comparison difficult.
- Public values change over time which make new type of services possible, for example related to monitoring.
- Privacy protection is sometimes subordinated to the public welfare and fight against terrorism and might be considerably different from how they are now.



# Finally there are 21 gaps, we allocate them into three groups for this workshop



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## Group 1:

Participants are interested in, and have good knowledge on government business and public management

Issues to be discussed:

- Lean Government
- Incident Politics
- Competition among nations
- Competition among regions
- Transparency
- New Types of Governance
- Government Network

## Group 2:

Participants who are interested in, and have a good knowledge in technology and eGov applications

Issues to be discussed:

- Information and Knowledge Management
- ICT as driver
- Ubiquitous systems
- eParticipation
- Unique European ID & authentication & Use of Biometrics
- Automatic monitoring and enforcement
- Ontology and Semantic Web

## Group 3:

Participants who are interested in, and have good knowledge in the interaction of Government with context (e.g. society, economics)

Issues to be discussed:

- Crisis Management
- Problems with social security and pensions
- Intellectual property
- Globalisation
- Cyber wars and crimes
- Virtual borders and citizenship
- Changing public values





**Thanks for your attention!**

**I will be around and willing to answer any question  
during the group discussion**

**The eGovRTD2020 Consortium.**

**<http://www.egovrtd2020.org/>**

**Final Results of Roadmapping Workshops will be published  
mid February 2007**