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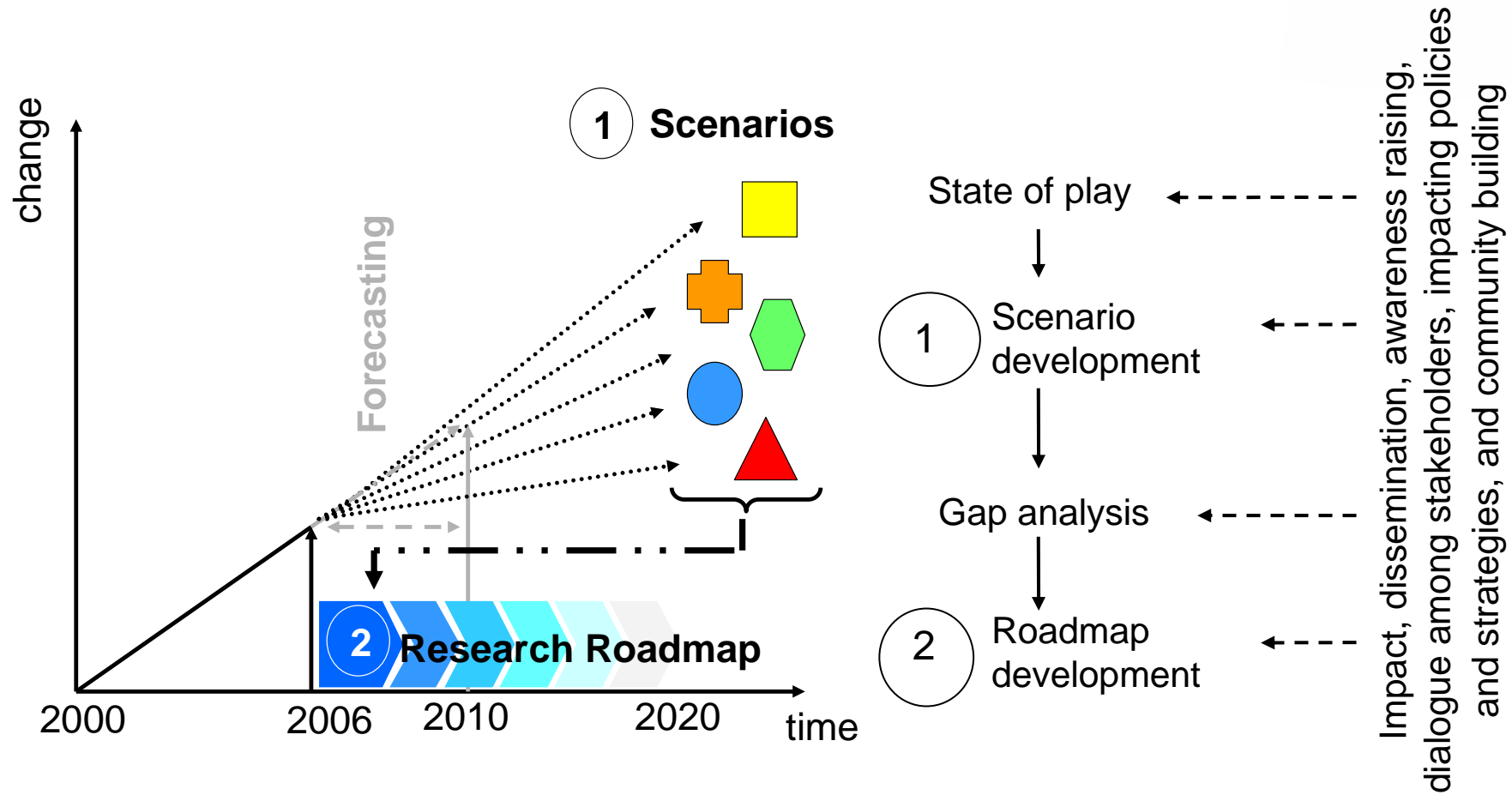
# Roadmapping eGovernment RTD 2020

Visions and Research Measures towards European Citizenship and  
Innovative Government

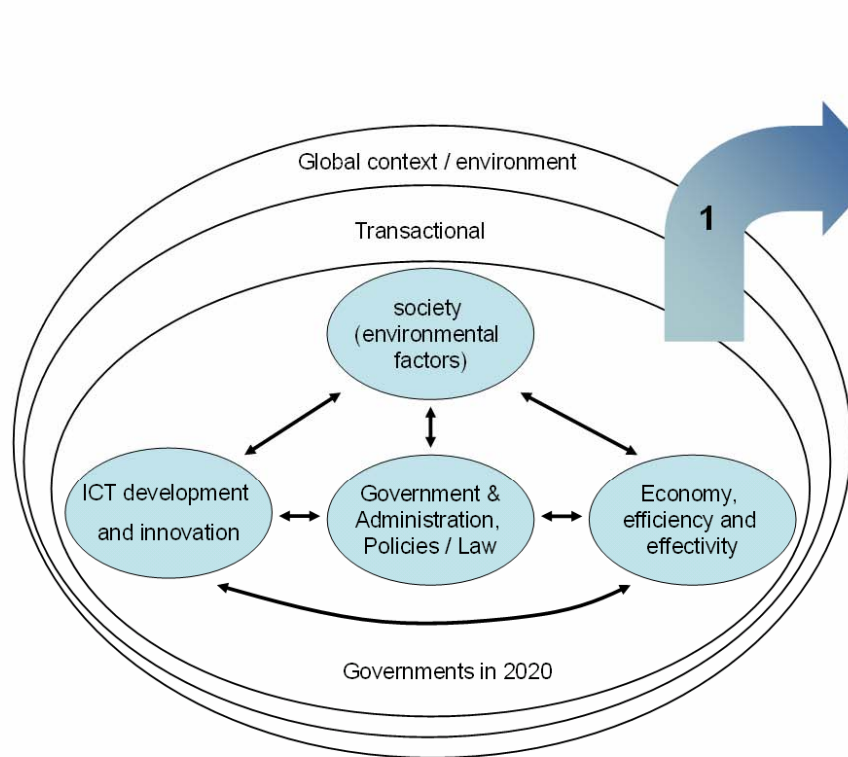


Maria A. Wimmer

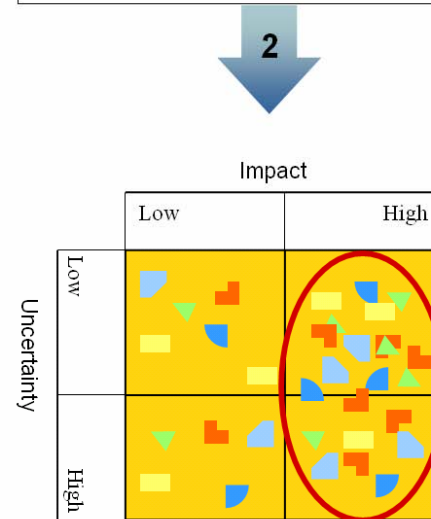
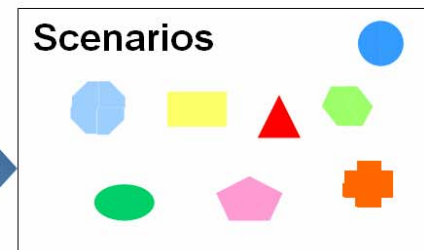
# Methodology



# Basic concept of scenario building



1. Scenario building based on a holistic approach

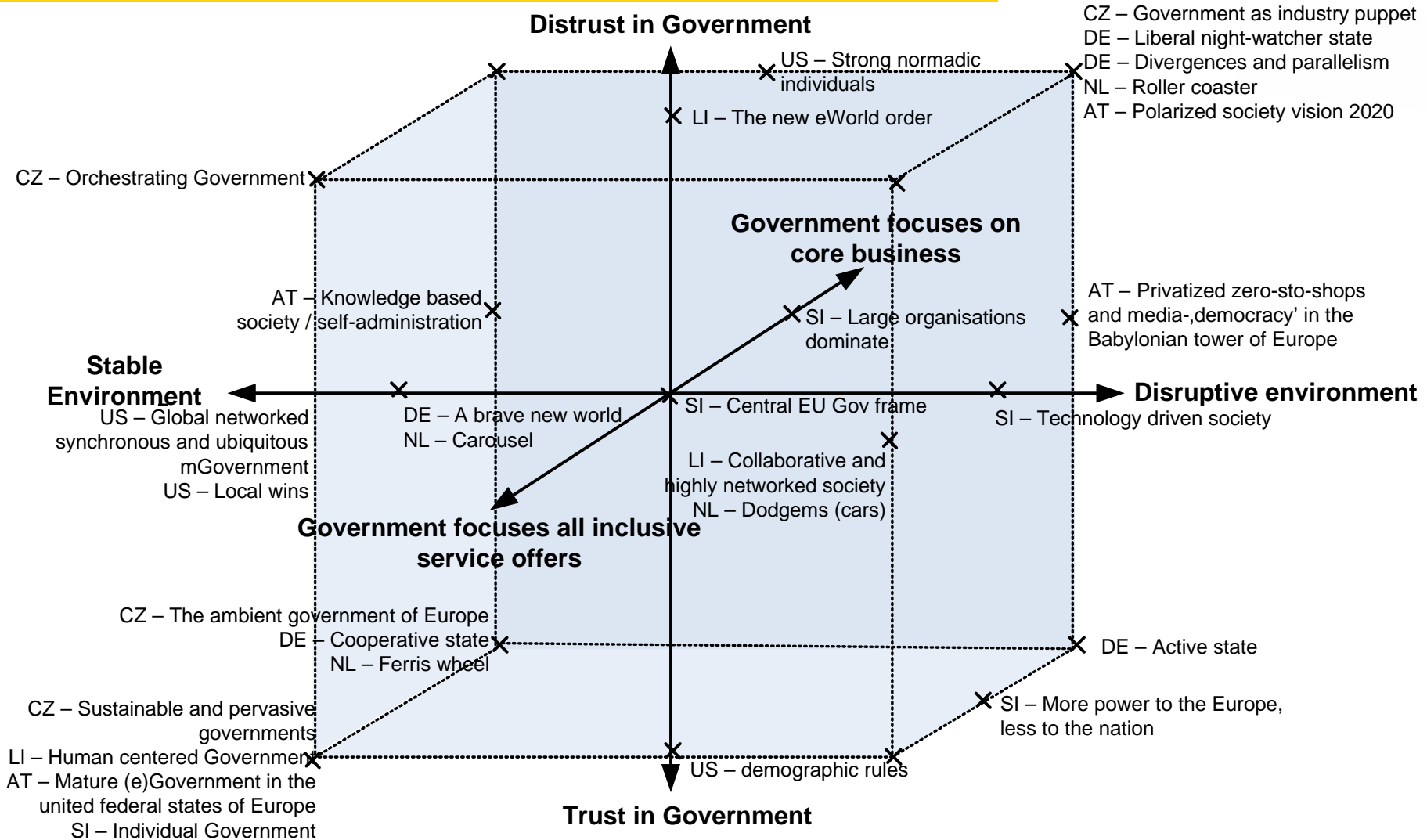


2. Extraction of issues from the scenarios and classification of issues to their uncertainty and impact on eGovernment

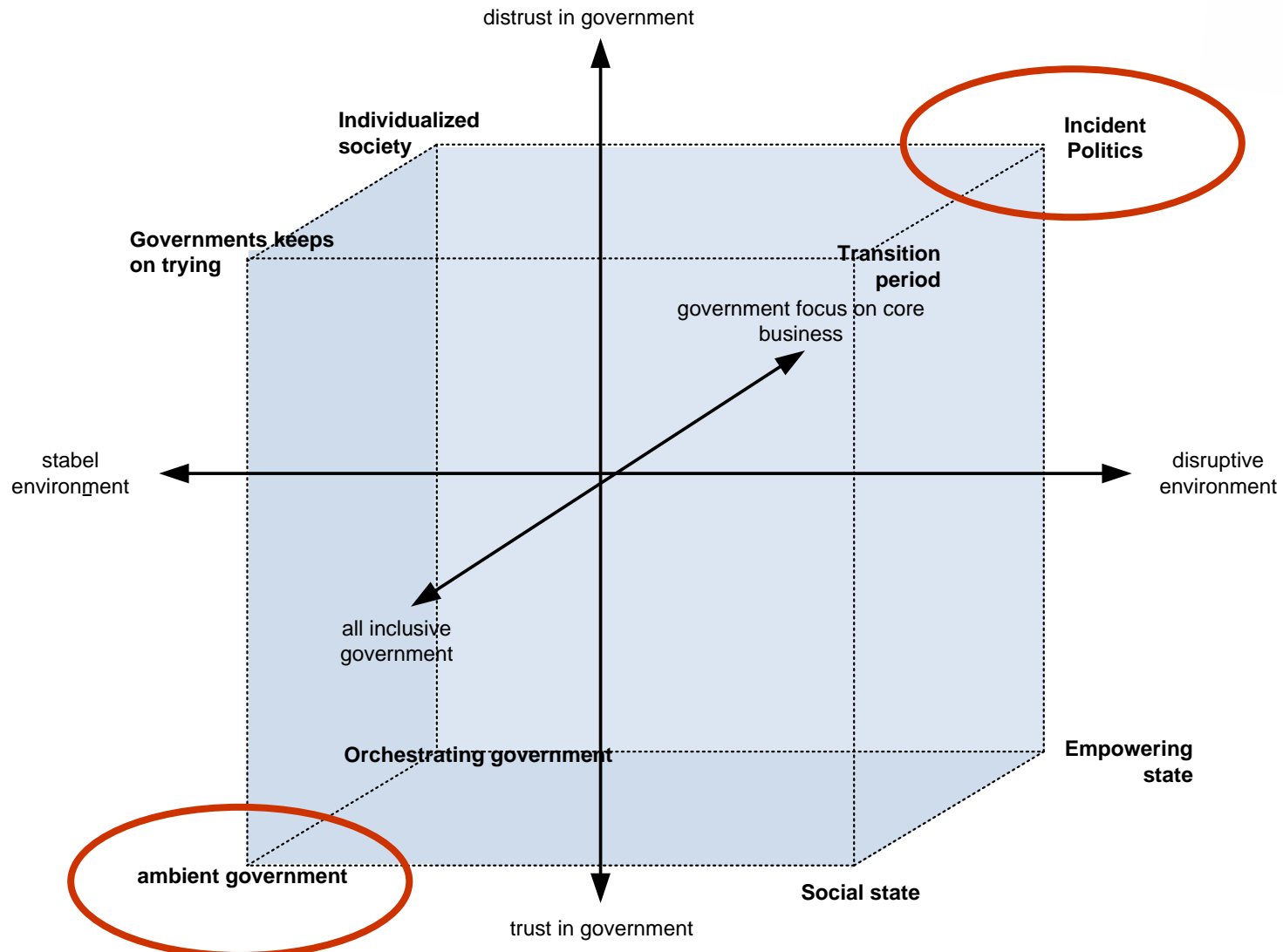
3. Validation of the workshop results and consolidation of aspects; extraction of three key dimensions

4. Synthesis of results into final eight alternative scenario pictures

# Allocation of 29 scenarios in three core dimensions



# Final eight scenarios



# Ambient government

[Stable environment, trust in government, government focus on inclusive services]



*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.*

## **Society and context**

Europeanization

Standardisation

High investments into education as prevention measurement

Internet communities

## **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 (biometric identification, RFID chips)

Sector-specific regulation

Service-oriented architecture

Interconnectivity, interoperability, automated services

Content & knowledge management



# Incident Politics

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



*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.*



# Incident Politics

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



## Society and context

Social exclusion, digital divide  
Instable environment (terrorism, religious wars)  
Ageing society  
Economy assume power (Profit more important than privacy)  
Less participation  
Individualism and self-responsibility  
Nationalism  
Europe fails

## Government

Competition between public agencies and regions (Problems to provide essential services among other things through obsolete ICT)  
Problems with providing essential services  
Restricted role in regulation & public administration  
Simplification of procedures and organisational structures  
Cooperation and common policy  
Outsourcing (different qualities, if provided by private sector)  
Depersonalised interaction between government and citizens

## ICT

Remote monitoring (context-dependent privacy protection)  
Automated services with implanted devices  
Low Interoperability  
Tools for eParticipation  
eServices  
Crisis Management Systems



# Gaps in eGovernment research



## ■ Gap 1 Lean Government

- The conditions for efficient sub-contracting / outsourcing to private sector with respect to general interest service requirement is a major issue. Comparative legal and policy analysis and understanding of the means and impact of cooperation between private organisations and government are needed.
- 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 partnerships
- 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.



# Gaps in eGovernment research



- **Gap 2 Maturity and dissemination of automated services**
  - Missing technologies for full automation of public-services
  - Solutions for legal, social and ethical aspects (e.g. privacy, security, etc.) are lacking
  - Impact of full automation to decrease the problem of increasing bureaucracy, to re-qualify and re-use the free human resources needs to be understood
  - How to deal with the huge bureaucratic resistance to front- and back-office reengineering?
  - Software tools for the transparent political decision-making not available



# Gaps in eGovernment research



## ■ Gap 7 **Government Network**

- Impacts and effects of government systems integration and virtualization not well understood
- Barriers of making government networks effective and efficient not known
- Impact of a single access point to the society and the market not understood in terms of economics, public value, etc.
- What is the demand for enabling cooperation among private and public agencies?

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

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



# Gaps in eGovernment research



- **Gap 13 Automatic monitoring and enforcement**
  - Link to privacy issues and remote monitoring needs to be understood well
  - How can automatic judgment, intelligent judgment, control over information gathering and use, monitoring for data collection and decision making be exploited with the help of technology? What technology is required?
- **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, automatic translation machines will be needed



# Gaps in eGovernment research



- **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.
- **Gap 10 Ubiquitous systems**
  - Need 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 eInclusion issues.



# Gaps in eGovernment research



- **Gap 12 One European identity & Worldwide Identification/authentication & use of Biometrics**
  - further development and research programs needed on establishing one European identity system
  - Can unique identification and authentication for all services be offered by chip technology in all areas of life?
  - Usage of chips and biometrics data in worldwide identification not well understood yet
  - How is privacy, which is becoming very important in the future, being treated here?



# Gaps in eGovernment research



## ■ Gap 15 Crisis Management

- Lack of knowledge concerning the identification of critical situations with high impact on people's life, organizations, market, health and property with huge economic and ethical consequences. How can ICT contribute to detect, prevent and help government manage crisis 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 (especially cross-national)



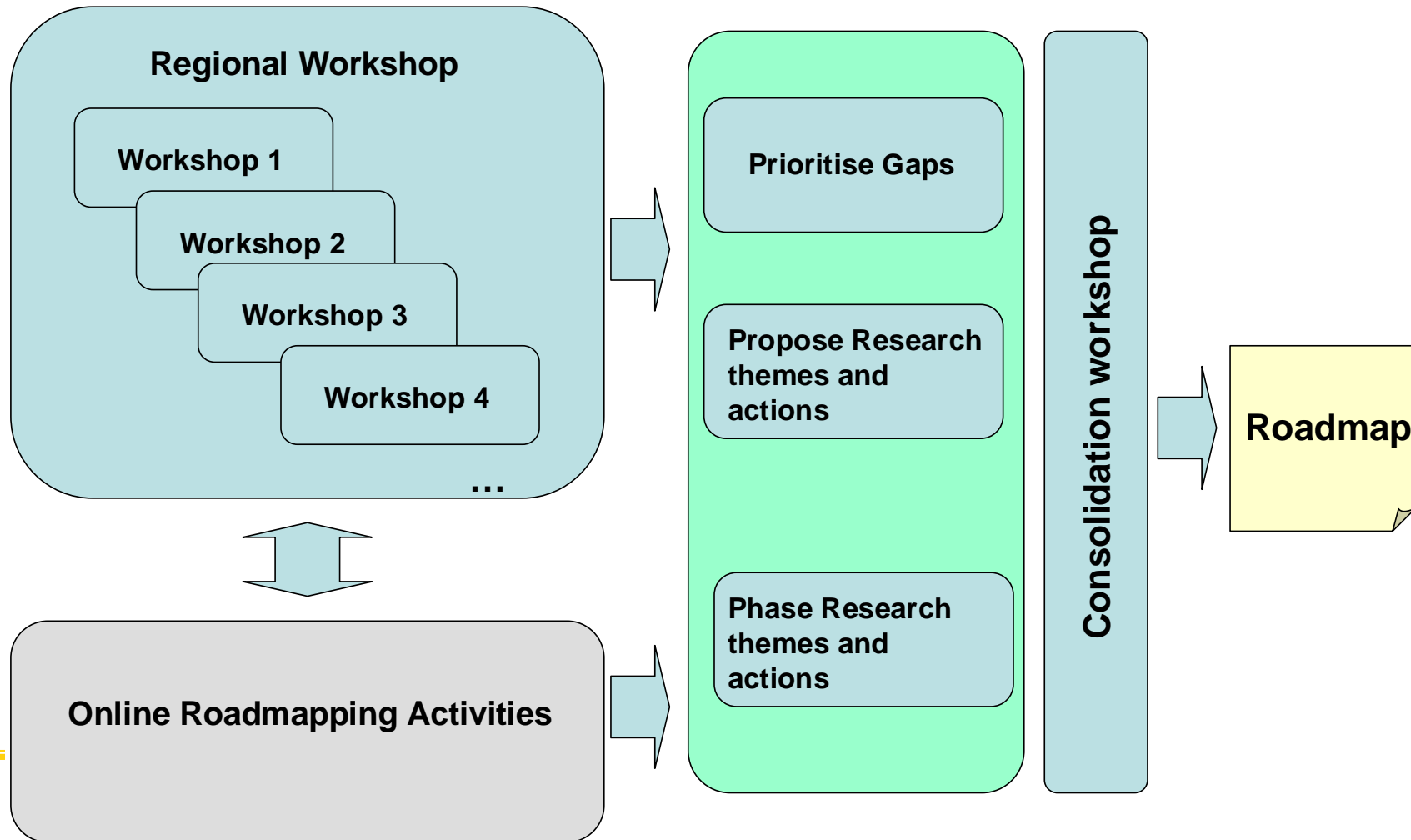
# Gaps in eGovernment research



- **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
  - Need for 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



# Roadmapping





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**Many thanks for your attention!**

**Participate in the eGovRTD2020 online  
consultation for future eGovernment  
research**

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

**Read more about the results on the project website!**