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# Mission e-Government of the next decade

Results from the eGovRTD2020 project



Maria Wimmer

# Agenda



- Introduction to the EC project eGovRTD2020
- Reflections on current research
- Scenarios for governments in 2020
- Research needs identified
- Roadmap of eGovernment research and implementation towards the visions of 2020
- Concluding remarks



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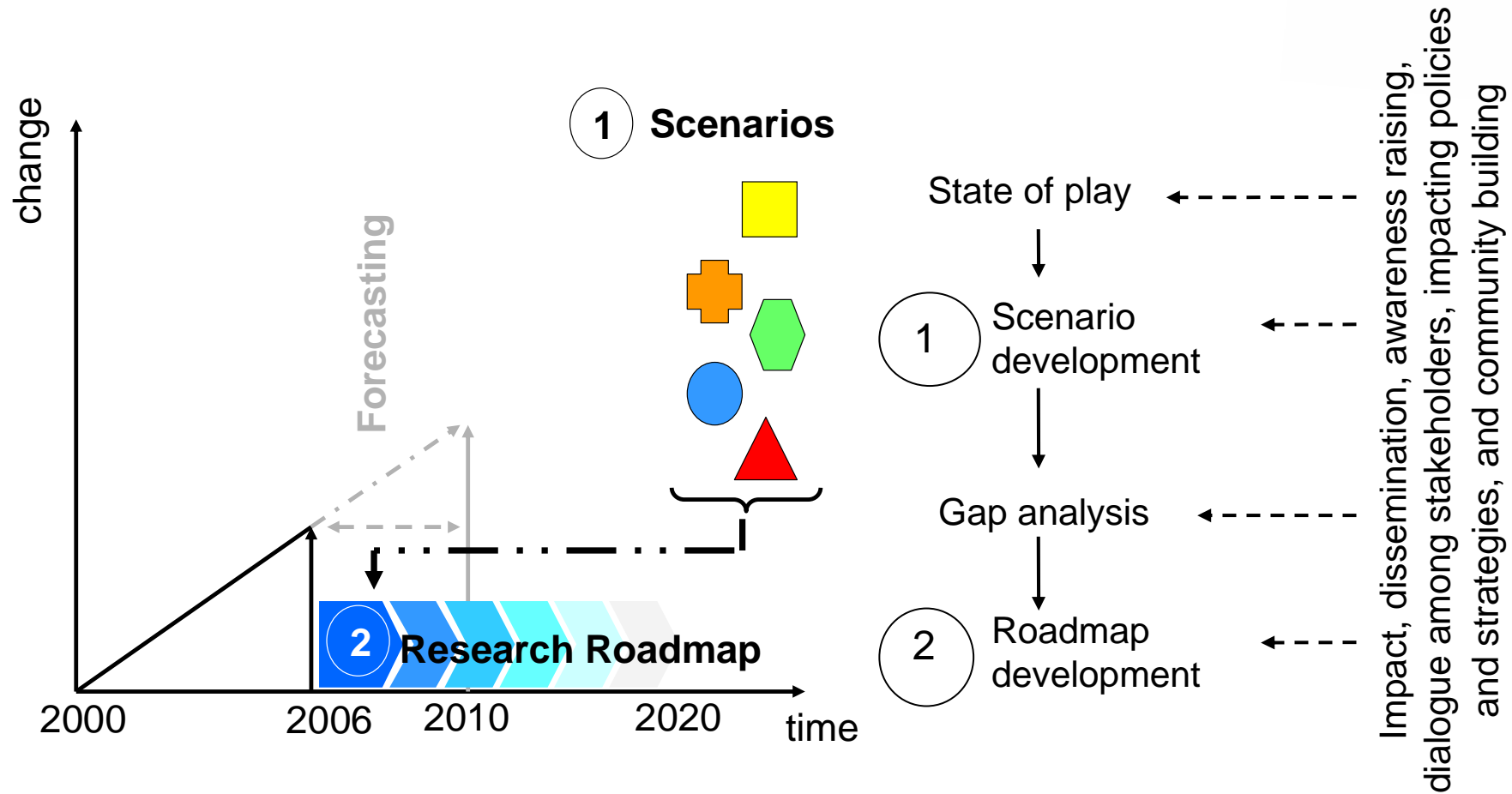
# Overall objectives of the project



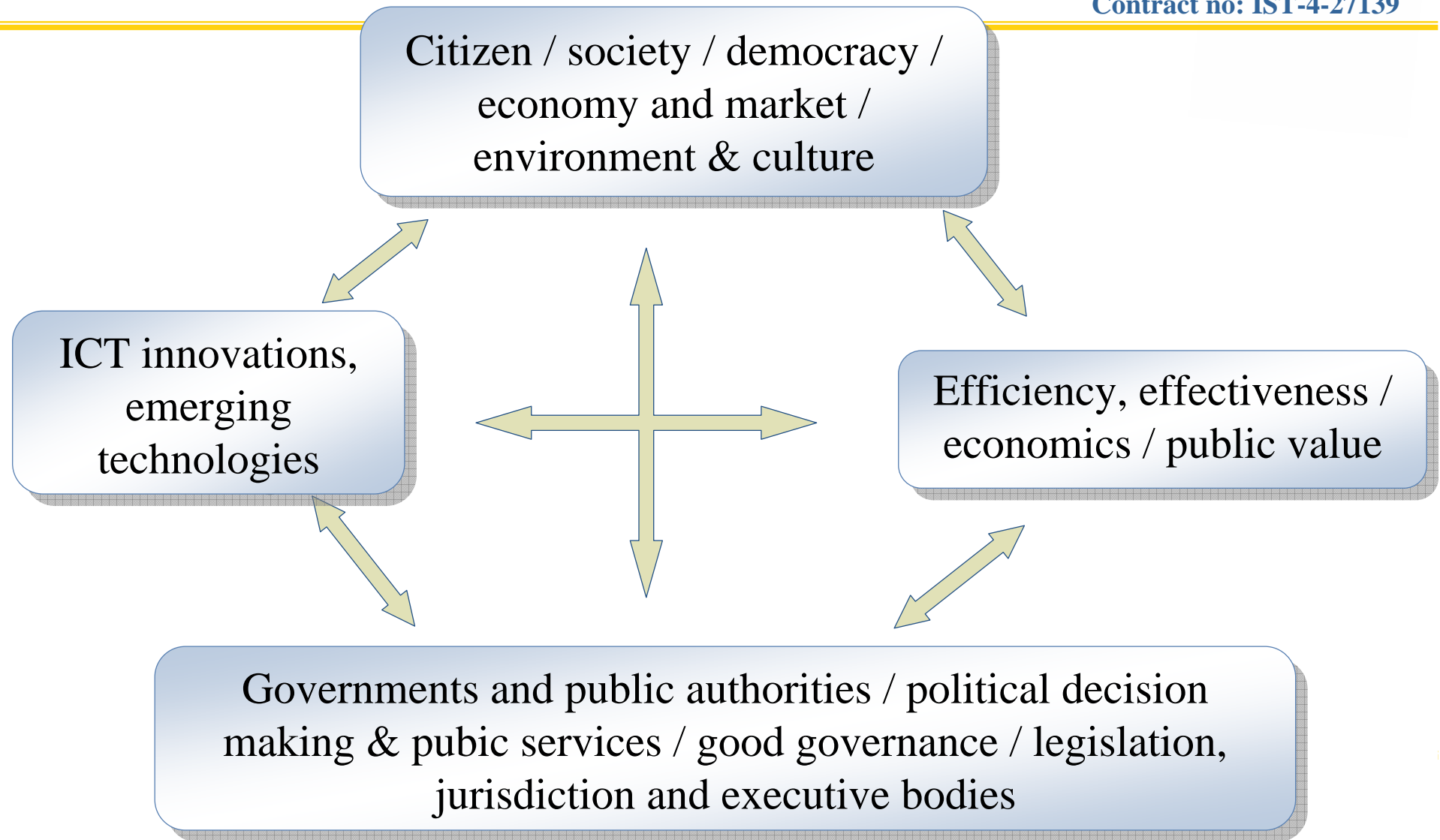
- Identify and characterize key **research challenges** and an implementation model for dynamic governments in 2020
  - Develop **visionary scenarios** of eGovernment for 2020
  - Develop a **detailed research roadmap** for the transformation process
- **Vision**
  - transform the EC Government **landscape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



# eGovRTD2020 Methodology



# Underlying holistic framework



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# Current research foci (1/2)



- Integration and Interoperability
  - Shared services centers, service-oriented architectures, networked governments
  - Integration of legacy systems and long-term storage
  - Communication infrastructure
- Security, Authentication and Identity Management
  - Biometrics
  - Electronic signature
- Digital Rights Management
- Document Management



# Current research foci (2/2)



- eProcurement
- eParticipation
- Knowledge Engineering
  - Ontology development
  - Search (semantic web) and guiding (intelligent agents) methods
- Accessibility
  - Including access for all
- eInclusion
- Privacy and trust



# Topics of research and implementation at EU vs national levels



Contract no: IST-4-27139

EU level topics (from EC documents)	National level topics (from 23 countries' national strategic documents)
Security and trust	
Harmonization and interoperability	
Understanding individual user needs	
eInclusion/eParticipation	
Socio-economic Inclusion	eProcurement
Access for all to government services	Identity management and authentication
Knowledge management	Broadband technology and access



# Agenda

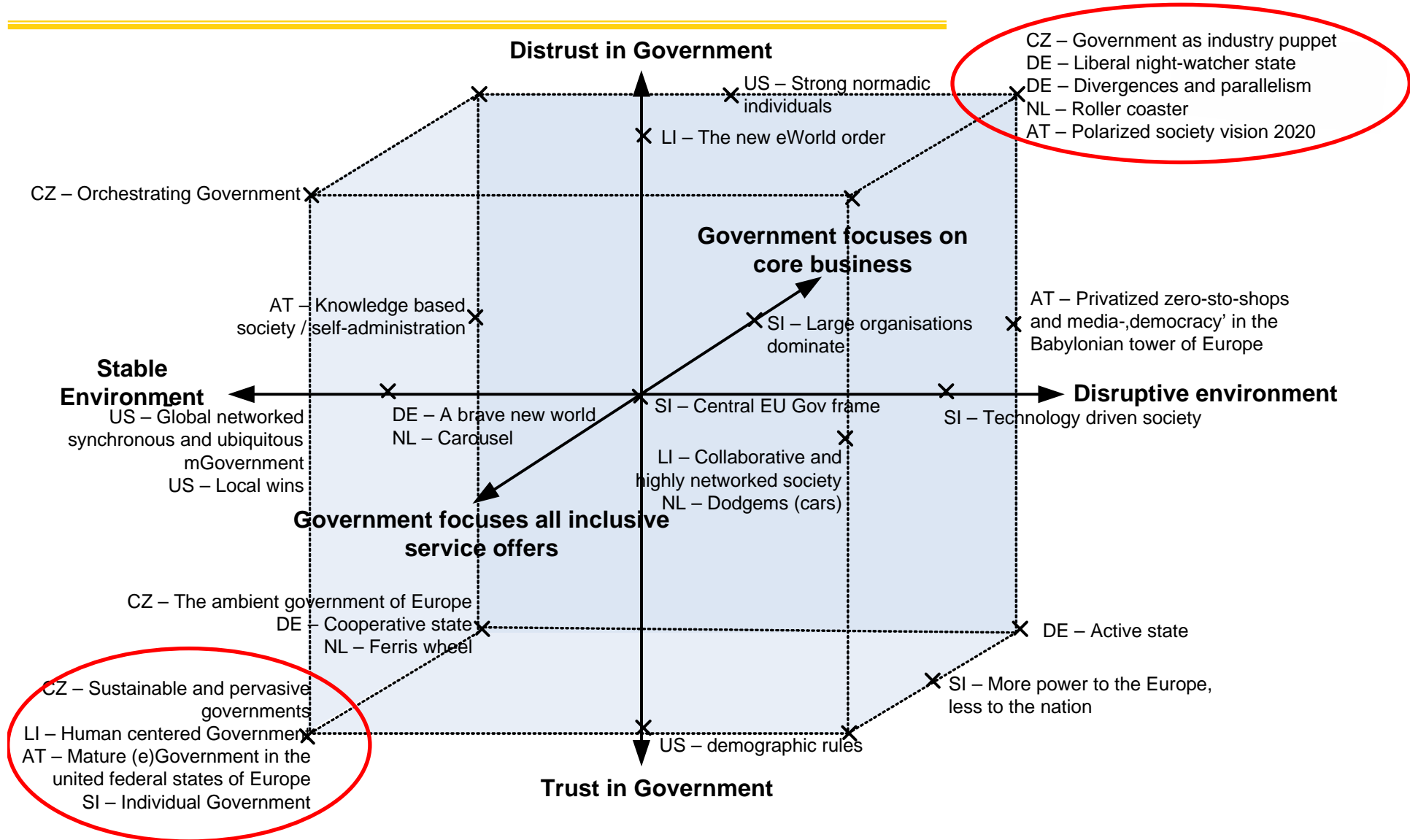


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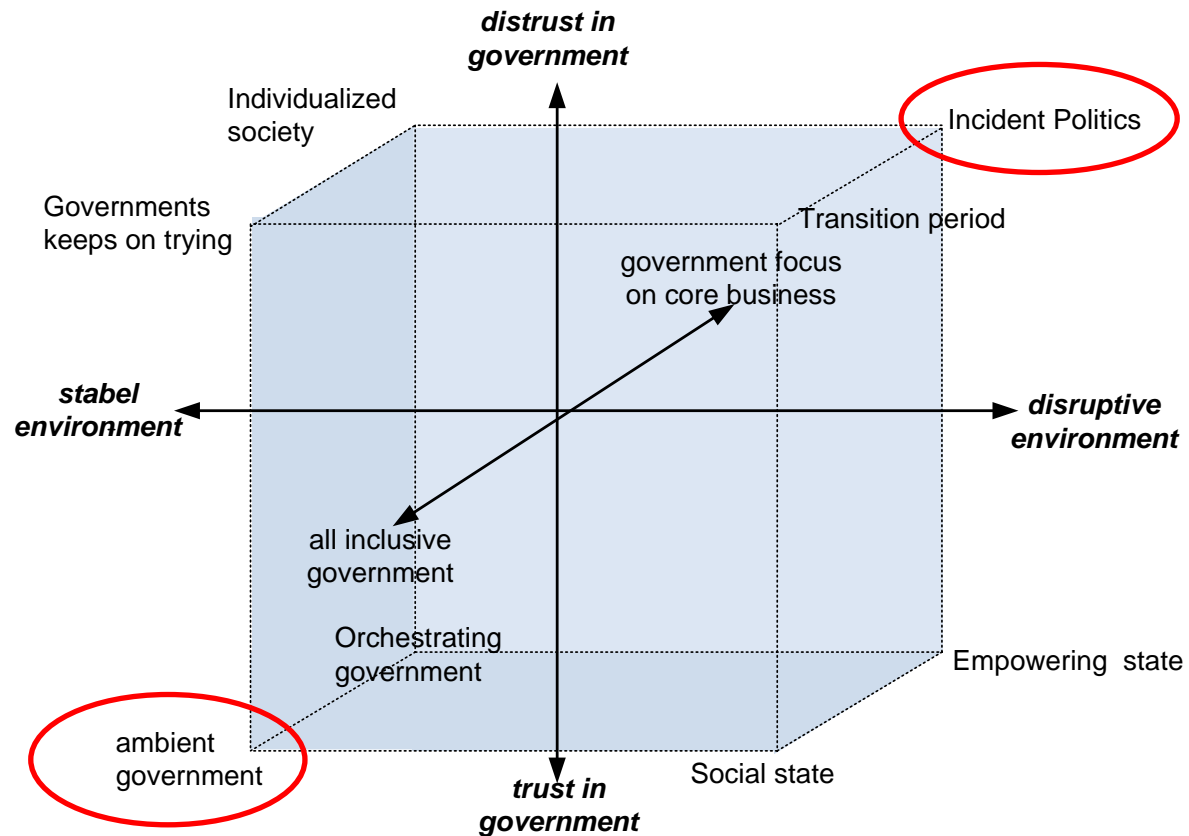
# Results from scenario building

## The 29 scenarios in core dimensions



# Results from scenario building

Consolidation of scenarios into a set of final 8 scenarios



# Ambient government

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



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:

### Society and context

Europeanization  
Standardisation  
High investments into education  
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. for economic growth  
Universal wireless networks  
Security standards  
Sector-specific regulation  
Service-oriented architecture



# Incident politics

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



Contract no: IST-4-27139

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:

### Society and context

Social exclusion, digital divide  
Instable environment (terrorism, religious wars)  
Ageing society  
Privacy subordinated to security  
Individualism and self-responsibility  
Nationalism, Europe breaks down

### Government

Problems with providing essential services  
Restricted role in legal & governmental issues  
Simplification of procedures and organisational structures  
Cooperation and common policy  
Depersonalised interaction between government and citizens

### ICT

Remote monitoring  
Implanted devices  
eParticipation  
eServices  
Ubiquitous Digital Right Management



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# 13 Crucial Themes for Future eGovernment Research



Contract no: IST-4-27139

- Trust in eGovernment
- Semantic and cultural interoperability of public services
- Assessing the value of government ICT investments
- E-participation, citizen engagement and democratic processes
- Mission-oriented goals and performance management
- Cyber infrastructures for eGovernment
- Information quality
- Ontology 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



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# Roadmap activities for Trust in eGovernment ... extraction ...

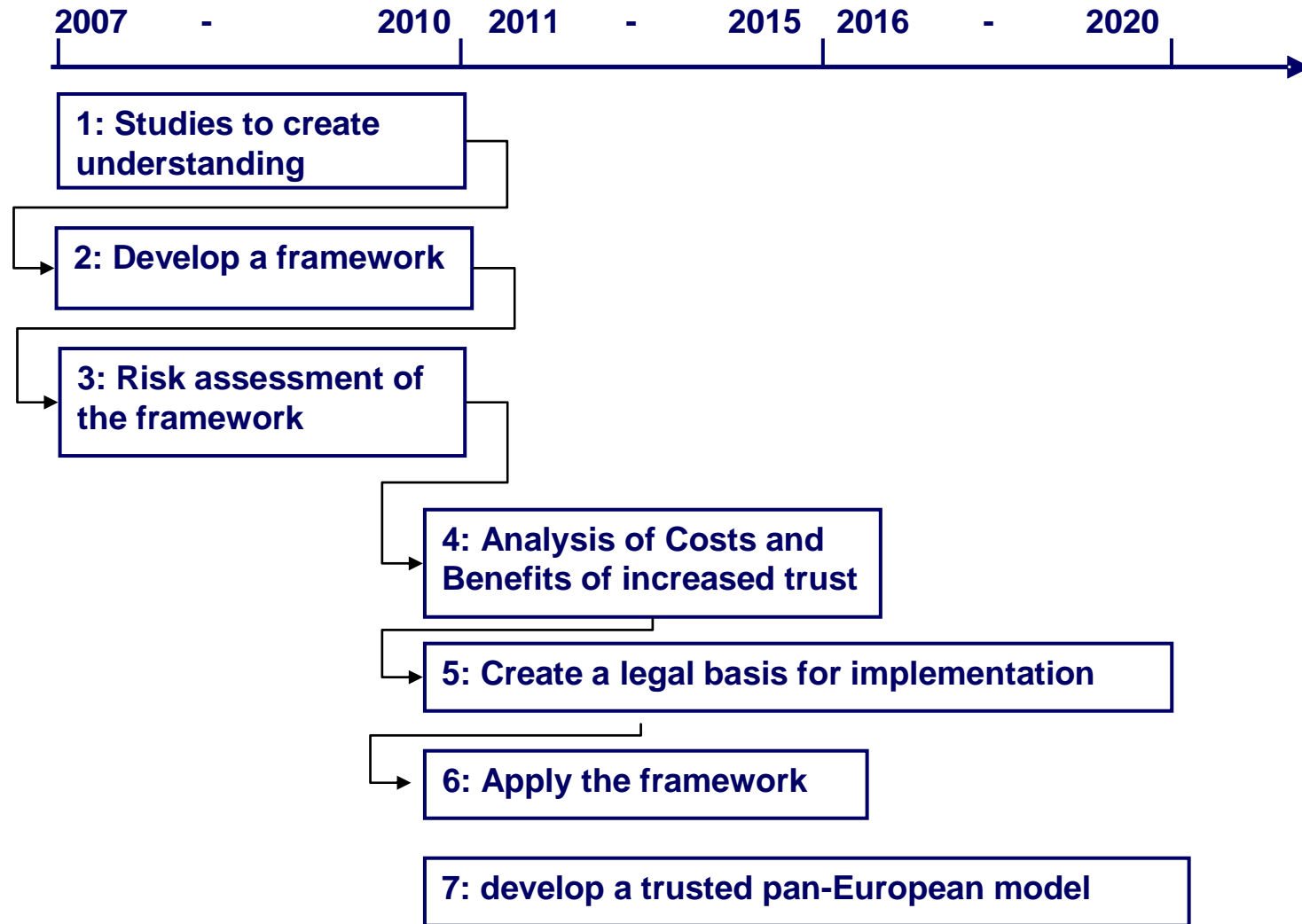


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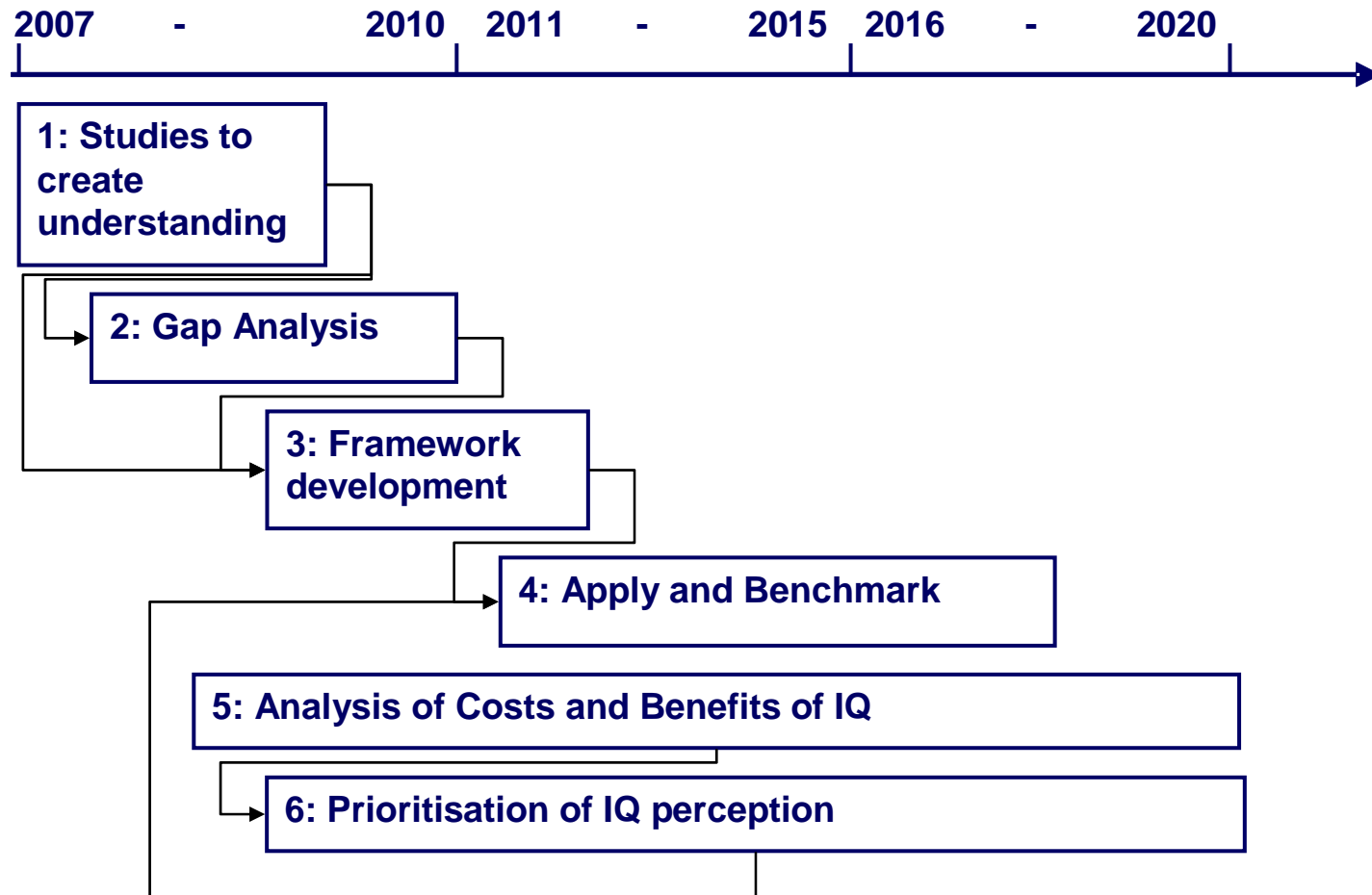
Description	Means	Actors
<p>Studies to investigate a proper understanding of trust in eGovernment, incl.:</p> <ul style="list-style-type: none"> <li>• Understanding the differences among key trust relationships in C2G, B2G, G2G</li> <li>• Understanding different types of trust (trust in service delivery, IT, participation...)</li> <li>• How do trust impact to different kinds of eGovernment efforts?</li> <li>• How can trust be fostered for the right reasons?</li> <li>• To what degree do we need trust to offer sophisticated eServices?</li> </ul>	<p>Action res., Analysi, Desk res</p>	<p>Res, Gov &amp; support from ICT industry</p>
<p>Develop a framework of mechanisms for trusted control relationship between government &amp; citizens?</p> <ul style="list-style-type: none"> <li>• Can ICT enable fair behaviour?</li> <li>• What kind of behaviour is acceptable?</li> <li>• How to prevent unfairness?</li> </ul>	<p>Action res, Gap analysis</p>	<p>Gov, Res and Consult</p>



# Roadmap for Trust in eGovernment



# Roadmap for Information Quality



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# Need for eGovernment research



Contract no: IST-4-27139

- Vital contribution of the public sector to advance economy and information society
  - Yet, role of the public sector in the market and society widely underestimated
- Governments and States duties need to be supported with proper methods and technologies of ICT design and reengineering to perform their work effectively and efficiently
  - Criteria and aims differ from private sector business



# E-Government Research Contributions to Practice (1/2)



- Adaptation of new theoretical concepts of traditional disciplines for their applicability in the public sector
  - transferring theories to practice
- Development of new methodical concepts of holistic systems development for e-government
  - Taking into account the special features of the public sector
- Analyzing the needs of the public sector
  - through an intense dialogue with the practical field of application of the public sector



# E-Government Research Contributions to Practice (2/2)



- Develop new concepts, frameworks and solutions for transferring to modern governments
- Perform independent studies
  - to assess and evaluate the impact of e-government projects
- Develop and transfer knowledge, skills and expertise
  - Methods and concepts
  - Improve competencies of the ICT sector and the application in government



# Mission eGovernment in the next decade



- Research roadmap adding momentum to current research and ICT development for the public sector
- 13 research themes broadening the three key pillars of i2010
  - more comprehensive and multidisciplinary dev.
  - taking into account future changes
- Dialogue and joint efforts crucial among research, application and implementation
  - Added value of research to be recognized





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Thank you for your attention !

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