



# Module Introduction to E-Government

## Summer term 2025

### Strategy development for digitalization in the public sector

# **Basic concepts and typical e-government solutions:**

## **Strategy development for digitalization in the public sector**

### **Agenda**

- ❖ Terminology – definition of concepts
- ❖ Strategies and action plans at European level
- ❖ E-government strategies in Germany
- ❖ Strategy development method and example from Georgia
- ❖ Learnings for the class

# Terminology: Public Policy

- ❖ Public policy as a courses of action, regulatory measures, laws, and funding priorities concerning a given topic promulgated by a governmental entity or its representatives

(Sophie J. Evans, Public Policy Issues Research Trends, Nova Science Publishers, Inc. 2008)

- ❖ Public policy commonly embodied in constitutions, legislative acts, and judicial decisions.

(W. Michael Schuster II . For the Greater Good: The Use of Public Policy Considerations in Confirming Chapter 11 Plans of Reorganization. In: Houston Law Review, Vol. 46, p. 467, 2009)

- ❖ Public policy includes decision-making and analysis of governmental decisions

(Surhone, Lambert M. (2010). Public Policy. VDM Verlag Dr. Mueller e.K. pp. 63)

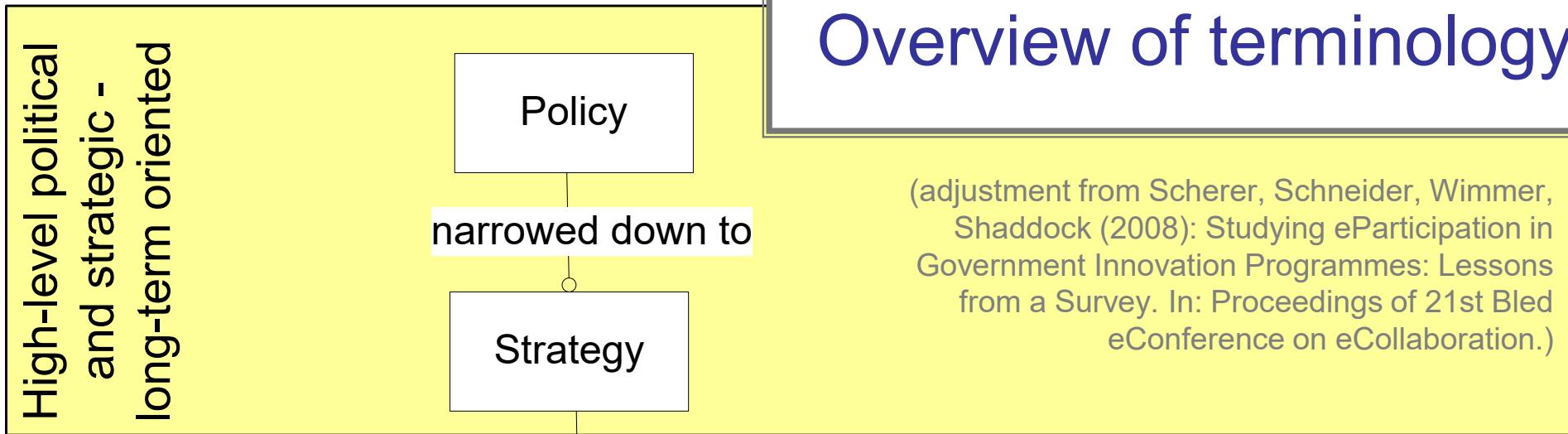
# Terminology: Strategy

- ❖ Long-term plans designed to achieve particular strategic-political goals
  - Give indications and strengthen activities towards desired directions of evolution
  - Directed towards higher echelons and indicating ‘their’ “will declaration” to achieve certain strategic objectives
  - ‘Some’ commitment to provide financial support from public budgets, but no fixed assignment
- ❖ Depending on the level of application, one or a number of bodies may be responsible to achieve the objectives
- ❖ Implemented through targeted programmes and action plans

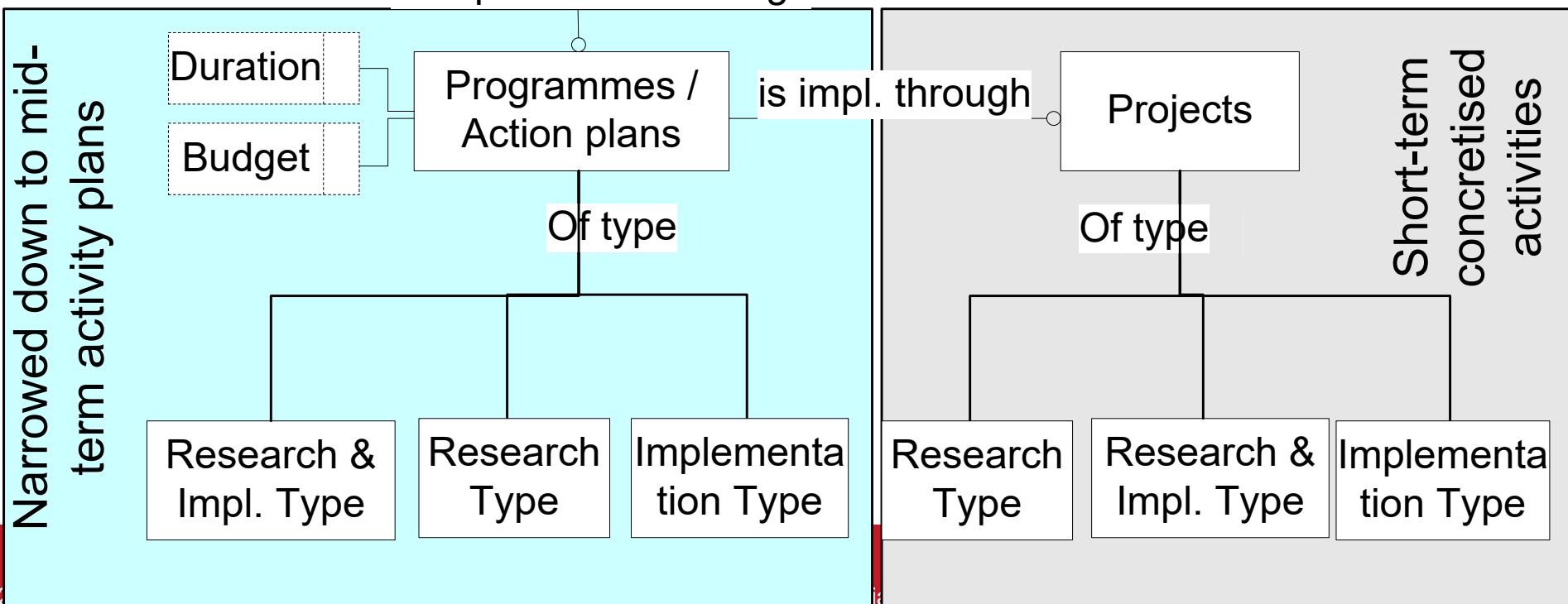
# Terminology: Public policy vs. Strategy

- ❖ Both are considered long-term plans of action designed to achieve particular strategic-political goals
- ❖ Public policy may be accompanied by particular regulation / legislation to be more legally binding, while strategies are usually not
- ❖ Public policy is usually more abstract and longer-term than a strategy

# Overview of terminology



is implemented through



# **Basic concepts and typical e-government solutions:**

## **Strategy development for digitalization in the public sector**

### **Agenda**

- ❖ Terminology – definition of concepts
- ❖ Strategies and action plans at European level
- ❖ E-government strategies in Germany
- ❖ Strategy development method and example from Georgia
- ❖ Learnings for the class

# European e-government strategies over the past >20 years

- ❖ A Europe fit for the digital age
- ❖ eGovernment Action Plan 2021
- ❖ Europe 2020 strategy
- ❖ Digital Agenda for Europe
- ❖ Digital Single Market Strategy
- ❖ eGovernment Action Plan 2016 - 2020
- ❖ eGovernment Action Plan 2011 - 2015
- ❖ i2010 & eGovernment Action Plan 2006 - 2010
- ❖ eParticipation preparatory action 2006 – 2008
- ❖ eEurope 2002, eEurope 2005
- ❖ Lisbon strategy of 2000 as underlying strategy



# Strategy and policy

The EU's overall political goals are developed collectively by its institutions. Find out how the EU's strategy is developed and translated into policies and initiatives by the European Commission.

## In focus



**Recovery Plan for Europe**



**EU Solidarity with Ukraine**



**Coronavirus response**

# EU's overall political goals – Planning, implementing and re



## Priorities

The story of the von der Leyen Commission  
 The European Green Deal  
 A Europe fit for the digital age  
 An economy that works for people  
 A stronger Europe in the world  
 Promoting our European way of life  
 A new push for European democracy

## Strategic planning

How priorities are set  
 State of the Union addresses  
 Strategic foresight  
 The joint priorities of the EU institutions for 2021-2024

## EU budget

The EU budget in motion  
 The long-term EU budget  
 The EU as a borrower

## Decision-making process

How decisions are made  
 Decision-making during weekly meetings

## Contribute to decision-making

Have your say on Commission initiatives  
 Track law-making

## Strategy documents

Commission work programme  
 Management plans  
 Strategic plans

[https://commission.europa.eu/strategy-and-policy\\_en](https://commission.europa.eu/strategy-and-policy_en)

Annual activity reports

# A Europe fit for the digital age: Empowering people with a new generation of technologies

[https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age_en)

*“Digital technology is changing people’s lives. The EU’s digital strategy aims to make this transformation work for people and businesses, while helping to achieve its target of a climate-neutral Europe by 2050.*

*The Commission is determined to make this Europe’s “Digital Decade”. Europe must now strengthen its digital sovereignty and set standards, rather than following those of others – with a clear focus on data, technology, and infrastructure.”*



# A Europe fit for the digital age: Empowering people with a new generation of technologies

[https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age_en)

## **Key figures:**

**€250 billion**

boost to digitalisation from  
NextGenerationEU

**80%**

of EU population should have basic  
digital skills by 2030

**€43 billion**

of policy-driven investment will  
support the Chips Act until 2030



### Digital Services Act

Ensuring a safe and accountable online environment



### Artificial Intelligence

Achieving better healthcare, safer and cleaner transport, more efficient manufacturing, and cheaper and more sustainable energy through AI



### Digital Markets Act

Ensuring fair and open digital markets



### European data strategy

Making the EU a role model for a society empowered by data



### European Chips Act

Strengthening Europe's competitiveness and resilience in semiconductor technologies



### European industrial strategy

Ensuring European industry leads the transition towards climate neutrality and digital leadership



### European Digital Identity

Giving you full control on how much information you share with third parties



### Contributing to European Defence

Working together to tackle security threats and challenges more robustly



### Space

EU initiatives for a satellite-based connectivity system and management of space traffic



### EU-US Trade and Technology Council

Coordinating approaches to key global trade, economic, and technology issues

# Digital Single Market Strategy for Europe (DSM)

## ❖ Overall strategic objectives

- Bringing down barriers to unlock online opportunities by
- Modernising public administration
- Achieving cross-border interoperability
- Facilitating easy interaction with citizens

[https://ec.europa.eu/priorities/digital-single-market\\_en](https://ec.europa.eu/priorities/digital-single-market_en),  
<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52015DC0192&from=EN>

# Digital Single Market Strategy for Europe (DSM)

- ❖ Three policy areas or 'pillars'
  - Improving access to digital goods and services
    - Helping to make the EU's digital world a seamless marketplace to buy and sell
  - An environment where digital networks and services can prosper
    - Designing rules which match the pace of technology and support infrastructure development.
  - Digital as a driver for growth
    - Ensuring that Europe's economy, industry and employment take full advantage of what digitalisation offers.

[https://ec.europa.eu/priorities/digital-single-market\\_en](https://ec.europa.eu/priorities/digital-single-market_en),  
<http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52015DC0192&from=EN>

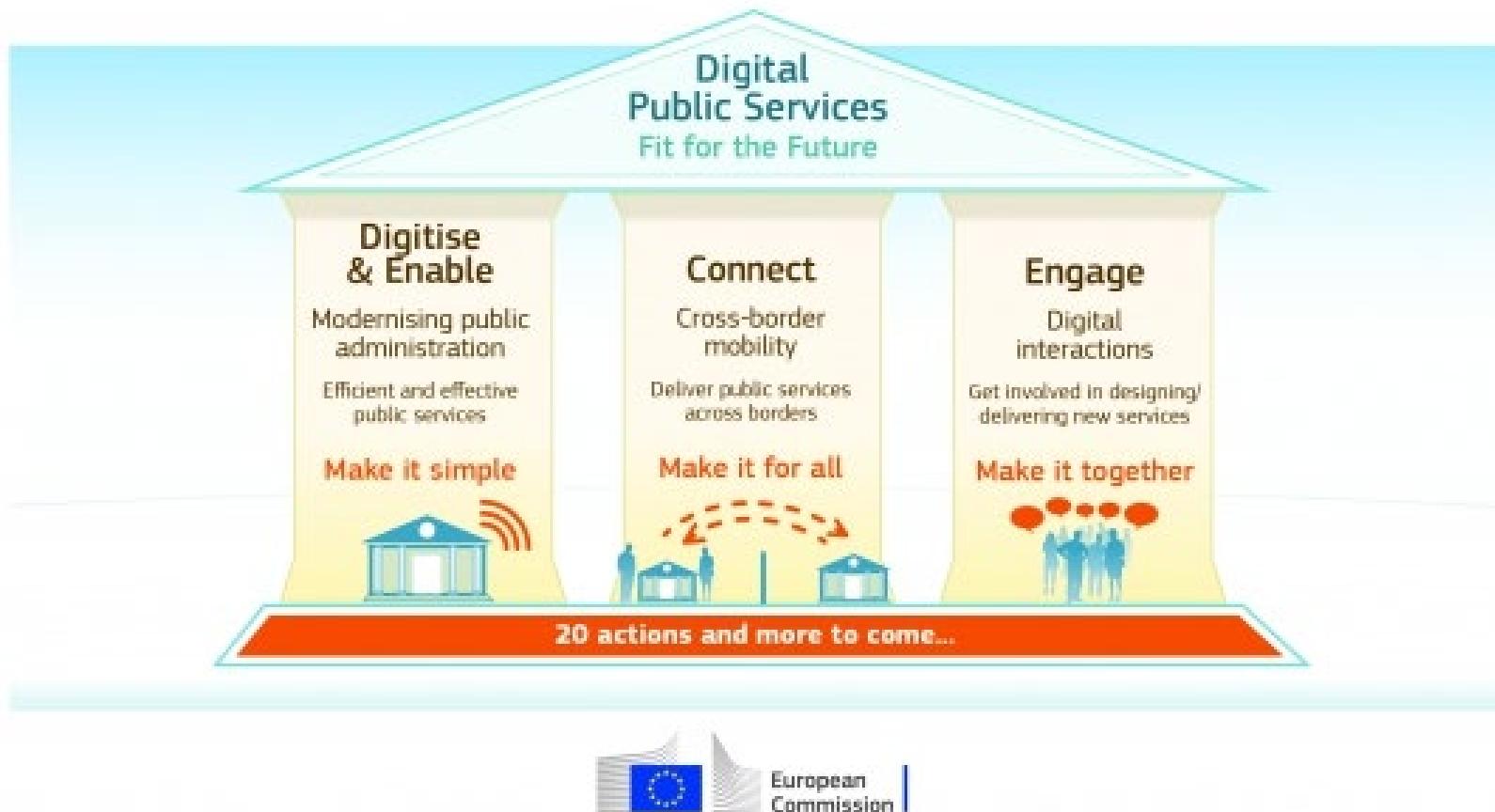
# E-Government Action Plan 2016 - 2020

- ❖ Vision: “*By 2020, public administrations and public institutions in the European Union should be open, efficient and inclusive, providing borderless, personalised, user-friendly, end-to-end digital public services to all citizens and businesses in the EU. Innovative approaches are used to design and deliver better services in line with the needs and demands of citizens and businesses. Public administrations use the opportunities offered by the new digital environment to facilitate their interactions with stakeholders and with each other.*“

<https://ec.europa.eu/digital-single-market/en/european-egovernment-action-plan-2016-2020>

## eGovernment Action Plan 2016-2020

Accelerating the digital transformation of Government



<https://ec.europa.eu/digital-single-market/en/european-egovernment-action-plan-2016-2020>

# E-Government Action Plan 2016 – 2020: Underlying seven principles

- ❖ Digital by default
- ❖ Once only principle
- ❖ Inclusiveness and accessibility
- ❖ Openness & transparency
- ❖ Cross-border by default
- ❖ Interoperability by default
- ❖ Trustworthiness & Security

<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016DC0179>

# Single Digital Gateway Regulation

[https://single-market-economy.ec.europa.eu/single-market/single-digital-gateway\\_en](https://single-market-economy.ec.europa.eu/single-market/single-digital-gateway_en)

<https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018R1724>

## REGULATION (EU) 2018/1724 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 2 October 2018

**establishing a single digital gateway to provide  
access to information, to procedures and to  
assistance and problem-solving services and  
amending Regulation (EU) No 1024/2012**

### The single digital gateway and Your Europe

The single digital gateway facilitates online access to information, administrative procedures, and assistance services that EU citizens and businesses may need in another EU country. Access to the gateway is via a search function in the [Your Europe portal](#) EN | ..., which has been providing EU and national information on the rights of citizens and businesses, as well as access to assistance services, since 2006.

Following the adoption of the gateway regulation in 2018, the European Commission and national administrations are developing a network of national portals to provide information for citizens and businesses on how EU rules are applied in each EU country for cross-border users, as well as on available assistance services. Since December 2020, some of these services have been available from the single entry point on the Your Europe portal. National websites participating in the gateway can be easily recognised by the presence of the Your Europe logo.

By the end of 2023, Your Europe will offer access to 21 online procedures in all EU countries, with procedures such as registering a car or claiming a pension being fully digitalised and eliminating the need for paperwork. The most important administrative procedures for cross-border users will be fully available online in all EU countries. A system to transfer documents needed for these procedures between national authorities in different EU countries will also be included. For example, a diploma obtained in one country can be shared with the national authorities of another, where it is needed to start a business.

To improve policy making, users are also able to provide feedback through the gateway on obstacles they encounter in the single market.

# Implementation programs for digital transformation, including e-government research and practice

(1/2)

- ❖ Framework programme Horizon Europe (2021-2027)
  - Work programmes with a set of calls for proposals per work programme
- ❖ Connecting Europe Facilities programs (since 2014)
  - Programs in different sectors to promote growth, jobs and competitiveness through infrastructure investments
- ❖ Framework program Horizon 2020 in place 2014 – 2020
  - Bi-annual work programmes with a set of calls for proposals per work programme
  - Relevant topics spread across different call topics (e.g. co-creation, engaging, resilience, digital transformation, etc.)
- ❖ Competitive Innovation Programme 2007 – 2013
  - Funding of large-scale pilot projects such as eSens, PEPPOL, eCodex, ...

# Horizon Europe

[https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)

Presentation by the EC: <https://research-and-innovation.ec.europa.eu/document/9224c3b4-f529-4b48-b21b-879c442002a2>



# Vision of the Horizon Europe Programme

[https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)

Presentation by the EC: <https://research-and-innovation.ec.europa.eu/document/9224c3b4-f529-4b48-b21b-879c442002a2>

The EU's key funding programme for research and innovation:

- Tackles climate change
- Helps to achieve the UN's Sustainable Development Goals
- Boosts the EU's competitiveness and growth
- Facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges
- Supports the creation and better diffusion of excellent knowledge and technologies
- Creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.

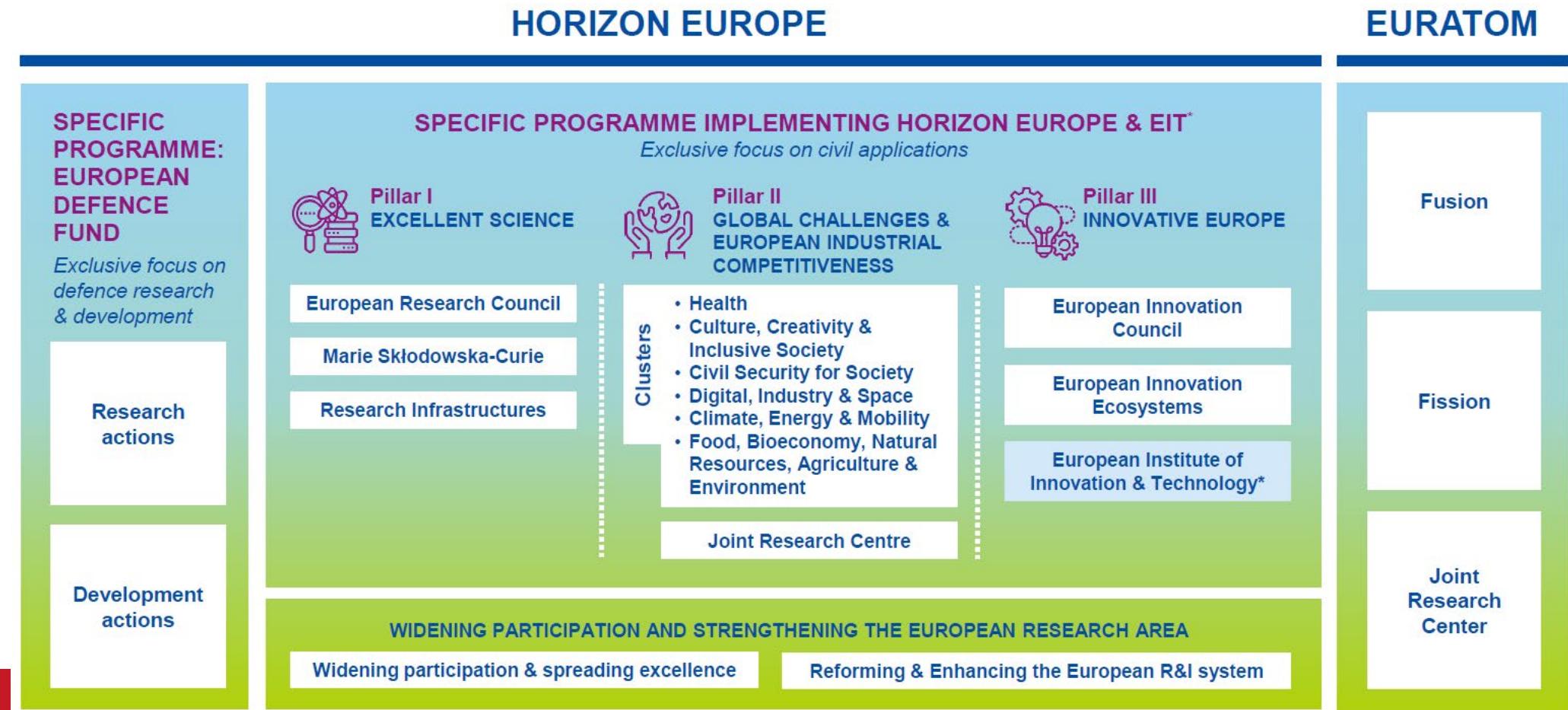


Credit: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

# Focus and Specific Programs in Horizon Europe

[https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)

Presentation by the EC: <https://research-and-innovation.ec.europa.eu/document/9224c3b4-f529-4b48-b21b-879c442002a2>



## Connecting Europe Facility

The Connecting Europe Facility is a key EU funding instrument to promote growth, jobs and competitiveness through infrastructure investment at European level

[https://cinea.ec.europa.eu/programmes/connecting-europe-facility\\_en](https://cinea.ec.europa.eu/programmes/connecting-europe-facility_en)

## Programme Sectors

### CEF Energy

The Connecting Europe Facility (CEF) for Energy is the EU funding programme to implement the Trans-European Networks for Energy policy. It aims at supporting investments in building new cross-border energy infrastructure in Europe or rehabilitating and upgrading the existing one.

### CEF Transport

The Connecting Europe Facility (CEF) for Transport is the funding instrument to realise European transport infrastructure policy. It aims at supporting investments in building new transport infrastructure in Europe or rehabilitating and upgrading the existing one.

### CEF Digital

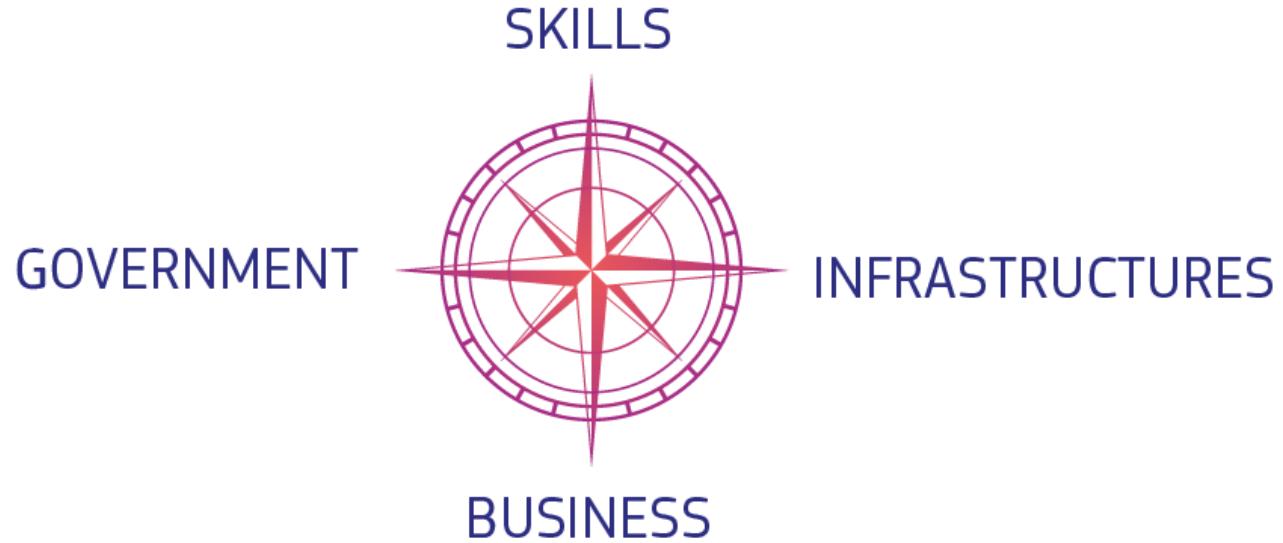
The CEF Digital portion is managed by the European Health and Digital Executive Agency (HaDEA).

# Implementation programs for digital transformation, including e-government research and practice (2/2)

- ❖ Framework program 7 spans 2007 - 2013
  - Bi-annual work programmes
  - 2011-2013 has ICT solutions for governance and policy modelling (objective 5.6)
  - 2009-2010 had ICT for governance and policy modelling (7.3)
  - 2007-2008 had no e-government research
- ❖ E-Participation Preparatory action 2006 – 2010
  - A set of pilot projects for e-participation and monitoring success (MOMENTUM)
- ❖ Framework program 6 in place 2001 – 2007
  - Extensive funding for e-government and e-participation developments
- ❖ Framework programme 5 in place 1998 – 2002
  - Funding of first set of e-government projects

# Europe's Digital Decade: Digital targets for 2030

- ❖ EU strategic initiative to guide the continent's digital transformation by 2030
- ❖ Concrete targets along four key areas: ➔ GOVERNMENT
- ❖ Several objectives (e.g.):
  - Building a safe and digital world
  - Providing digital public services
  - Everyone can participate in digital opportunities
  - Promoting research focused on measuring the impact of digital technologies



[https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europe-s-digital-decade-digital-targets-2030\\_en](https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/europe-s-digital-decade-digital-targets-2030_en)

# Europe's Digital Decade: Digital targets for 2030

## 1. Digital Skills

- ❖ Ensure that at least 80% of EU citizens aged 16–74 possess basic digital skills.
- ❖ Increase the number of employed ICT specialists in the EU to 20 million, with a focus on promoting gender balance in the sector.

<https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52021DC0118>

## 2. Digital Infrastructure

- ❖ Provide gigabit connectivity to all households and ensure 5G coverage for all populated areas.
- ❖ Double the EU's share in global semiconductor production to 20%.
- ❖ Deploy 10,000 climate-neutral, highly secure edge computing nodes across the EU.
- ❖ Develop the EU's first quantum-accelerated computer by 2025.

# Europe's Digital Decade: Digital targets for 2030

## 3. Digital Transformation of Businesses

- ❖ Achieve at least 75% adoption of cloud computing, big data, or artificial intelligence technologies among EU enterprises.
- ❖ Ensure that more than 90% of small and medium-sized enterprises (SMEs) reach at least a basic level of digital intensity.
- ❖ Double the number of EU unicorns (start-ups valued at over \$1 billion).

## 4. Digitalization of Public Services

- ❖ Make 100% of key public services accessible online.
- ❖ Ensure that all EU citizens have access to their electronic health records.
- ❖ Provide all EU citizens with access to a secure and widely accepted digital identity.

<https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52021DC0118>

# National Digital Decade strategic roadmaps

- ❖ Align each EU Member State's digital plans with the EU's Digital Decade targets for 2030
- ❖ Includes national policies, actions, milestones, and projected digital progress
- ❖ Follows EU guidance for consistency across Member States
- ❖ Reviewed and updated every two years, tied to the Digital Decade monitoring cycle
- ❖ **Goal:** Promote coordinated digital transformation while respecting national specificities.

<https://digital-strategy.ec.europa.eu/en/policies/national-strategic-roadmaps>

# E-government projects funded through EC

- ❖ Large number of projects funded over a time span of >20 years
  - With varying intensity of funding
- ❖ Overall aims:
  - Spur development and innovation of the public sector through ICT use
  - Bringing public sector agencies up to common standards across Europe, therewith ensuring interoperability across borders
  - Innovating the public sector through new governance models (engagement, co-creation, reduction of administrative burdens etc.)
  - Paving the way to a digital single market across Europe

# R&D Projects on E-Government at Research Group E-Government

- ❖ Framework programme Horizon Europe (2021-2027)



- ❖ Competitive Innovation Programme 2007 – 2013



- ❖ Connecting Europe Facilities programs (since 2014)



- ❖ Framework program Horizon 2020 in place 2014 – 2020



# R&D Projects on E-Government at Research Group E-Government

- ❖ Framework program 7 spans 2007 - 2013



- ❖ E-Participation Preparatory action 2006 – 2010



- ❖ Framework program 6 in place 2001 – 2007



- ❖ Framework programme 5 in place 1998 – 2002
  - Project EGOV

# **Basic concepts and typical e-government solutions:**

## **Strategy development for digitalization in the public sector**

### **Agenda**

- ❖ Terminology – definition of concepts
- ❖ Strategies and action plans at European level
- ❖ E-government strategies in Germany
- ❖ Strategy development method and example from Georgia
- ❖ Learnings for the class

# Potential of cost savings through BundOnline 2005



- ❖ BundOnline 2005 provides a number of information, communication and transaction offers through the internet
  - Approximately 350 Mio Euro cost savings in internal improvement of processes among governments
  - Approximately 450 Mio Euro cost savings in external interactions with citizens and companies, etc.

Abschlussbericht\_bundonline\_2005\_download.pdf (see material in OLAT)

# Initiative BundOnline 2005 in Germany



- ❖ Biggest e-government initiative in Germany so far
- ❖ Terminated by end of 2005
- ❖ From September 2000 till 2006 more than 440 public services in authorities of the federal level have been implemented and provided online
  - 244 services for companies
  - 265 services for citizens
- ❖ Request for further investments in e-government
  - Stronger orientation towards the needs of businesses
  - Increasing the level of transactions online

[Abschlussbericht\\_bundonline\\_2005\\_download.pdf](#) (see material in OLAT)

# E-Government 2.0 programme of the Federal State - introduction



Bundesministerium  
des Innern



- ❖ 2nd generation e-government
  - Approved by Council of Ministers by 13th September 2006
- ❖ Main aims
  - Federal State improves focus on process and service orientation and security in online public services
  - Online public services should support actors of all branches in their interaction with governments and facilitate new ways of cooperation and work procedures
- ❖ Duration till end 2010

Abschlussbericht E-Government 2.0:  
<http://docplayer.org/docview/24/2626570/#file=/storage/24/2626570/2626570.pdf>



# Structure of e-government 2.0

- ❖ A. Portfolio
  - Demand oriented qualitative and quantitative expansion of e-government offers of the Federal Government
- ❖ B. Process chains
  - Electronic collaboration among businesses and governments enabled through common cross-organisational process chains
- ❖ C. Identification
  - Introduction of the electronic identity card (ePa) and elaboration of identity concepts
- ❖ D. Communication
  - Secure communication infrastructures for citizens, companies and governments

Abschlussbericht E-Government 2.0:  
<http://docplayer.org/docview/24/2626570/#file=/storage/24/2626570/2626570.pdf>

# IT Planning Council

<https://www.it-planungsrat.de/en/the-it-planning-council>

## Central body for the digitalisation of the administrative system

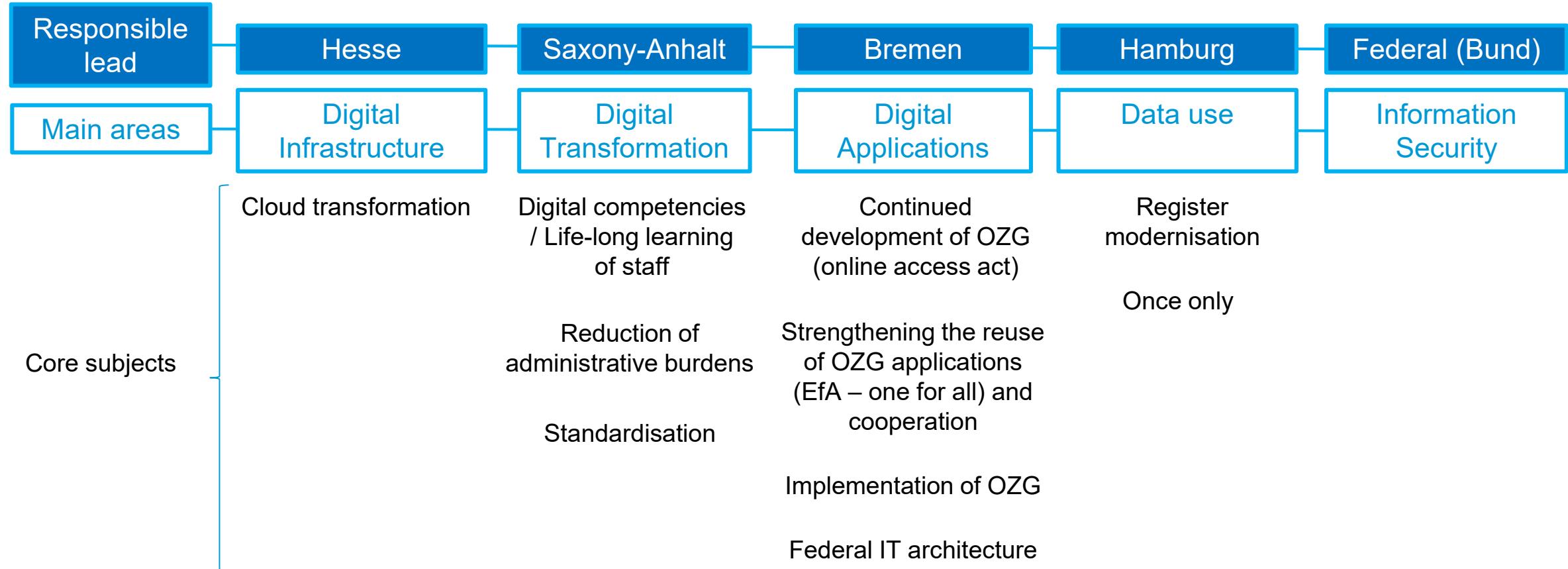
Joining forces to drive the digitalisation of Germany's public administration: The IT Planning Council is a central political body that coordinates and supports collaboration between the federal and state governments on matters regarding information technology and the digitalisation of administrative services. It ensures that the work of the federal and state governments is closely coordinated, for example based on shared goals and areas of activity, promotes uniform IT standards and oversees the implementation of digitalisation projects. The goal is to establish an IT infrastructure that is consistent across Germany's administrative systems and benefits citizens and companies in equal measure.



Quelle: ©FITKO

# Current Multi-annual Thematic Foci (as of 2022)

<https://www.it-planungsrat.de/der-it-planungsrat/aufgaben>



# Main Functions of IT Planning Council

<https://www.it-planungsrat.de/en/the-it-planning-council/functions>

## Overview of functions

in accordance with Sect. 1 of the IT state treaty

### > **IT coordination**

Coordinating federal cooperation on matters regarding information technology

### > **IT standards**

Establishing overarching IT interoperability and security standards

### > **Digitalising administration**

Coordinating and supporting the federal and state governments on matters regarding the digitalisation of administrative services

### > **E-government projects**

Managing assigned projects and products that are part of digitally supported governance and administration

### > **Network**

Coordinating body for the network linking the IT networks of the federal and state governments

The logo for the IT Planning Council, featuring the text "IT PLANNING COUNCIL" in black with a series of colored dots (grey, red, yellow) above it.

# From Strategy to Implementation

- ❖ Operative body: FITKO (Federal IT Cooperation)
- ❖ Agile organization for implementing the decisions of the IT Planning Council



<https://www.it-planungsrat.de/en/the-it-planning-council/functions>

# Number of strategic projects by IT Planning Council

- ❖ Register modernisation
- ❖ Implementation of online access act
  - Portal cluster / linkage
  - User accounts and post boxes
  - Digitalisation of 575 public services at federal, state and municipal level

# National E-Government Strategy (NEGS) in Germany

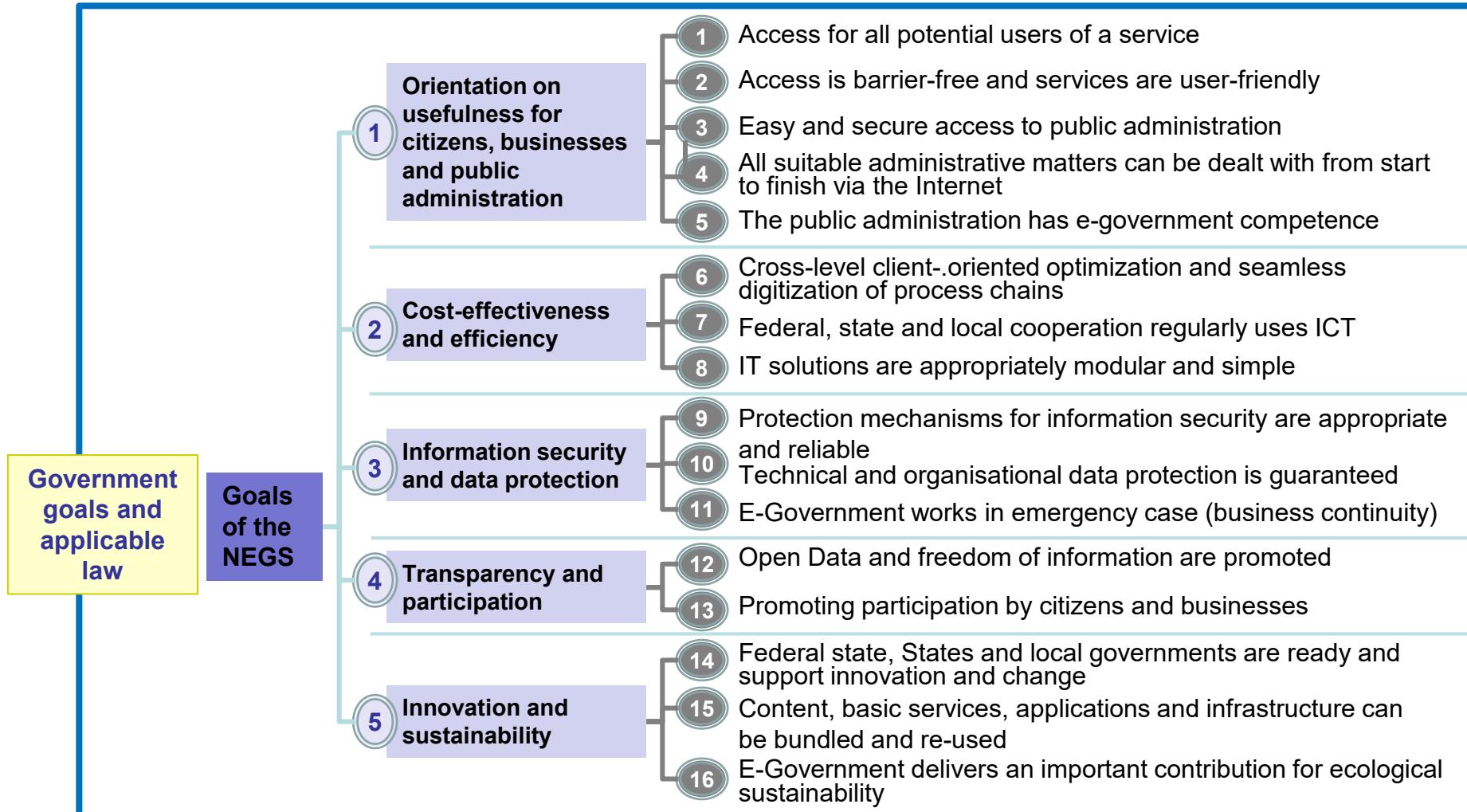
[https://www.it-planungsrat.de/fileadmin/beschluesse/2010/Beschluss2010-17\\_NEGS.pdf](https://www.it-planungsrat.de/fileadmin/beschluesse/2010/Beschluss2010-17_NEGS.pdf)

- ❖ Approved first time by IT Planning Council in September 2010
  - IT Planning council: a coordination body between Federal State and 16 States in Germany
- ❖ With focus on developments of e-government towards 2015 and beyond
- ❖ Coordination of future developments in electronic government and online public service provision via the Internet
- ❖ Six aims settled for future developments of e-government in Germany
- ❖ Continued evaluation and updates of the NEGS in Germany

# Vision of NEGS for 2015 (update after 2010)

- ❖ German e-government has become leading edge as it
  - is oriented towards the needs of citizens, businesses and administrations,
  - is economic and efficient,
  - ensures transparency upon data and administrative procedures as well as upon data protection,
  - supports participation of citizens and businesses,
  - furthers sustainable solutions, and
  - implements powerful ICT support

# Five objectives of revised NEGS with 16 targets



# Evaluation report of NEGS in 2019 by IT Planning Council (1)

[https://www.it-planungsrat.de/fileadmin/beschluesse/2019/Beschluss2019-37\\_TOP\\_27\\_Evaluationsbericht\\_NEGS.pdf](https://www.it-planungsrat.de/fileadmin/beschluesse/2019/Beschluss2019-37_TOP_27_Evaluationsbericht_NEGS.pdf)

- ❖ Querying a number of factors such as
  - What are success factors for a strategy?
  - What criteria (thematic foci / objectives) should be embodied in a NEGS?
  - What is the purpose, rationale and contribution of a NEGS?
  - How shall the process of strategy development be conceptualized? Who shall participate in this process?
- ❖ Major strategic topics and contextual aspects shaping and constraining strategy development for the IT Planning Council
  - See next slide

# Evaluation report of NEGS in 2019 by IT Planning Council (2)

[https://www.it-planungsrat.de/fileadmin/beschluesse/2019/Beschluss2019-37\\_TOP\\_27\\_Evaluationsbericht\\_NEGS.pdf](https://www.it-planungsrat.de/fileadmin/beschluesse/2019/Beschluss2019-37_TOP_27_Evaluationsbericht_NEGS.pdf)

## ❖ Major strategic topics and contextual aspects

I: European dimension <ul style="list-style-type: none"> <li>eGovernment Action plans of the EU</li> <li>Tallinn Declaration on eGovernment</li> <li>Single Digital Gateway (SDG), eIDAS-VO, etc.</li> </ul>	II: National political level <ul style="list-style-type: none"> <li>Decisions of Minister's Conference (MPK, CdSK)</li> <li>Audits of NKR (national audit council)</li> <li>Objectives and decisions of FITKO (Budgets and activities, municipal needs)</li> </ul>	III: National legislation and strategies <ul style="list-style-type: none"> <li>Federal and State digitalization strategies</li> <li>National domain-spec. Strategies</li> <li>Online Access Act (OZG)</li> <li>IT security regulation</li> <li>GDPR (data protection)</li> </ul>
IV: Coordination across domains <ul style="list-style-type: none"> <li>Coordination on domain-independent IT</li> <li>Interrelation among IT strategy and domain-specific strategies</li> <li>Strategies on standardization</li> </ul>	V: Further subjects <ul style="list-style-type: none"> <li>Personnel</li> <li>Intertwining with organizational topics for modernization (Working group along Conference of Ministers of interior)</li> <li>Scientific Learnings</li> </ul>	

# IT Planning Council's Decision to retire the NEGS

<https://www.e-government.de/it-planungsrat-macht-ohne-negs-weiter-a-3fec3980f3d5b1304bee773cacf2edae/>

## ❖ Reasons to retire NEGS

- New federal IT strategy necessary
- Developing a strategy requires involving large number of actors and frequent evaluation (cumbersome process)
- Need for change:
  - approval of the Agreement with municipal level (Kommunalpakt)
  - Multi-annual foci for work programme
  - Revisions of the IT treaty among federal states

Nationale E-Government-Strategie

## IT-Planungsrat macht ohne NEGS weiter

31.07.2023 · Von Susanne Ehneß · 4 min Lesedauer · 

In seiner 41. Sitzung hat der IT-Planungsrat die Gültigkeit der Nationalen E-Government-Strategie (NEGS) mit sofortiger Wirkung aufgehoben. Vorsitzender Patrick Burghardt erklärt die Hintergründe dieser Entscheidung.



Patrick Burghardt, CIO von Hessen und Vorsitzender des IT-Planungsrats  
(© Hessische Staatskanzlei)

# Government Coalition Programme: Digital Agenda 2020 – approved in 2014

- ❖ Seven areas of actions
  - Digital infrastructure and broadband
  - Digital economy
  - Innovative administration
  - Digital society, research, education and culture
  - Security
  - Protection and trust of society and economy
  - European and international dimension of the digital agenda

[http://www.verwaltung-innovativ.de/SharedDocs/Kurzmeldungen/DE/2014/digitale\\_verwaltung\\_2020.html](http://www.verwaltung-innovativ.de/SharedDocs/Kurzmeldungen/DE/2014/digitale_verwaltung_2020.html)

# Actors to implement digital agenda 2020



- ❖ Actors to be involved at federal level:
- ❖ For first time a common leadership of three ministries:
  - Federal Ministry of the Interior (BMI)
  - Federal Ministry of Science (BMWi)
  - Federal Ministry of Transportation and Infrastructure (BMVI)
- ❖ A common agreement of the Cabinet on 17th Sept. 2014 for this collaborative leadership

## Starting points ... (1/2)

- ❖ Vision: Digital administration 2020 shall convert governments towards a citizen-friendly digital Germany
- ❖ Coalition treaty of 2013 „Deutschlands Zukunft gestalten“ (p. 152f) says:
  - „Wir wollen ein bürgerfreundliches ‘digitales Deutschland’. Ein Programm ‘Digitale Verwaltung 2020’ für verbindliche Standards zur flächendeckenden Digitalisierung der Verwaltung soll dazu auf den Weg gebracht werden.“ and
  - „die 100 wichtigsten und am häufigsten genutzten Verwaltungsleistungen innerhalb der nächsten vier Jahre bundesweit einheitlich online anbieten.“
- ❖ Approval and enactment of the E-Government-Act of the Federal State (EGovG) „Gesetz zur Förderung der elektronischen Verwaltung“ in force since 1st August 2013

<https://www.bundesregierung.de/Content/DE/StatischeSeiten/Breg/koalitionsvertrag-inhaltsverzeichnis.html>

# Main objectives of „Digital Administration Germany“



- ❖ Efficient electronic administration at federal level
- ❖ Common information and knowledge management
- ❖ Needs oriented, user-friendly and re-usable offers
- ❖ Seamless online public services oriented along the needs and life events of citizens and businesses instead of orientation along domain-specific responsibilities within governments

[http://www.verwaltung-innovativ.de/DE/Regierungsprogramm/aktuelles\\_regierungsprogramm/18\\_legislaturperiode\\_node.html](http://www.verwaltung-innovativ.de/DE/Regierungsprogramm/aktuelles_regierungsprogramm/18_legislaturperiode_node.html)

# Action plan in suggested domains of the federal government



Digitale  
Verwaltung  
2020



- ❖ Setting up and use of common infrastructures
  - Such as De-Mail, e-ID, e-payment, Forms server
- ❖ E-administration / E-Akte
- ❖ Introduction of standardised e-invoice
- ❖ Norm screening to reduce legal barriers for e-government
  - Such as obligatory paper-based written forms, personal presence
- ❖ Editorial and technical standardisation of information exchange within government agencies
- ❖ Open data
- ❖ Geo referencing to support spatial linking of data

[http://www.verwaltung-innovativ.de/DE/Regierungsprogramm/aktuelles\\_regierungsprogramm/18\\_legislaturperiode\\_node.html](http://www.verwaltung-innovativ.de/DE/Regierungsprogramm/aktuelles_regierungsprogramm/18_legislaturperiode_node.html)

# Current Strategy for Digitalisation of the Federal Government (2023)

<https://www.bundesregierung.de/breg-de/themen/digitaler-aufbruch/digitalstrategie-2072884>

Three main focal areas

1. Networked and digitally sovereign society
2. Innovative economy, workforce and research
3. **Learning, digital state**
  - Open, digital and transparent data of public administration
  - Simplification of procedures and administrations
  - Security and safety with digitalized police
  - Complaints and judiciary procedures via Internet
  - Secure data for public administrations and businesses
  - Security for public administrations in cyberspace
  - Strengthening digitalisation of partner countries
  - Best defense of 21st century



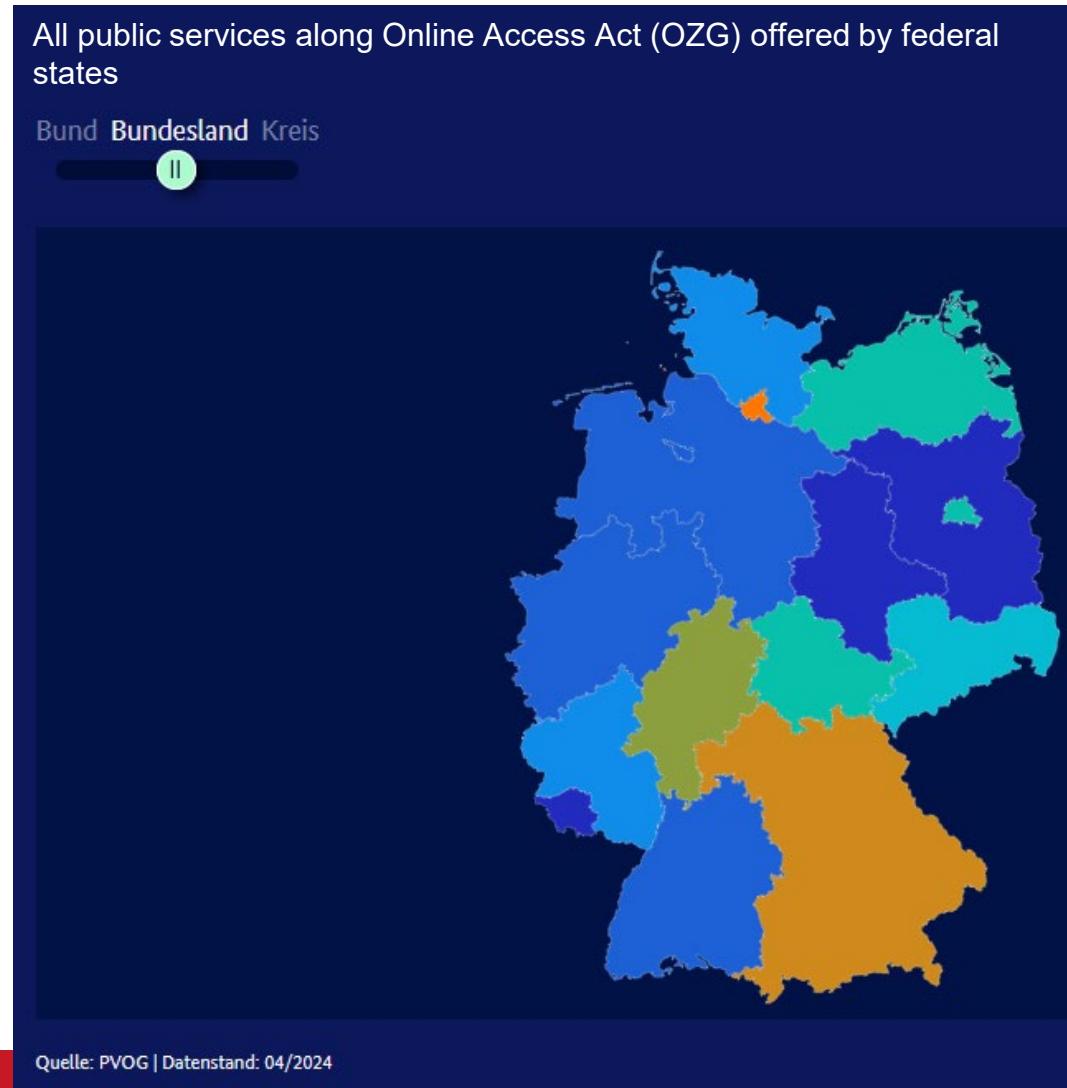
**digital-made-in.de**



Image: Getty Images/iStockphoto/metamorworks

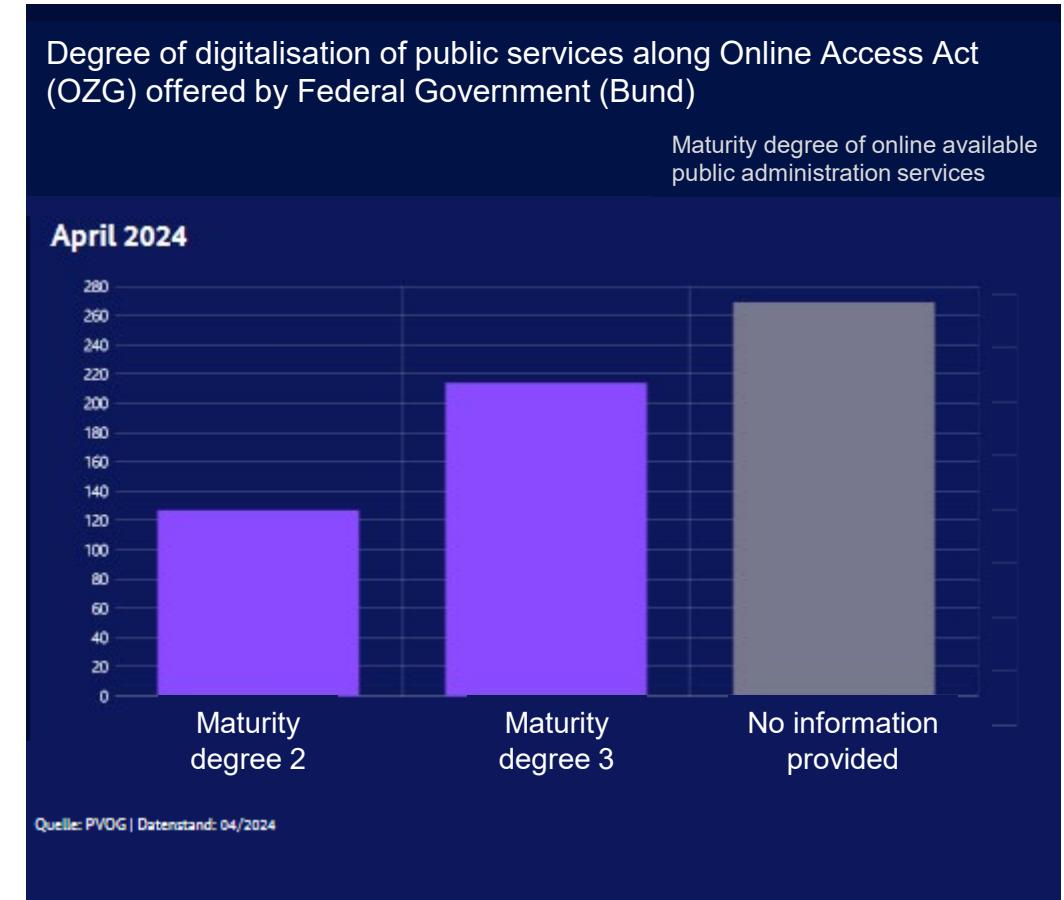
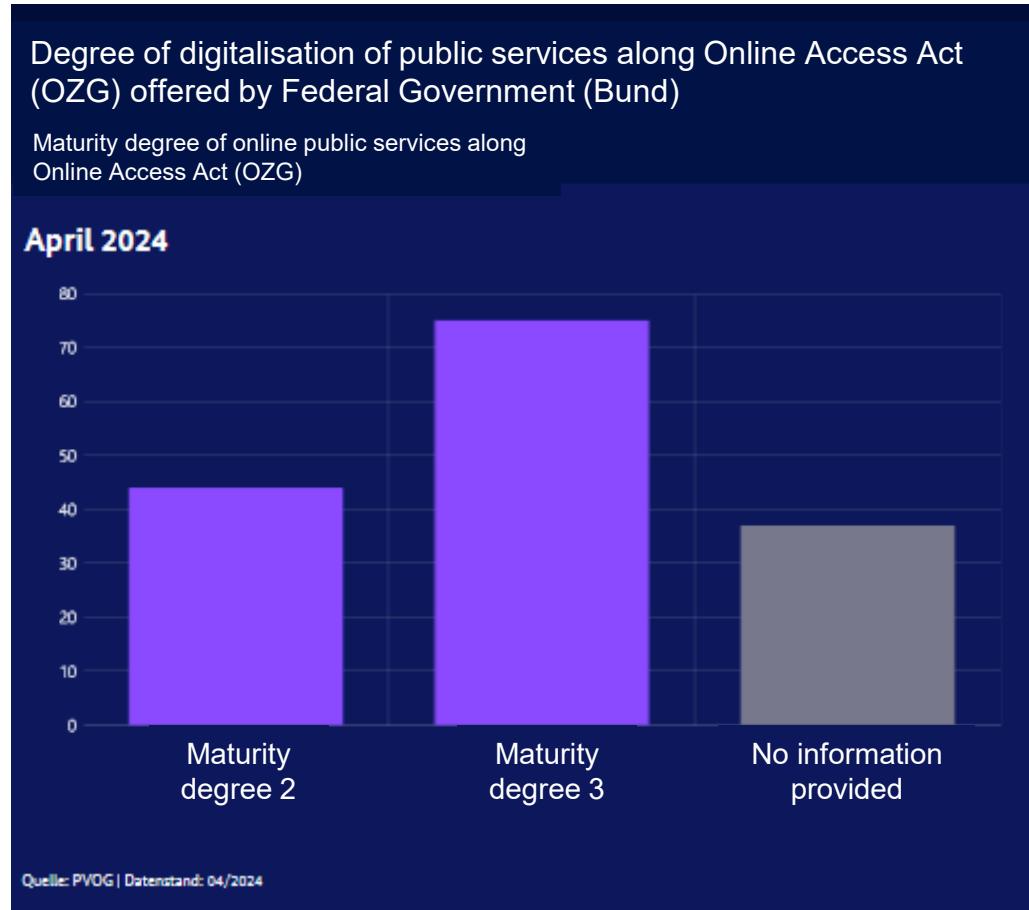
# Dashboard E-Government

<https://dashboard.digitale-verwaltung.de/>



# Dashboard E-Government

<https://dashboard.digitale-verwaltung.de/>



# **Basic concepts and typical e-government solutions:**

## **Strategy development for digitalization in the public sector**

### **Agenda**

- ❖ Terminology – definition of concepts
- ❖ Strategies and action plans at European level
- ❖ E-government strategies in Germany
- ❖ Strategy development method and examples
  - a. eGovRTD2020 method
  - b. Example of strategy development for Georgia
- ❖ Learnings for the class

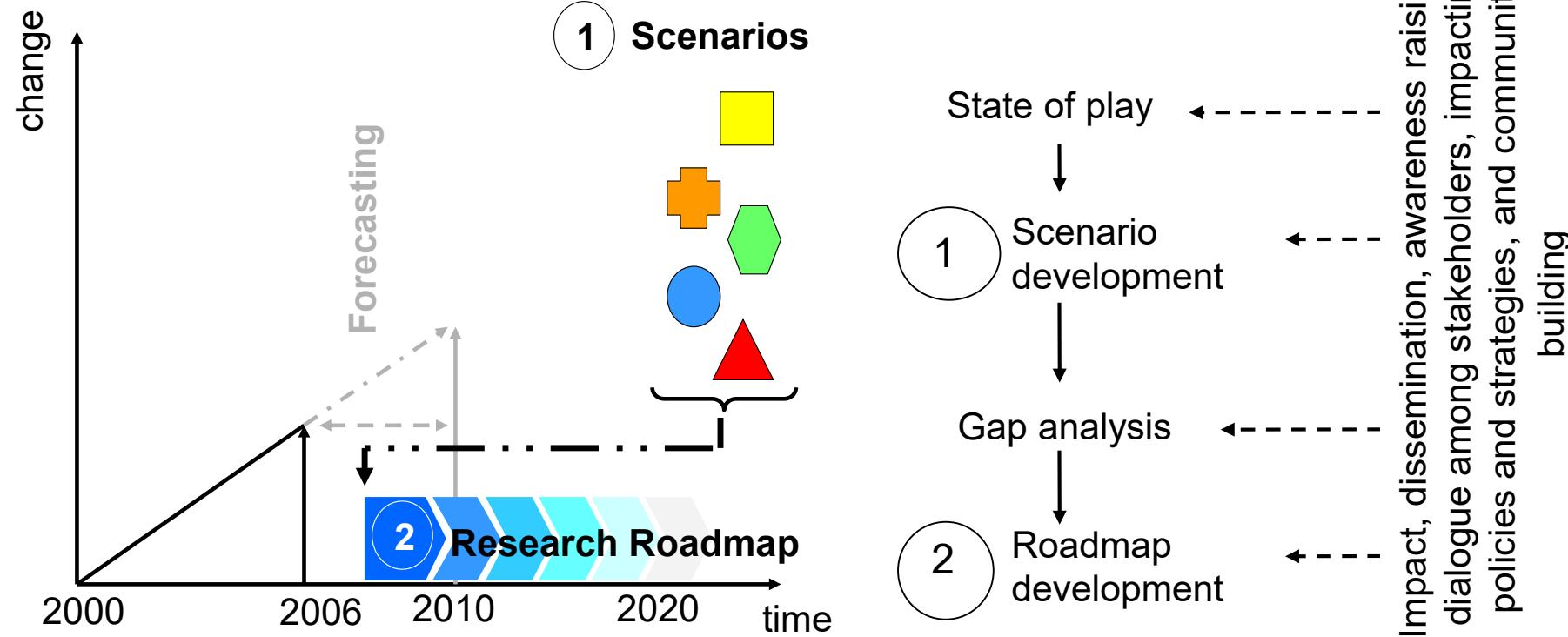
# Overall objectives of eGovRTD2020

(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))

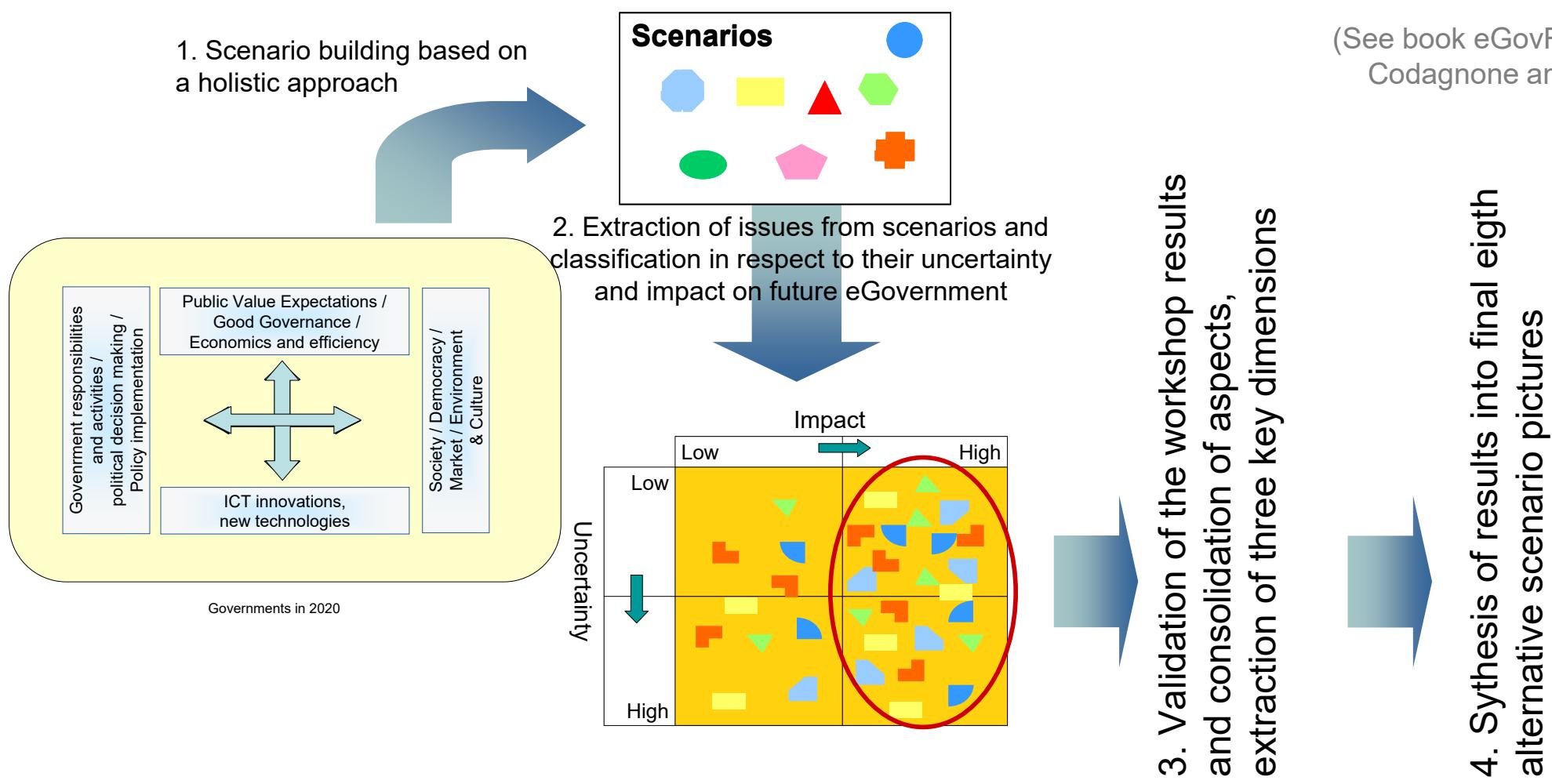
- ❖ Identify and characterise key research challenges and an implementation model for dynamic governments in 2020
  - Develop visionary scenarios of e-government for 2020
  - Develop a detailed research roadmap for the transformation process
  
- ❖ Vision
  - transform the EC Government landscape into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

# eGovRTD2020 overall roadmapping met

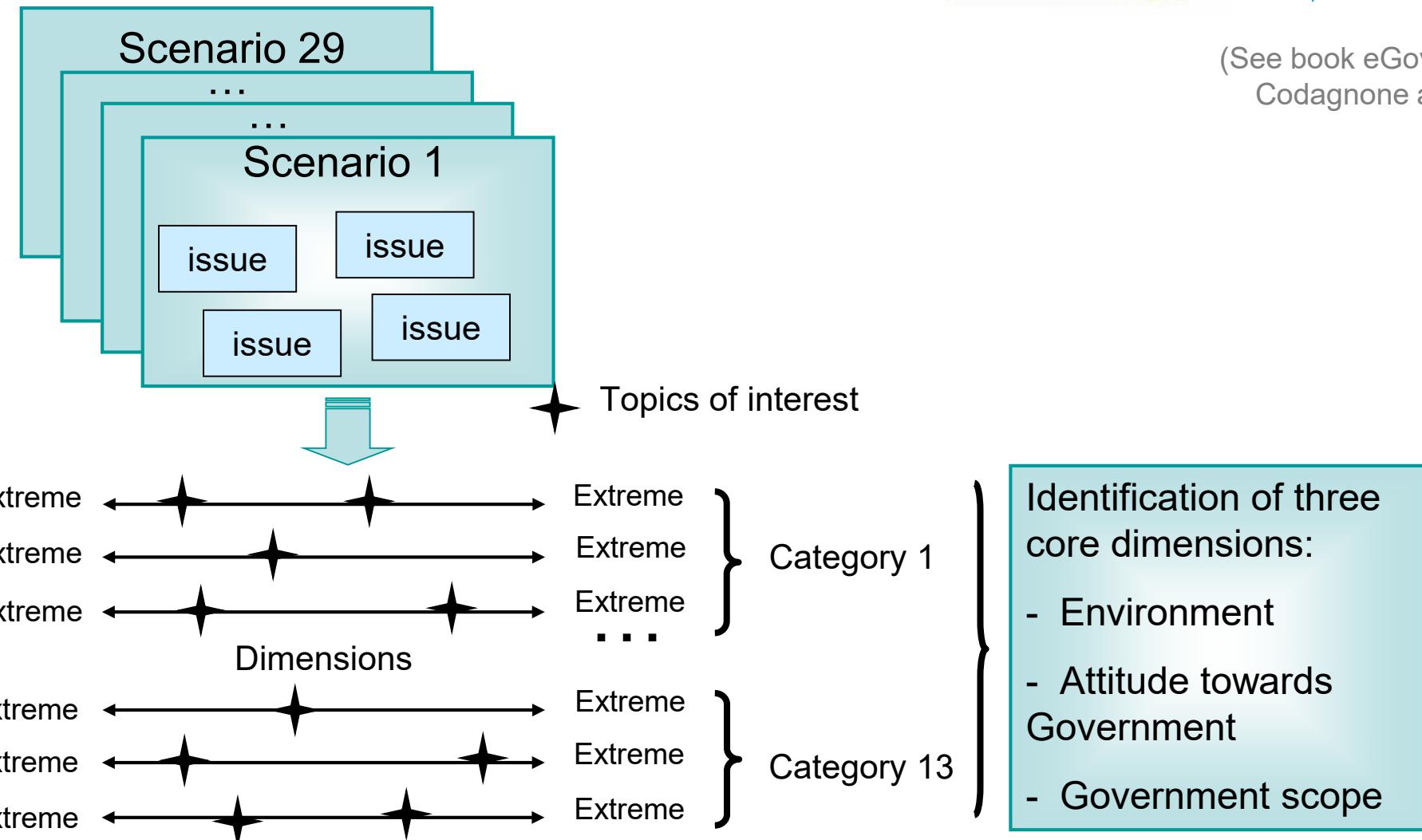
(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))



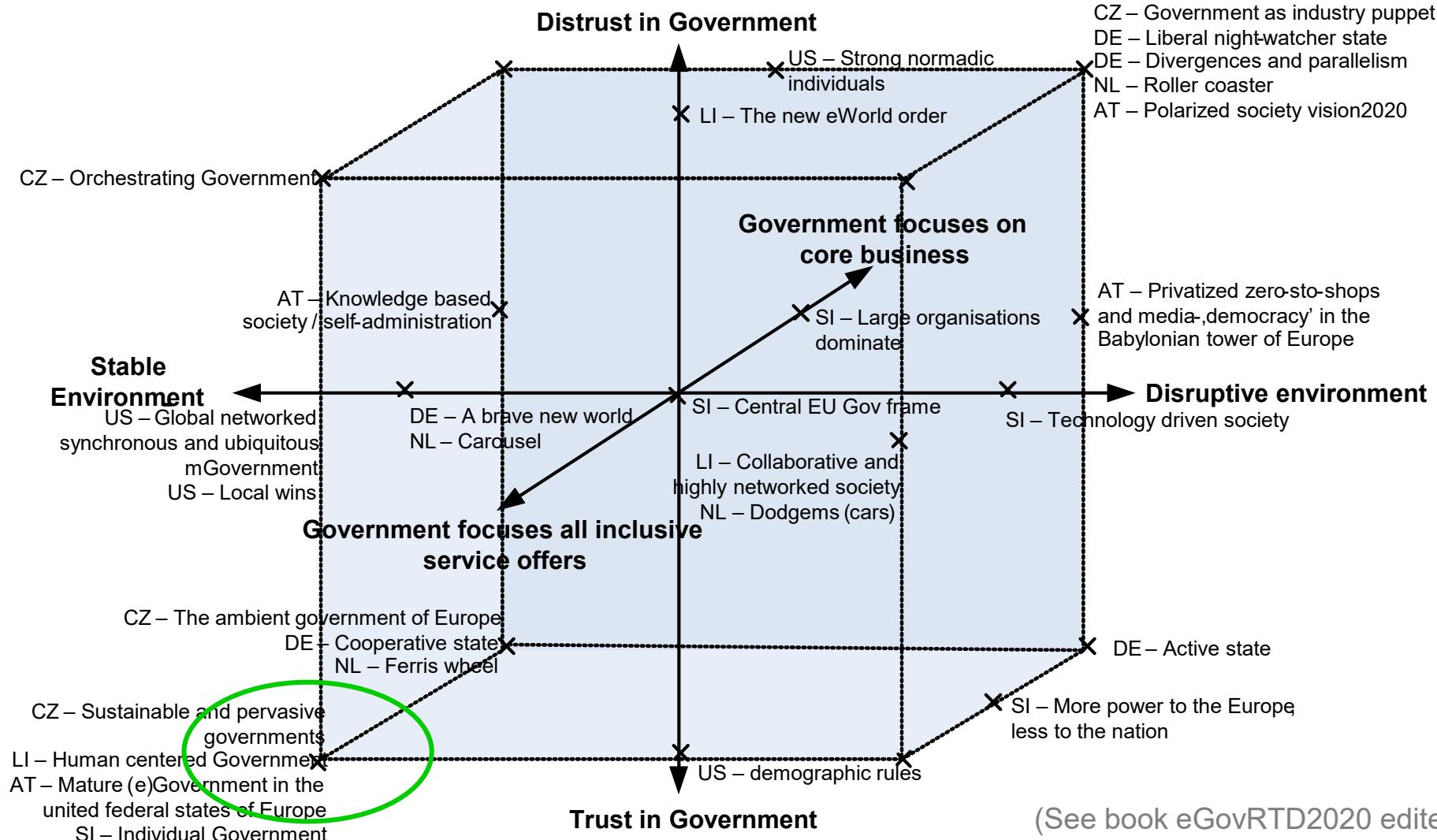
# Method for scenario development



(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))

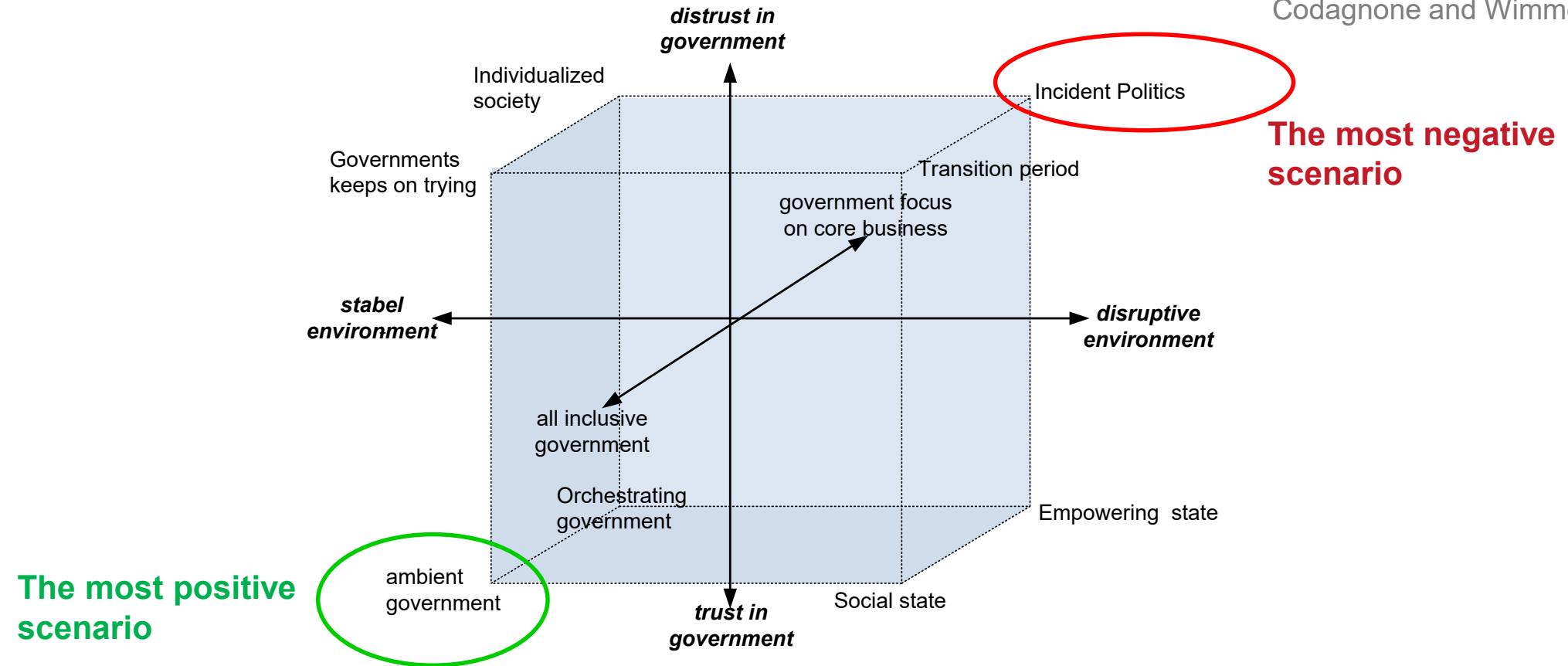


# 29 scenarios from seven regional works!



# Consolidation of scenarios into a set of final 8 scenarios

(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))



# Ambient government

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

(See book eGovRTD2020 edited by  
Codagnone and Wimmer (2007))

- ❖ 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	Government	ICT
Europeanization	Cooperation between Europe's governments	Communication across cultures
Standardisation	Central EU e-procurement	ICT as driver e.g. economic growth
High investments into education as prevention measurement	No physical contact (high quality of e-services)	Universal wireless networks
Internet communities	Political power at EU and local level raises, decrease at national level Transparent decision-making Public-Private Partnerships	Security standards Sector-specific regulation Service-oriented architecture

# Involving experts in scenario-building workshops

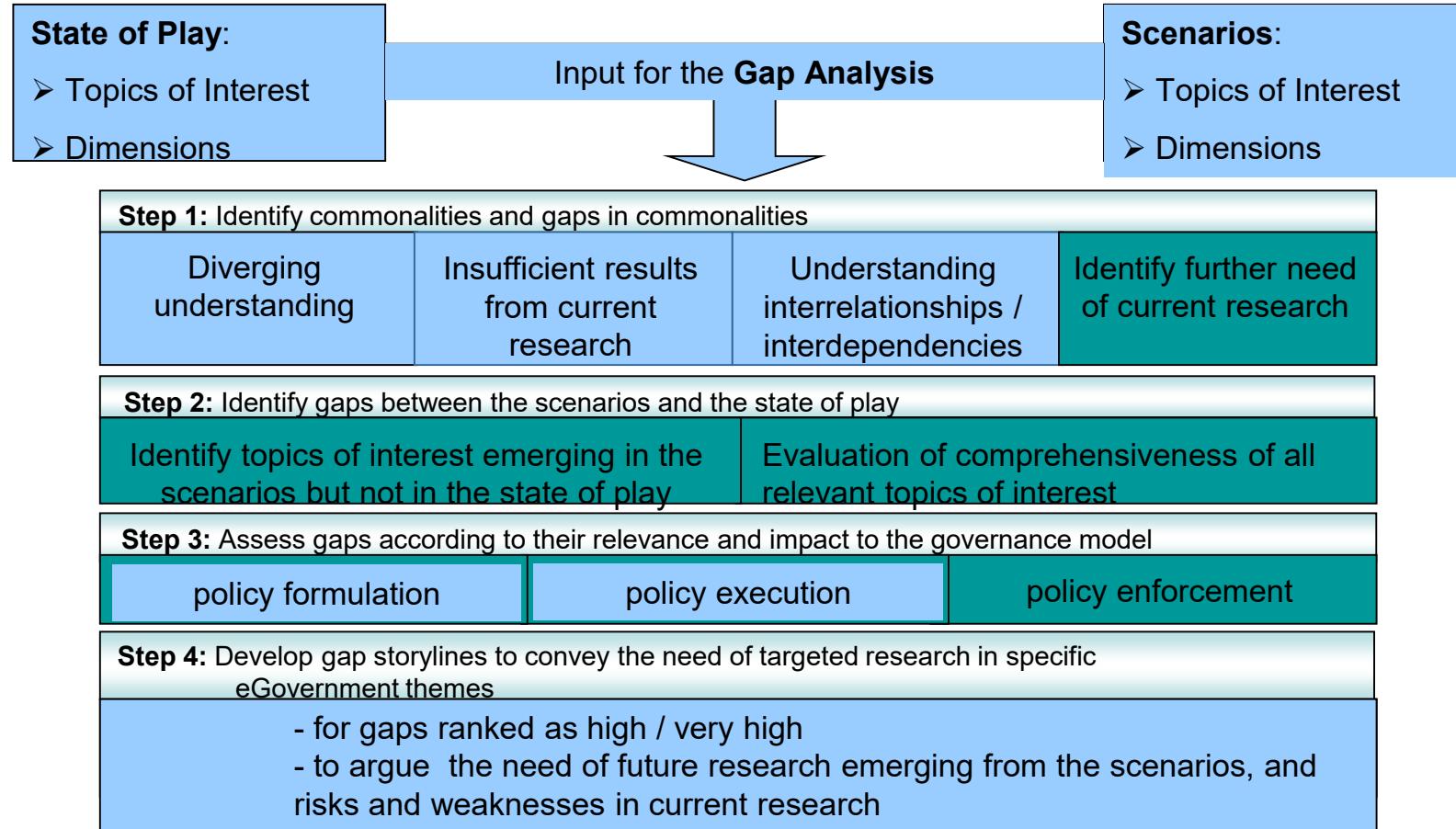


(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))

Country	City	Number of scenarios	Participants scenario-building workshops				Geographical spread by continents			
			Government	Academia	IT Industry & Consulting	Total	Europe	USA	Australia	Asia
Czech Republic	Prague	4	1	13	1	15	15			
Germany	Koblenz	5	2	13	4	19	19			
The Netherlands	Delft	4	4	7	8	19	19			
USA	San Diego	4	2	23	1	26	7	17		2
Lithuania	Vilnius	3	5	8	5	18	18			
Austria	Linz	4	11	9	5	25	25			
Slovenia	Bled	5	2	12	5	19	18	1		
<b>Total number of participants</b>		<b>29</b>	<b>27</b>	<b>85</b>	<b>29</b>	<b>141</b>	<b>121</b>	<b>18</b>	<b>0</b>	<b>2</b>

# Gap analysis method

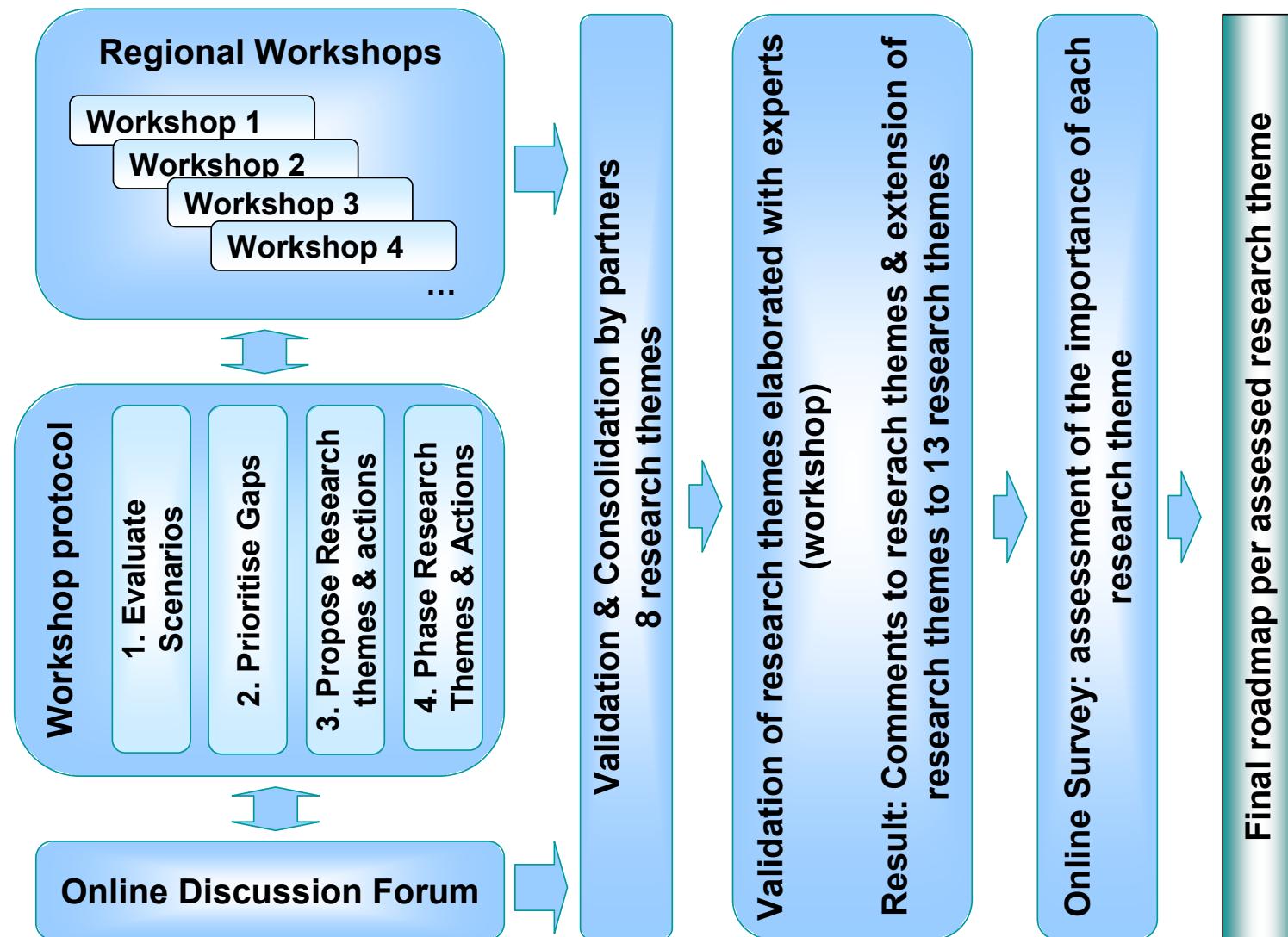
(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))



# Roadmapping method



(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))



# 13 themes for future e-government research

(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))

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

# Example of describing research themes: Information quality

(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))

- ❖ Abstract: Governments, the market, and individuals increasingly need well-defined, timely, accurate, reliable and appropriate information drawn from many sources. In the future, guaranteeing information quality will become both more important and more difficult as the number and variety information sources (including informal sources such as wikis and blogs) continues to grow. What mechanisms are needed to find, select, evaluate, and authenticate information that is appropriate for a given use?
- ❖ Keywords: information quality assurance, evaluation mechanisms, certification and trustworthiness of information sources

(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))

#	Description	Means	Actors	Timeline
1	Study to gain a proper understanding of Information Quality (IQ) within the networked government context, including linking Information Quality with activities and stakeholders: Analyse what is at stake, evaluate existing research Analyse existing frameworks, ontology/ taxonomy/ typology Develop a landscape/ scope of understanding IQ Identify general criteria to assess Information Quality Develop an understanding of the objectives of IQ Link IQ to activities / actors	Action research, desk research	Research with key players from government and ICT industry	now, urgently needed -> 2008
2	Evaluate and measure existing approaches to IQ and test them in the government context	Gap analysis	Research with key players from government and ICT industry	now, urgently needed -> 2009
3	Develop a framework for measuring Information Quality Define measurement criteria Make the measurement criteria operational and apply criteria	Conceptual design and user participation	Research (and Consulting)	2008 -> 2011
4	Apply the framework in practice and continuously evaluate the framework for improvement Implement pilot cases Reengineer the framework based on insights from pilots Frequently monitor, evaluate and reengineer the IQ framework within a given context (micro-level) Benchmark the IQ framework across countries (macro-level)	Pilot projects, updating the IQ measurement framework, and benchmarking	Consultancy and key players from government with support of research (for reengineering)	2010 -> 2015
5	Analysis of costs and benefits of Information Quality What are the costs of weak Information Quality? What are the consequences of good or of bad IQ in government decision-making and electronic public services contexts? Which investments are needed to secure high IQ?	Desk research, comparative analysis, impact analysis, action research and case studies	Research and consulting with key players from governments and ICT industry	now -> 2015
6	Prioritisation of IQ by stakeholders in relation to the intended activities: Investigate, where IQ is more important than in other areas / activities of government, and Who has which perceived IQ importance? Investigate, which mismatches of perceived importance of IQ do exist, and Develop concepts and solutions of how to solve these conflicts of interest	Gap analysis and action research	Research and consulting with key players from governments and ICT industry	now -> 2011

# Book available @ research group e-government and in library



(See book eGovRTD2020 edited by Codagnone and Wimmer (2007))



# **Basic concepts and typical e-government solutions:**

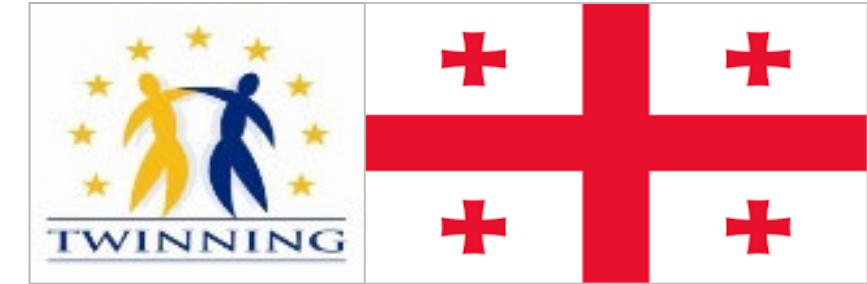
## **Strategy development for digitalization in the public sector**

### **Agenda**

- ❖ Terminology – definition of concepts
- ❖ Strategies and action plans at European level
- ❖ Strategy development method and examples
  - a. eGovRTD2020 method
  - b. Example of strategy development for Georgia
- ❖ E-government strategies in Germany
- ❖ Learnings for the class

# Example of e-government strategy for Georgia (Twinning project)

- ❖ Strategy Document “A Digital Georgia: e-Georgia strategy and action plan 2014-2018”
- ❖ Elaborated in the period Jan 2013 – Oct 2014
- ❖ Adopting in part the eGovRTD2020 methods



B. Krabina, P.-W. Liu, M. Meyerhoff-Nielsen, J. Millard, P. Reichstädter, M. A. Wimmer: A Digital Georgia: e-Georgia strategy and action plan 2014-2018. Component 4 of the twinning project “Promote the strengthening of E-Governance in Georgia (E-Government Georgia)” (2014)

# Objectives of the strategy

- ❖ Illustrating the path leading to a modern Georgia
- ❖ Providing a comprehensive framework for societal changes enabled by Information and Communication Technology (ICT)
  - Focusing those fields of action, where the public sector is able to take measurements and to set frameworks to exploit the full potential of ICT
  - With broader scope tackling related fields of innovation to create a prosperous environment for an innovative business sector and an innovative civil society
    - Role of government: to stimulate innovation in public, private and civic sectors to ensure economic and sustainable growth

Krabina et al (2014)

# Vision for the e-Georgia strategy

- ❖ “Georgia will become a more efficient and effective public sector offering integrated, secure, and high quality e-services. Improved usage and participation enable ICT-driven sustainable economic growth.”
- ❖ Vision further translated into six mission statements, which in turn led to eleven thematic priorities for the e-Georgia strategy

Krabina et al (2014)

# The six mission statements of e-Georgia (1/2)

- ❖ To ensure one-stop accessibility of secure and effective e-services for citizens, businesses and non-governmental sector based on reliable and trustworthy infrastructure
- ❖ To stimulate the demand and increased use of e-services by citizens and businesses through high quality, efficient, effective, trusted and secure service delivery
- ❖ To encourage the involvement of a skilled civil society and private sector in innovation and the development of e-services in an open and transparent environment.

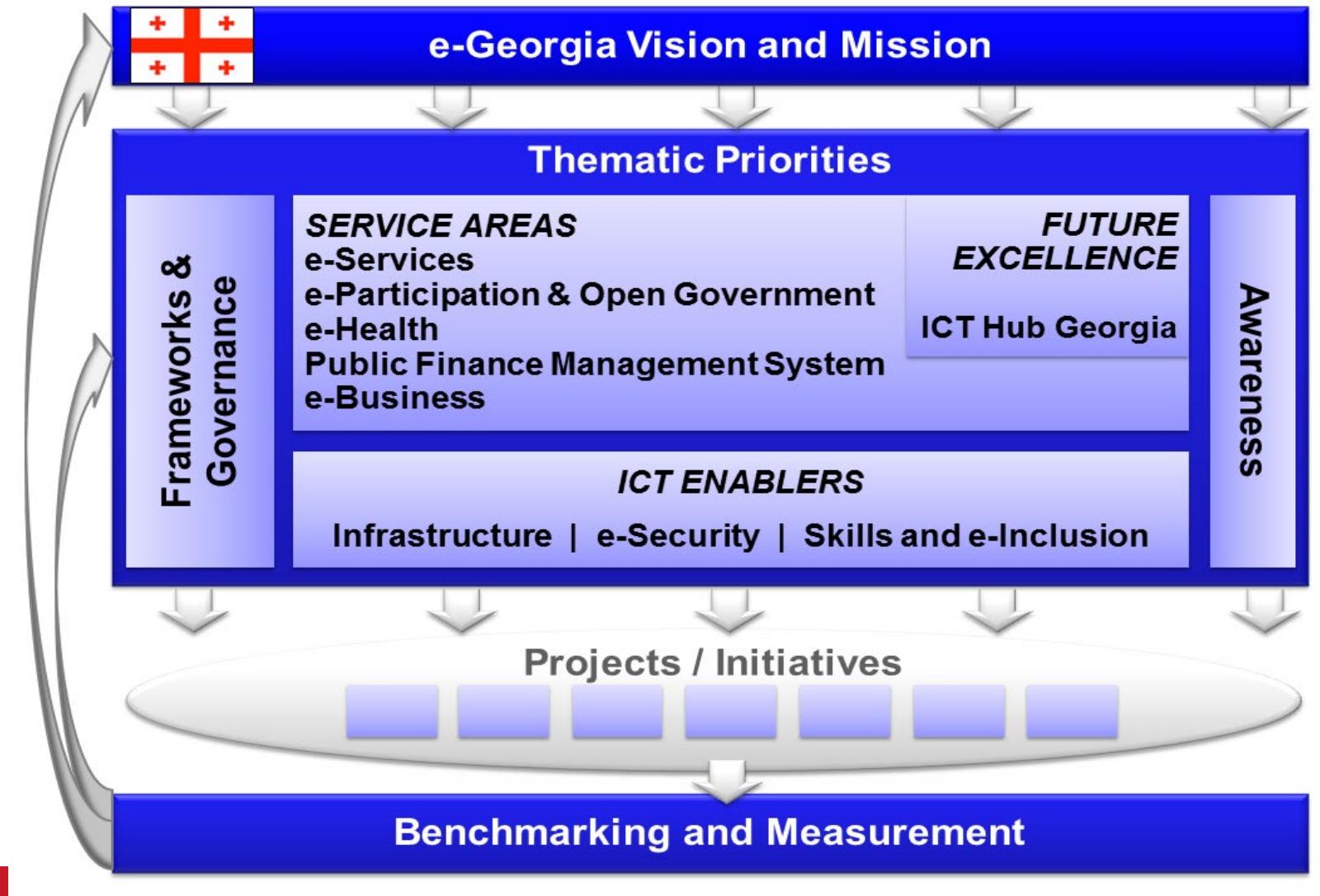
Krabina et al (2014)

## The six mission statements of e-Georgia (2/2)

- ❖ To build a durable interoperability foundation for creating secure, trusted channels for the sharing and exchange of information, information systems and technologies in state agencies, local self-government territories, municipalities and private organisations
- ❖ To further a competitive and innovative business environment and to support entrepreneurship, partnerships between civil society, as well as the public and private sector in the field of ICT
- ❖ To establish effective information security and privacy policies protecting well against information and cyber-security threats

Krabina et al (2014)

# The Overall Strategy Contents



Krabina et al (2014)

# Description template for each thematic priority...

- ❖ Introduction and scope
- ❖ Current situation and initiatives
  - including state of play analysis of existing projects
- ❖ Goals and action plans
  - outlining expected stakeholder benefits
  - outlining specific actions and the expected outputs and outcomes underpinning goals for theme, and thus to overall strategy
- ❖ Performance targets to operationalize the overall vision and mission statements
  - Defining specific, measurable indicators for outputs & outcomes

Krabina et al (2014)

## Examples for e-Services for Citizens (G2C) (extracts only) (1/5)

- ❖ Introduction and scope
  - Priority to high-impact government to citizen (G2C) service and the availability of online services via the my.gov.ge portal
  - Increased availability of e-Services across the country through self-service kiosks at Public Service Halls, Community centres and libraries, as well as commercial channels such as Payment Kiosks will be also fostered

Krabina et al (2014)

## Examples for e-Services for Citizens (G2C) (extracts only) (2/5)

- ❖ Current situation and initiatives
  - Based on 2012 UN e-Government Survey, Georgia ranked 72nd (of 193)
  - E-government score: 0.5563 and online availability score: 0.6013
  - Large gap between availability (i.e. supply) of e-services and actual use
    - E.g. property tax declaration ~100% take-up, change of residential address hardly used online.
  - Investments focused on digital services for issuing of passport, ID and residency, life event services related to marriage, divorce, birth adoption, change of name, death, power of attorney etc.
  - Development of key enablers for sophisticated online service provision included introduction of identity cards (e-ID) and development of one-stop government portal my.gov.ge

Krabina et al (2014)

# Examples for e-Services for Citizens (G2C) (extracts only) (3/5)

## ❖ Goals and action plans

### ➤ expected stakeholder benefits

- To optimise the value-added for citizens and government the e-Georgia must focus on both the supply and the demand and take-up of government e-Services - creating a cost-efficient public sector through redesigned and automation of service delivery processes and channels
  - Planting the seeds of sophisticated G2C e-services i.e. ensuring availability and supply of user-friendly and accessible electronic services
- To ensure added value for citizens, digital services not only complement existing service delivery channels, but allow for convenient, time saving, 24/7 access – and if service design is user-centric, personal and proactive the digital channel constitutes an improved service experience.
  - e.g. high quality of service delivery, cost and time savings by using the electronic services, optimised return on investment for governments

Krabina et al (2014)

# Examples for e-Services for Citizens (G2C) (extracts only) (4/5)

Outlining specific actions and expected outputs

No	Title	Description	Output	Time-line	Respon-sibility
1	User-friendly, personal and relevant e-Service design, and evaluation processes	<p>Project on user-friendly, personal and relevant e-Service design. Focus on minimum requirement for user-friendliness and web-accessibility (as defined by W3C's WCAG standard<sup>4</sup>) in e-Services plus common-look-and-feel principles.</p> <p>A definition of quality of service and relevant parameters (min./max.) needs to be established; This is then used as input for contracting and especially monitoring of the infrastructure services along the lines of the United Kingdom's gov.uk's T10 design principles<sup>5</sup> or Denmark's 24 user-friendliness and web-accessibility minimum requirements for e-Services<sup>6</sup></p> <p>(see section 3.2 e-Participation and Open Government).</p>	Guide launched Agreement on evaluation process	2014-2015	DEA
2	Transaction statistics, user rating and commenting on e-Services	Transaction statistics and user-rating and commenting on e-Services project focusing on the automated collection of transaction data (i.e. take-up of e-Services), qualitative user-feedback (i.e. rating and commenting). Focus should be on services available and activated via e.g. my.gov.ge. Objective is to management information, progress on strategy objectives, monitoring of e-Service take-up in	Technical solution launched	2014	DEA, e-Service providers

Krabina et al (2014)

# Examples for e-Services for Citizens (G2C) (extracts only) (5/5)

## ❖ Performance targets

- Guide on user-friendly, personal and relevant e-Service design available in 2014, with evaluation process agreed by 2015 (underpins e-Service take-up targets).
- Transaction statistics, user-rating and commenting on e-Services are launched and fully functional (underpins monitoring of e-Service take-up targets) by 2014.
- Feasibility study on better digital communication performed and recommendations developed by 2015.
- Implementation of the recommendations made in feasibility study better digital communication performed and recommendations developed by 2018.
- Georgia improves its e-Services score in the biannual UN e-Government Survey with 5 points by 2014, 10 points by 2016, and 20 points by 2018 from its 2012 base of 72nd position (0.556 e-Government Index in UN Study 2012).<sup>7</sup>
- 90% of central public G2B/G2NGO/B2G services and 70% of services from local governments and private sector are available through multiple channels at transactional level in a user-friendly and efficient manner through the one-stop portal (single hub) accomplishing public duties.

Krabina et al (2014)

## The method

- ❖ Four workshops with experts from DEA and stakeholders from several ministries and institutions participated to elaborate and review the strategy
  - More than 60 participants from 34 different organisations
- ❖ Literature review for the state of the art by Twinning experts
- ❖ Several interviews with different ministries held in order to clarify open issues and to collect further feedback
- ❖ Iterative process of development and reviewing the strategy by stakeholders to gather feedback

Krabina et al (2014)

# **Basic concepts and typical e-government solutions:**

## **Strategy development for digitalization in the public sector**

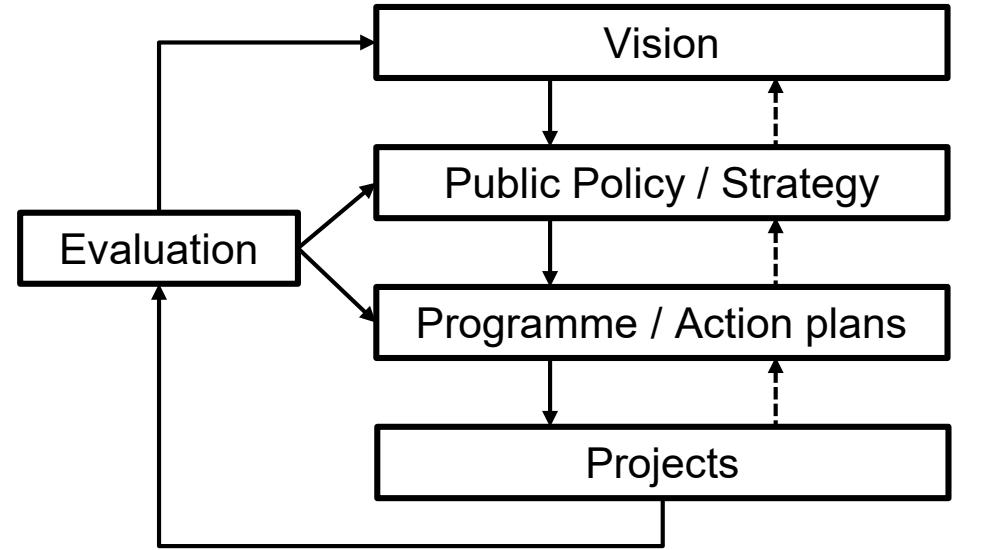
### **Agenda**

- ❖ Terminology – definition of concepts
- ❖ Strategies and action plans at European level
- ❖ Strategy development method and examples
- ❖ E-government strategies in Germany
- ❖ Learnings for the class

# Lessons on Strategy Development for Public Sector Digitalisation

- ❖ Strategy development an iterative and interactive process
  - Involving different stakeholders
  - Not written in a day
- ❖ Strategy lifecycle management is key
  - A strategy is valid for a given time-span
  - New topics evolve, existing ones fade out or are resolved
  - Strategy development is costly
    - Process requires expertise and involves substantial human power
    - Strategic objectives must be equipped with financial resources for their implementation
    - Strategy needs monitoring and evaluation on a frequent basis
- ❖ Structured Method needed for strategy development and monitoring

# Phases of Strategy Development and Implementation-> iterative Lifecycle of Strategies and Public Policies



## Legend:

- |       |
|-------|
| Phase |
|-------|
- Activity flow
- Recursion / Feedback and Assessment of overall objectives related to the higher-level phase

(Wimmer 2002, Scherer et al 2008, Mkude & Wimmer 2013)

# References

- ❖ Codagnone, C., Wimmer, M.A. Roadmapping eGovernment Research: Visions and Measures towards Innovative Governments in 2020, MY Print snc di Guerinoni Marco & C. (2007)
- ❖ Evans, S.J.: Public Policy Issues Research Trends, Nova Science Publishers, Inc. 2008
- ❖ Krabina, B., Liu, P.-W., Meyerhoff-Nielsen, M., Millard, J., Reichstädter, P., Wimmer, M. A.: A Digital Georgia: e-Georgia strategy and action plan 2014-2018. Component 4 of the twinning project “Promote the strengthening of E-Governance in Georgia (E-Government Georgia)”, 2014
- ❖ Mkude, C., Wimmer, M.A.: Strategic Framework for Designing E-Government in Developing In: Proceedings of Electronic Government. LNCS # 8074, Springer: Heidelberg et al, 2013, pp. 146-160
- ❖ Schuster II, W. M.: For the Greater Good: The Use of Public Policy Considerations in Confirming Chapter 11 Plans of Reorganization. In: Houston Law Review, Vol. 46, p. 467, 2009
- ❖ Scherer, S., Schneider, C., Wimmer, M.A.: Studying eParticipation in Government Innovation Programmes: Lessons from a Survey. In Hampe, F., Swatman, P.M.C., Gricar, J., Pucihar, A., Lenart, G. (Eds.). eCollaboration: Overcoming Boundaries through Multi-Channel Interaction. 21st Bled eConference, pp. 15-18 (2008)
- ❖ Surhone, L. M.: Public Policy. VDM Verlag Dr. Mueller e.K. pp. 63 , 2010
- ❖ Wimmer, M.A.: A European Perspective Towards Online One-stop Government: The eGOV Project. In Electronic Commerce Research and Applications,1(1), pp. 92 – 103 (2002)

➤ Thank you for your attention and good success  
with the module!

... your questions!