



EGOVERNET Workshop:
Beginning of a framework on e-government research
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E-government research programmes in Europe: an
overview

Results of eGovernet WP3

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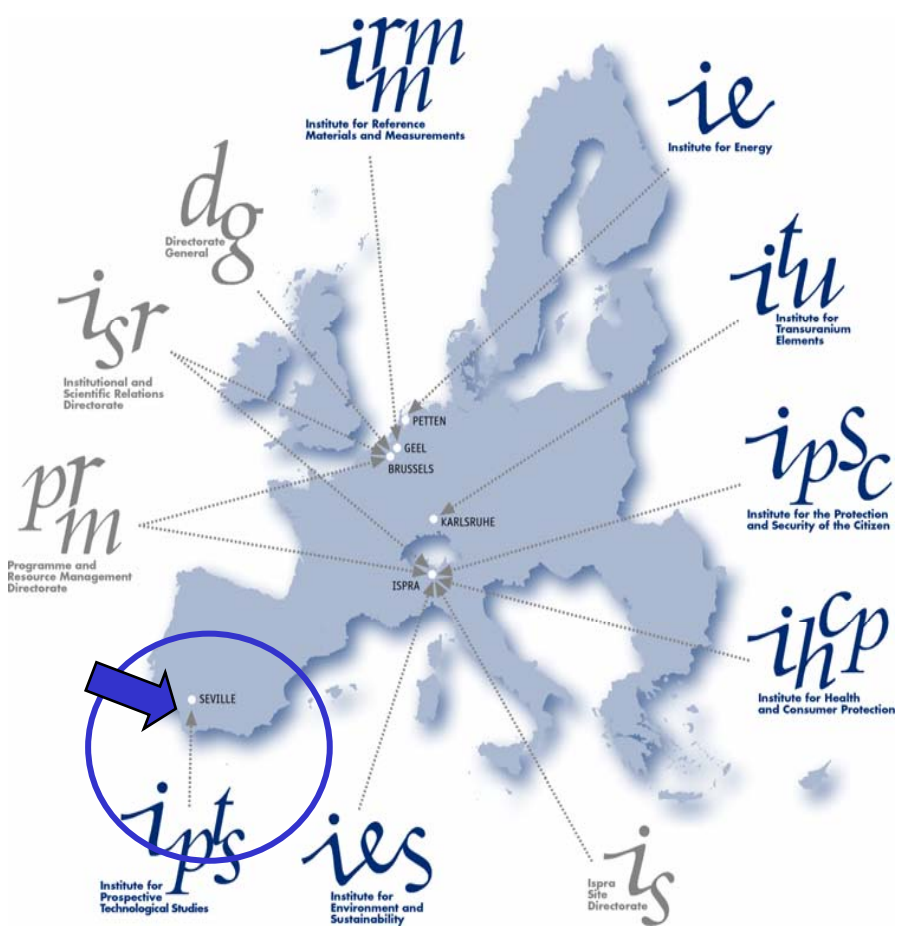
JRC-IPTS

IPTS: Part of DG JRC of the EC: 7 Research Institutes across Europe

Mission: "to provide customer-driven support to the EU policy-making process by researching science-based responses to policy challenges that have both a socio-economic as well as a scientific/technological dimension"

Modus operandi: desk research, expert groups, modelling, centres of expertise

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Content

- A. Aims and method
- B. An overview
- C. A cross-country thematic analysis
- D. Gap analysis, conclusions and future work



Aims of WP3

- E-government research is fragmented, but is undergoing a process of consolidation
- Research funding not only stimulates research, but helps bringing together the different actors
- Egovernet WP3 aims:
 - To assess state-of-the-art and future eGovernment research programmes,
 - To investigate best practice in eGovernment research programmes, in the different countries represented in the project,
 - To integrate these national results into a synthesis view at the EU level.

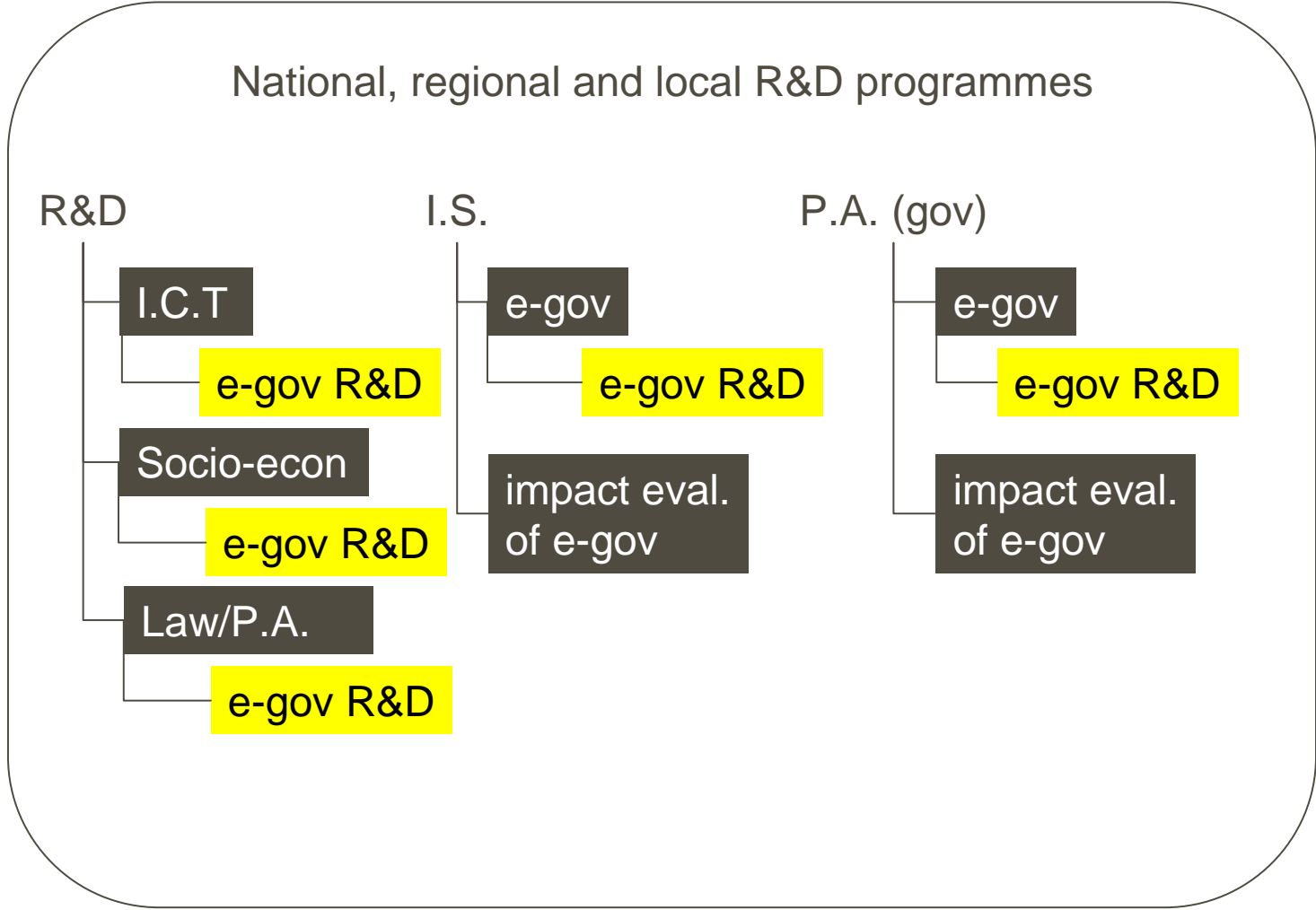


Methods

- TOP DOWN
 - Partners' input
 - Key institutional contacts (interest group)
 - ERAWATCH, CISTRANA, eGOVRTD2020...
- BOTTOM-UP
 - Survey of researchers (ECEG participants)
 - ERISA



The approach: 3 different policy domains of e-gov R&D





Operational definition of eGovernment research

- Includes different disciplines with equal relevance, with ICT as a key enabler
- Includes different stages of research, from basic research up to action oriented research and the innovative integration of existing solutions. Does not include the adoption of ICT in the public administration and the actual implementation of e-government
- Is carried out in both the public and the private sector, but eGOVERNET focuses on research funded through Public sector programmes
- Does not include the activities of the public sector that are specific only to the health and education sectors



3 types of e-government research programmes

1. DED) dedicated eGovernment research programmes, mainly in the central green area of the scheme;
2. EXPL) eGovernment research as one explicit priority in a wider programme for IST R&D or eGovernment implementation;
3. POT) eGovernment as one potential application field of other R&D programmes which may concern generic technologies and applications, methodologies and so on.



The context of R&D and eGovernment in Europe

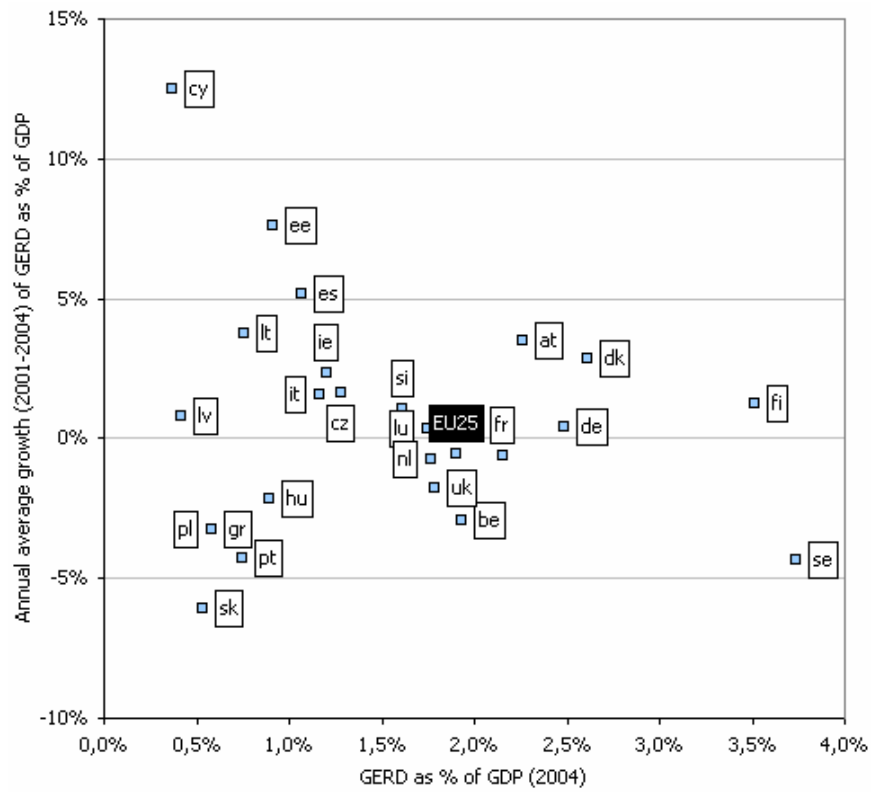
- "The national landscape for R&D in Europe is extremely diverse, both in terms of relative investment in R&D and the systems for implementing national programmes. [...]. The situation is much more harmonised and coordinated in basic research than in industrial and societal programmes. "

		Programme Orientation		
		Single Framework Programme	Multiple Generic Programme	Multiple thematic Programme
Implementation orientation	Multi agency/council/ministry	E I IE	B F	UK D
	Several agencies/councils	P CZ LU GR	EE LY LV	NL AT FI SE
	Single agency/council	PL CY MT BG SK SI		NO DK HU RN

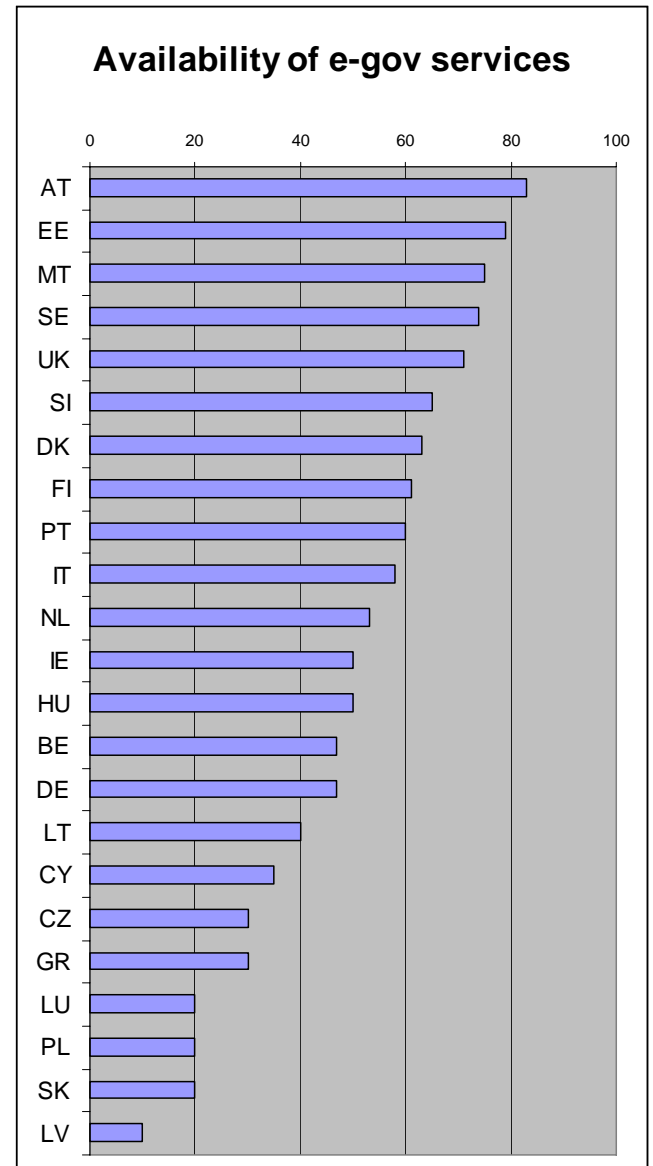


Different R&D and e-gov situations

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Source: EUROSTAT





Country overview

1. Countries with DED programmes: Sweden, Norway, regions of Flanders and Emilia-Romagna
 2. Countries with EXPL programmes: FI, ES, FR, D, IE, HU, LV, SK, SI, BG, CZ
 3. Countries with POT programmes: all others
- But in reality, each country is a mix of the different forms
 - Fragmentation very much exists at national level too
 - In annex to the report, and on the web, national information sheet will be published



1. Examples of programmes potentially supporting e-government research.

- Italy, the National Research Programme: "The PNR does not contain specific reference to the field of e-government. Nevertheless, there are a number of research areas, in particular in ICT, that are potentially relevant for e-government. But they are not connected explicitly to e-government R&D. Some projects financed within the framework of PNR (collected through a bottom-up approach) are related to e-government key research area, but they are not part of a coordinated research initiative (programme or part of a programme) in the e-government field" (Network technologies, e-democracy, Quality of services (to final users), Knowledge management, Open Source Software)
- Poland, the National Computerisation Plan: ""The part does not include initiative/programme on eGov research but underlines the importance on eGov research. The plan does not introduce any financial mechanism to support the implementation of the NCP"
- Czech Republic, Slovenia, UK, Greece, and all others...
- Northern Ireland – Peace II project
- E-gov research is funded also here! In these countries, important role of EU funds



2. Examples of research programmes including e-government as a priority area

- Netherlands:
 - AVB AVB is a research network / think-tank of the Dutch Ministry of Interior and Kingdom Relations in co-operation with the Ministry of Economic Affairs and eight academic research institutes. Each year a number of studies is carried out concerning fundamental questions about the role, position and functions of the (e-) government:
 - Organizational Innovation
 - Identity Management
 - User Interaction
 - eDemocracy
 - Modernisation of public Administrations
 - ICT Regie – ICT research programme, E-government is a possible aspect, but not yet a priority.
- Ireland: DERI (with e-gov research on semantic interoperability) funded by IST research programme
- Spain: National programme for service technology of Information society
- Germany: IT – Internet basics and services
- France: Programme "Société de l'information"
- Regione Friuli, Regione Toscana, Province of Trento (Italy)



4. Dedicated research programmes on e-government

- Sweden
- Norway
- Belgium – Flanders (IBBT)
- Emilia-Romagna region (Italy)



Sweden

- eService in the public administration (2005-2009): managed by Vinnova - Swedish Innovation Agency
 - 4 M Euros on a four year period (+4 M private co-financing)
 - Open calls, proposals led by public administration
 - Action oriented, need oriented, always multy discipline
 - “Innovative Development of Cross-boundary public e-services” and “Cross-boundary public e-services for businesses
 - Applied research, down to prototype
 - Extensive stakeholder consultation
- Other programmes include e-gov as potential area, also from foundation and local authorities



Norway

- Research for innovation and renewal in the public sector (FIFOS): managed by Norwegian research Council
 - ICT challenges in government and to innovations in the health sector
 - 10 million Euros over a six year period (2002-2008)
 - The projects must have matching funds up to 70% of the total budget.
 - Action oriented, need oriented, always multi discipline
 - Open calls - projects from the calls are evaluated and ranked by an external Expert Committee.
- BIA – User driven research based innovation (includes also e-gov)
- Høykom. Piloting Broadband Services for Local Government – not research but pilot
- DEMOSREG – Democracy and Governance in Regional Context
- IT Funk – ICT for the Disabled - Research for the development of universal design
- Other include e-gov as potential area



Flanders (Belgium)

- IBBT as virtual research institute by joining up existing research groups of 5 different Flemish universities
- Research programme on e-government - 4M Euros budget
- Open call + yearly brokerage event to define research priorities
- Demand driven definition of research priorities
- Joint Basic Research, with a more local scope and in close co-operation with a number of enterprises with complementary business models, 50/50% co-financed by these enterprises
- Evaluated by external experts (IWT)
- 5 themes:
 - Multi-channel delivery
 - Security and identity
 - Integration and interoperability
 - Monitoring
 - Impact on users
- Not just technological research, but combined with research into the economical, legal and societal aspects



Emilia-Romagna

- Within the regional ICT strategy, a specific action is towards ICT research, mainly on public sector (eGov eHealth eLearning)
- Participating universities, in partnership with industry and local authority
- 8,5 M€ form regional gov - total 21,5 M€
- Open calls, Applied research and development.
- Themes: Mobile services in eGovernment; multi-channel, ambient intelligence for urban spaces; User interaction; integration of social and health care
- Mostly technological research



Other cases

- Institutional funding to universities
- Procurement of research (Slovenia, IPTS, and all)
 - Specifically to support policy-making
 - Focus on socio-economic research, policy impact, foresight
- Creation of dedicated research centres (Ireland, Flanders, Toscana, Estonia, etc.)
 - public private partnerships
 - Strong relation with e-gov deployment
- Research embedded in deployment projects
- Bottom-up funding (no priority indicated ex-ante)
- Soft coordination efforts under way in many countries



A cross country thematic analysis: Institutional setting

- Most research programmes falling under R&D policy
- Only in 5 cases e-government implementation programmes include measures for research
- Important role of EU cohesion/structural funds in Portugal, Greece and some New Member States
- Significant role of regional level (Flanders, Emilia-Romagna, French regions)
- Joined-up e-government R&D not yet there...



Budget

- Existing DED research programmes are multi-annual and have a budget between 2 and 6 Million Euros per year. This is generally met by equivalent co-funding by private players.
- Difficult to measure budget of EXPL and POT, but likely to be smaller
- Overall investment appears marginal if compared to eGovernment implementation
- By comparison, eHealth attracts greater research investment, and smaller IT expenditure

<i>Type of programme</i>	<i>Budget (M €)</i>
Total budget of eGovernment research programmes in EU Member States, 2005-2006	34
Budget for eGovernment research in FP6 WP 2005/2006	46
eGovernment implementation programmes, EU Member States 2004 (latest available data)	11,900



Stages of research and multi-disciplinary approach

- eGovernment as IST application research
- General problem of usage of research (see also WP5)
- Specific policies to address the issue in Norway and Sweden
- DED programmes are more precise in priorities-setting; procurement used for specific requests and (relatively) clear needs
- Most research programmes are technology-centred
- Some require multidisciplinary: DED and France
- Socio-economic research is mostly for policy support and often funded through procurement and partnership with universities.



Thematic priorities

- Few national research programmes define priorities in such a precise way as FP 6 did
- The themes most often mentioned are: e-democracy, security, knowledge management, semantic web in government context, services to citizens and business, broadband application, and, of course, socio-economic studies in support of eGovernment policies
- The research theme "understanding users needs", indicated by previous research as one of the key research challenges, appear not to be considered in any research programmes, although "customer satisfaction" surveys are often carried out.
- DED programmes often have a cross-public sector approach



Beneficiaries

In order of importance:

1. Universities and companies
2. Public authorities

Strongly related to strategic goals

1. Strengthening the R&D system and a competitive ICT sector
2. Improving public services



Project selection and programme evaluation

- In research programmes, open calls are used, and proposals are evaluated by external experts.
- Sometimes consultation/negotiation procedures are used (Netherlands, Flanders-B), also in combination with open calls.
- Finally, as previously mentioned, procurement procedures are often used for socio-economic studies for policy support.
- More information on project selection procedures will be provided in a separate project report within WP7 of EGOVERNET.
- Programme evaluation not available, also because of their recent history
- Generally successful in leveraging private investment, if national eGovernment market is significant



Research and competence centres

- Widely felt need to consolidate eGovernment research
- Many countries created dedicated central research centres, physical or virtual, in partnership with university
- Centres sometimes also used to distribute funds
- Dedicated umbrella project being created



Identified goals and related gaps

- Establish organization and research management infrastructure for eGovernment research activities
- Define long term eGovernment vision and strategy in correlation with research programme management
- Define users and stakeholders and the relationship between them
- Establish correlations between different types of research
- Increase priorities of eGovernment research
- Leverage technological advancement in terms of new information and telecommunications technologies, new business models and open source principles
- Developed pan-European services
- eGovernment research – European Research Area

For each gap, SLOMIS developed specific policy recommendations



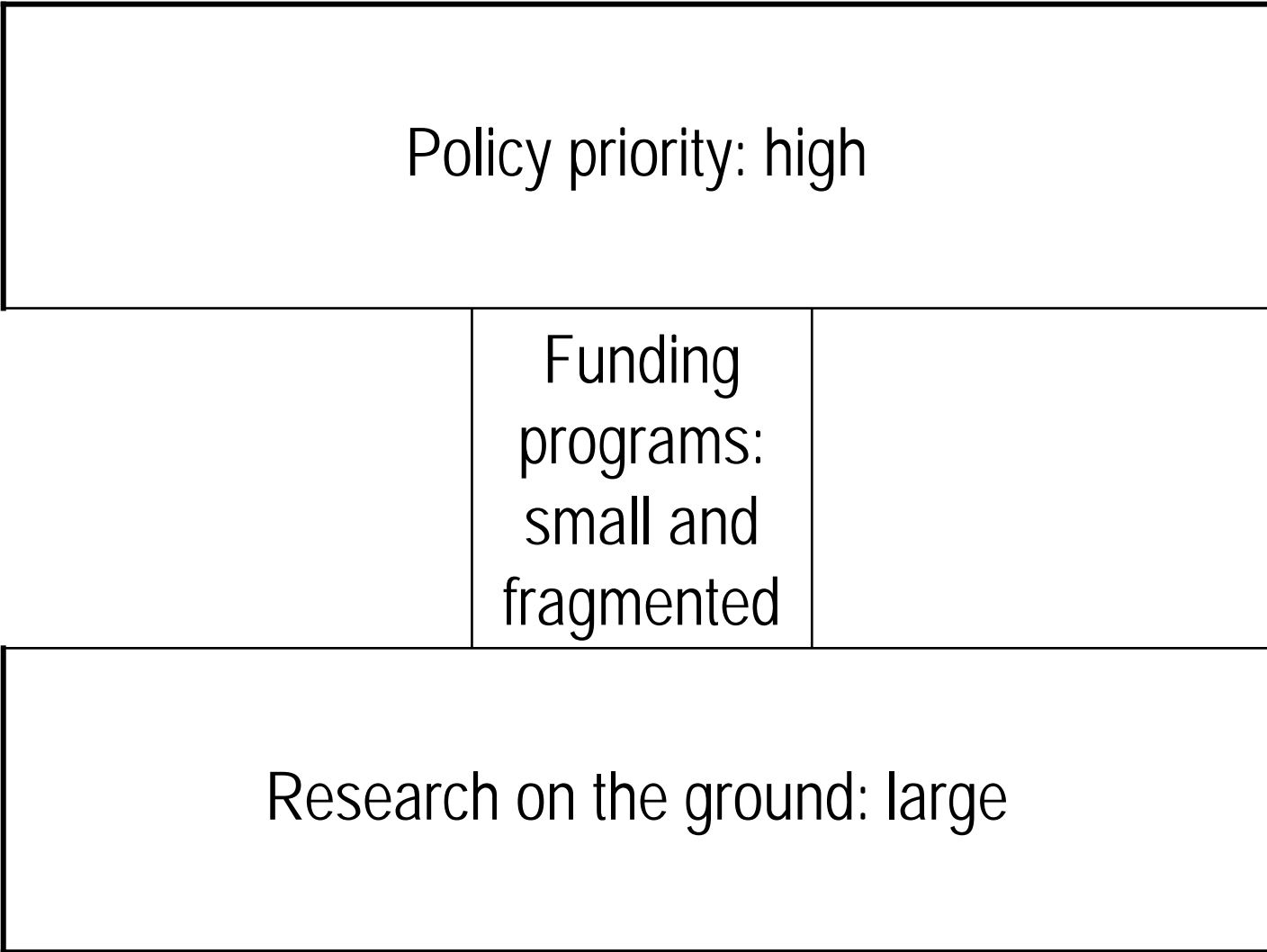
Conclusions and next steps

- Future work to update the database should
 - Be firmly based on other data collection exercise, in the general field of research programmes (ERAWATCH and CISTRANA) and on coordination of actual e-government research projects (EGOVRTD2020, EC, other national initiatives)
 - Involve national and regional programme managers as contributor for information on existing research opportunities
 - Involve the real experts on eGovernment research funding: the researchers themselves
 - Exploit the collaboration opportunities and spirit of social computing and web 2.0



Conclusions and next steps

- Contrast between the (high) declared importance of eGovernment research, (small) actual funding, and (large) amount of research carried out on the ground
- Future recommended research themes such as users needs are not visible in research programmes
- DED programmes are not the best or only solution for supporting eGovernment research. However they are effective in integrating the research field across boundaries





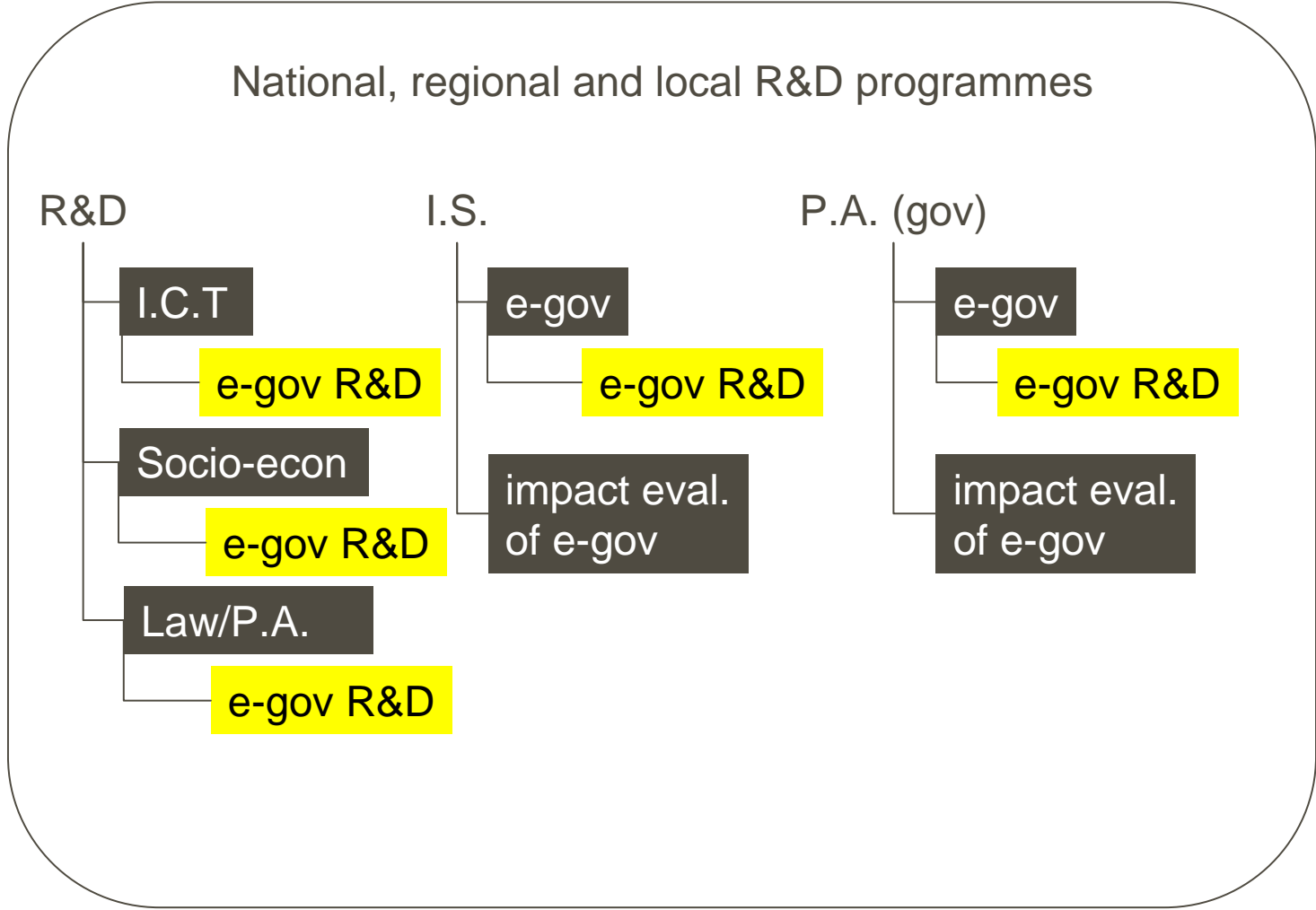
Conclusions and next steps

- Fragmentation of eGovernment research is very much visible at the national level too, between different policy areas, strategic goals and funding mechanisms
- Programmes and funding mechanisms are often more fragmented than the actual research carried out
- Division between socio-economic and IST research
- Research programmes arguably not the largest source of funding: institutional research, procurement and partnership. Necessary to include this in the EGOVERNET framework.



From parallel funding streams...

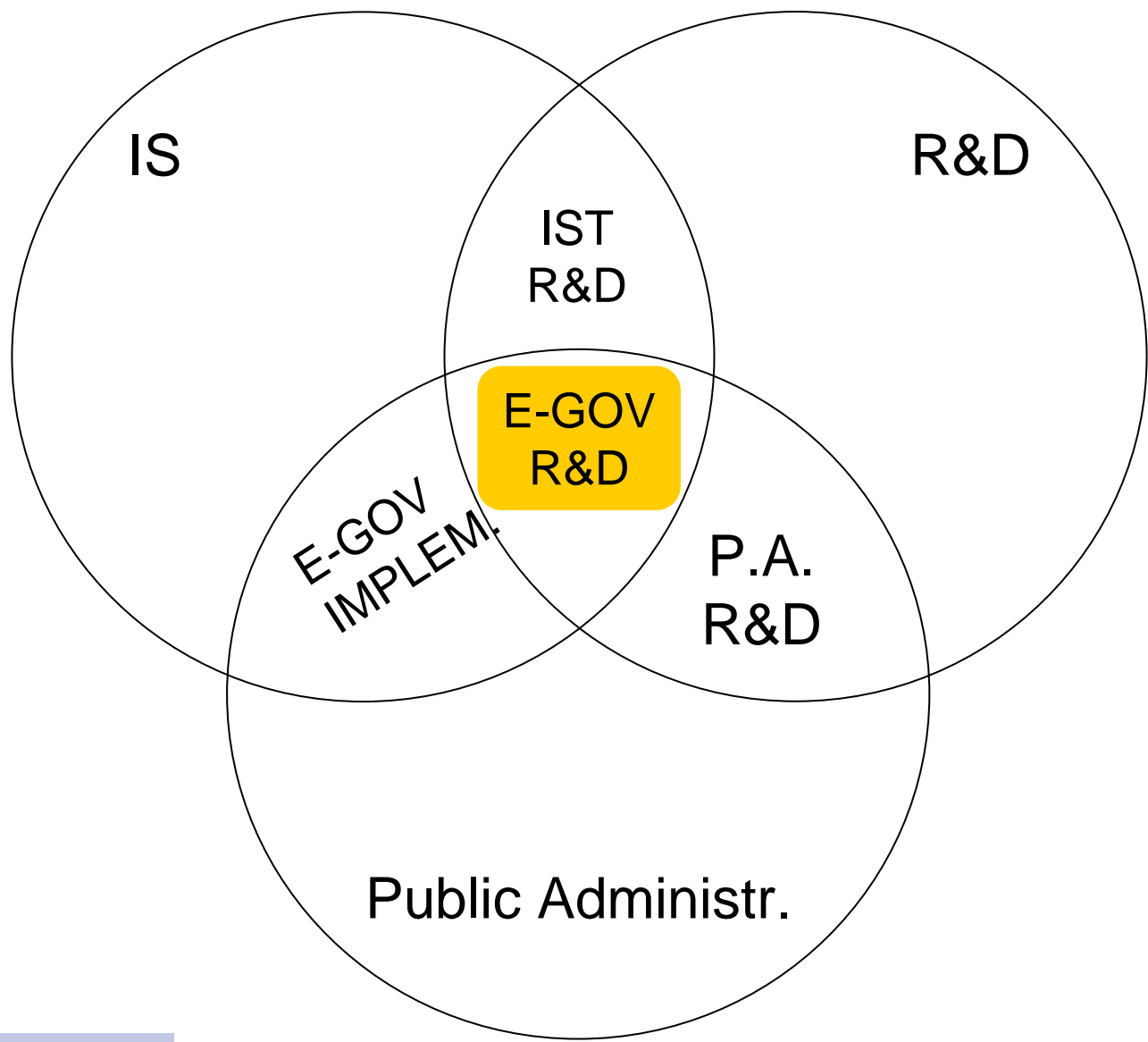
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... to an integrated approach

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Thanks and
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