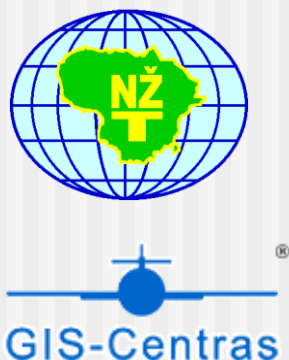


LGII Project – development of a spatial data infrastructure towards implementation of INSPIRE and GMES initiatives in Lithuania



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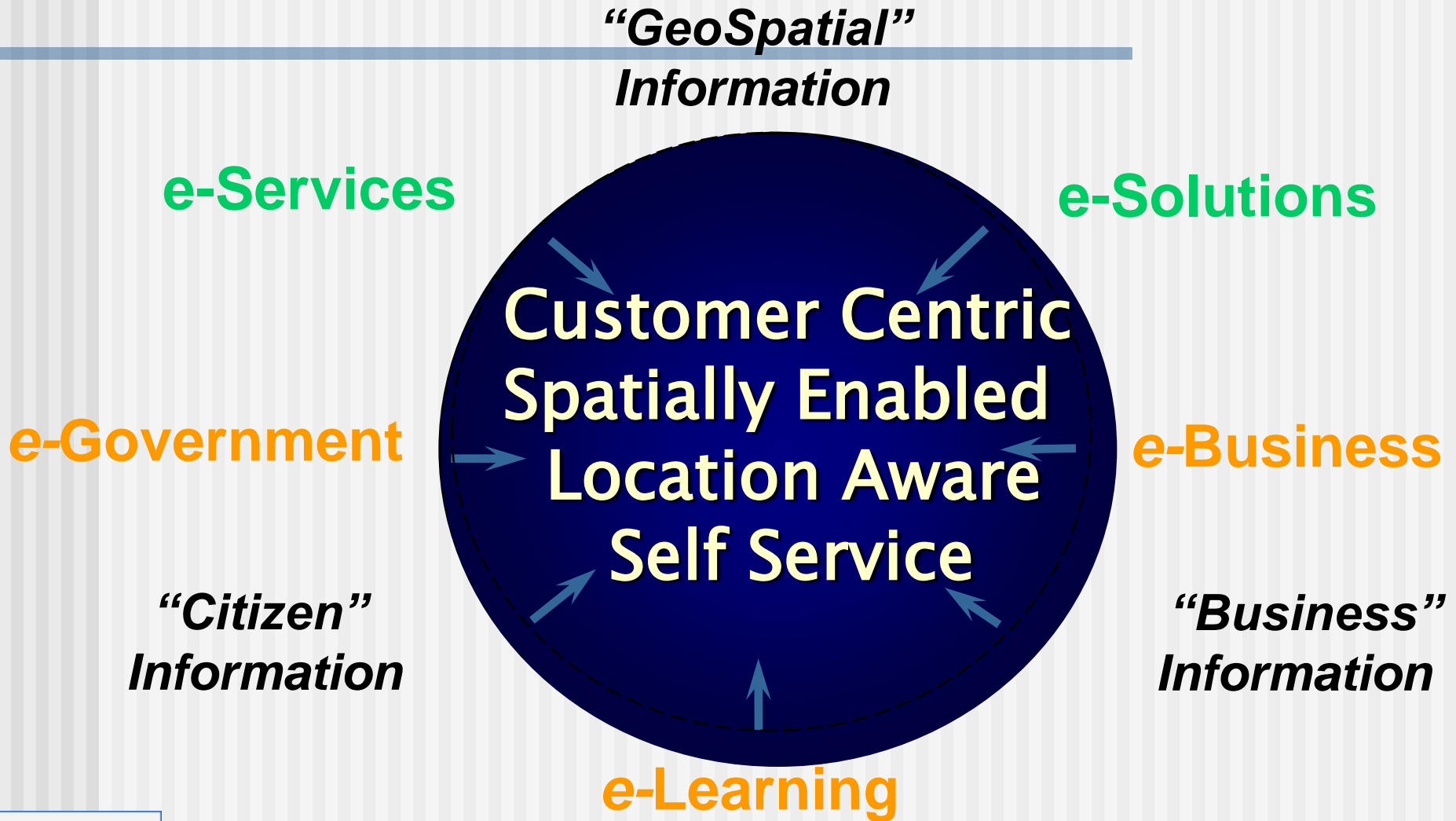
GIS-Centras

E-Government

- E-Government programme aims to reform the way in which government conducts business at all levels, in part by applying IT lessons learnt by industry.
- The scope of E-Government extends far beyond public access systems however. Their internal systems and methods of working are also required to move forward.



Leveraging The New Economy InfoStructure



The need for Spatial Data Infrastructure (SDI)

- **"Spatial Data and Information** is an indispensable part of the **basic infrastructure** in the individual country, and experiences from the well-developed countries show that **spatial information affects 80 per cent** of human decision-making. Spatial Information is a resource on a par with employees, funds etc. Use of spatial information produces a direct or indirect possibility of **increased efficiency in all sectors of public administration, in the political decision-making process, as well as in the private sector.**"
 - Jes Ryttersgaard, Chair of FIG Commission 3, Denmark

Project on development of Lithuanian Geographical information infrastructure (LGII)

- The overall goal:
 - to improve the quality of policy making, citizen's participation and market development through the increased use of GI hence to provide a new means of acquiring knowledge
- LGII functional goal:
 - to develop an official Geographic Information source system or Infrastructure and Information Environment allowing the incorporation of GI into almost any Public Sector Information (PSI) Services

LGII project: objectives

- Key objectives:
 - GI availability via the Internet
 - Interoperability
 - Economic gain
- Impact on GI development:
 - The project sets forth the long-term outlines establishing the rational approach for the development, maintenance and access to the harmonised national GI data

INSPIRE principles

1. Data should be collected once and maintained at the level where this can be done most effectively
2. it should be possible to combine seamlessly spatial information from different sources across Europe and share it between many users and application
3. it should be possible for information collected at one level to be shared between all the different levels, detailed for detailed investigations, general for strategic purposes
4. geographic information needed for good governance at all levels should be abundant under conditions that do not refrain its extensive use
5. it should be easy to discover which geographic information is available, fits the needs for a particular use and under which conditions it can be acquired and used
6. geographic data should become easy to understand and interpret because it is properly documented and can be visualised within the appropriate context selected in a user-friendly way

LGII stages

- Preparatory (Facility Study)
- Developing framework, standards and harmonisation of available GI (2005-2008)
- Knowledge development and remote learning (2006-2008)
- Developing reference data and services (2007-2010)

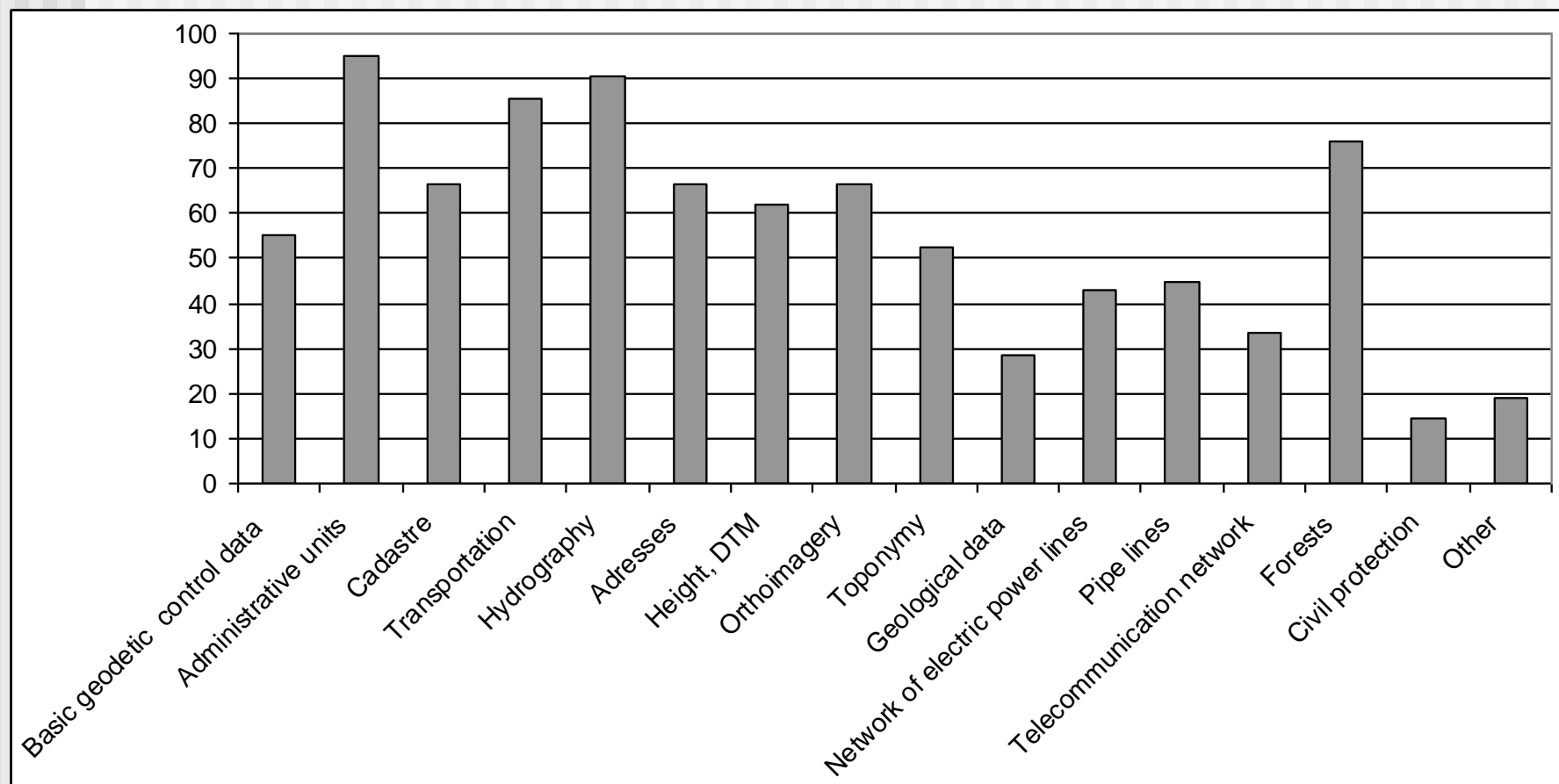
LGII Preparation Facility study: tasks

- Identify GI users and providers
- Development of partnerships and raise the awareness
- Connections and coordination among government institutions
- Analyse the risks and flexibility and estimate the cost and benefits of LGII over a time horizon of 10 years
- Preparation of high quality project proposals for the upcoming support from Structural Funds

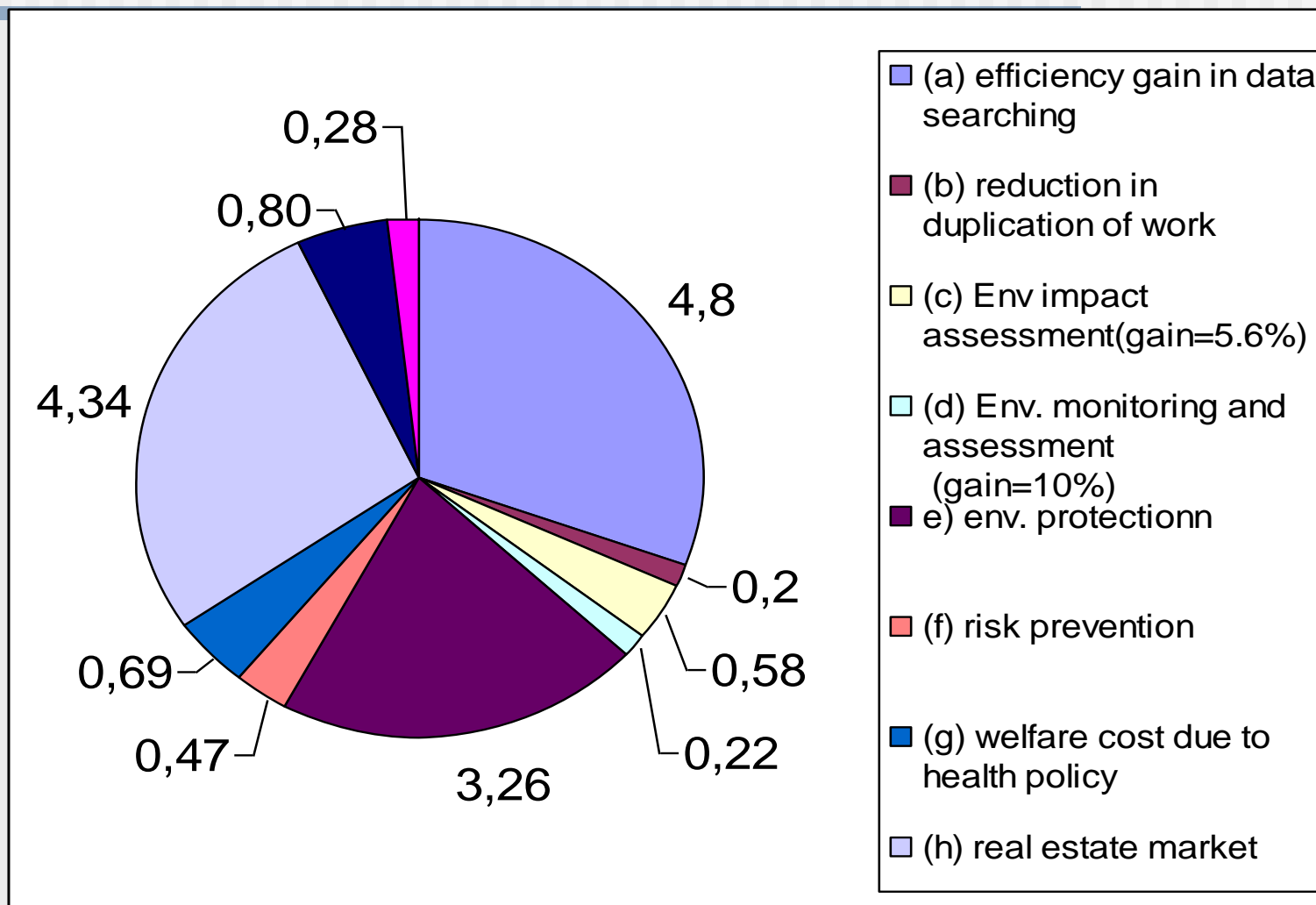
LGII Preparation Facility study: outcome

- Feasibility Study
- Eligibility Study
- Technical Study
- Tender Dossiers

LGII: reference data themes



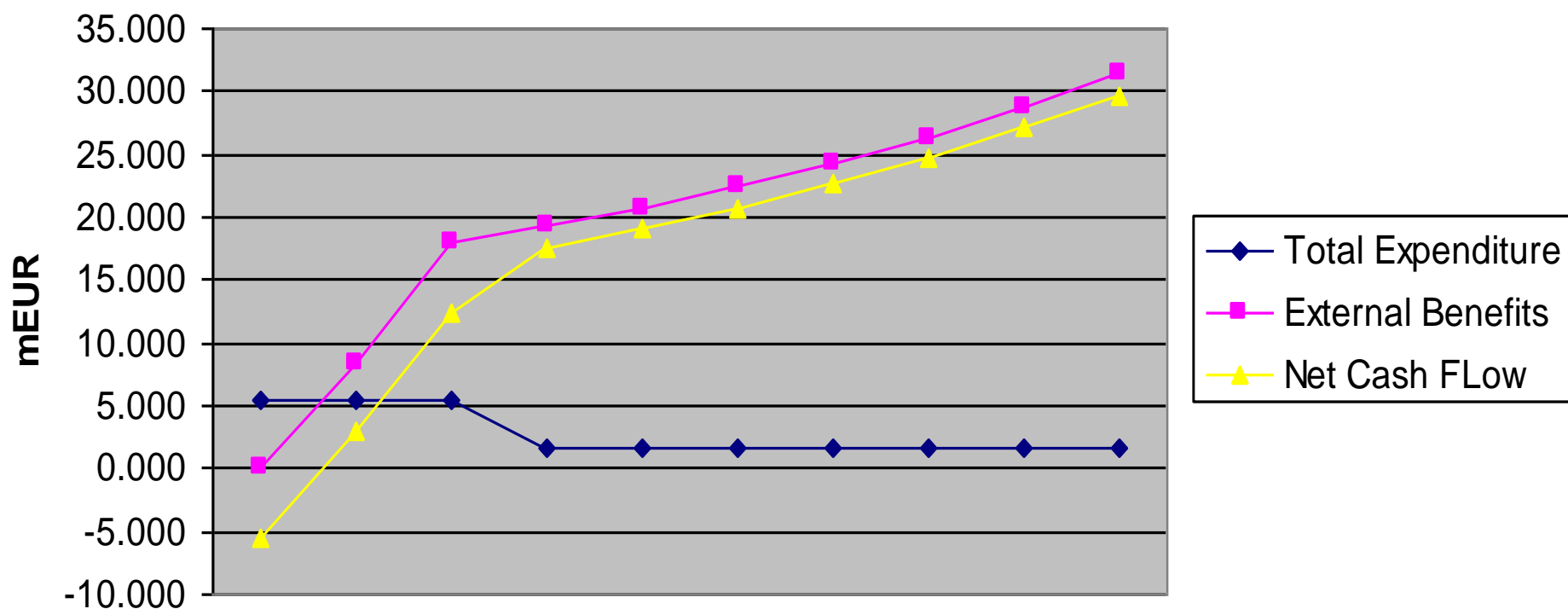
Economical benefits: LGII benefits per annual (mln EUR)



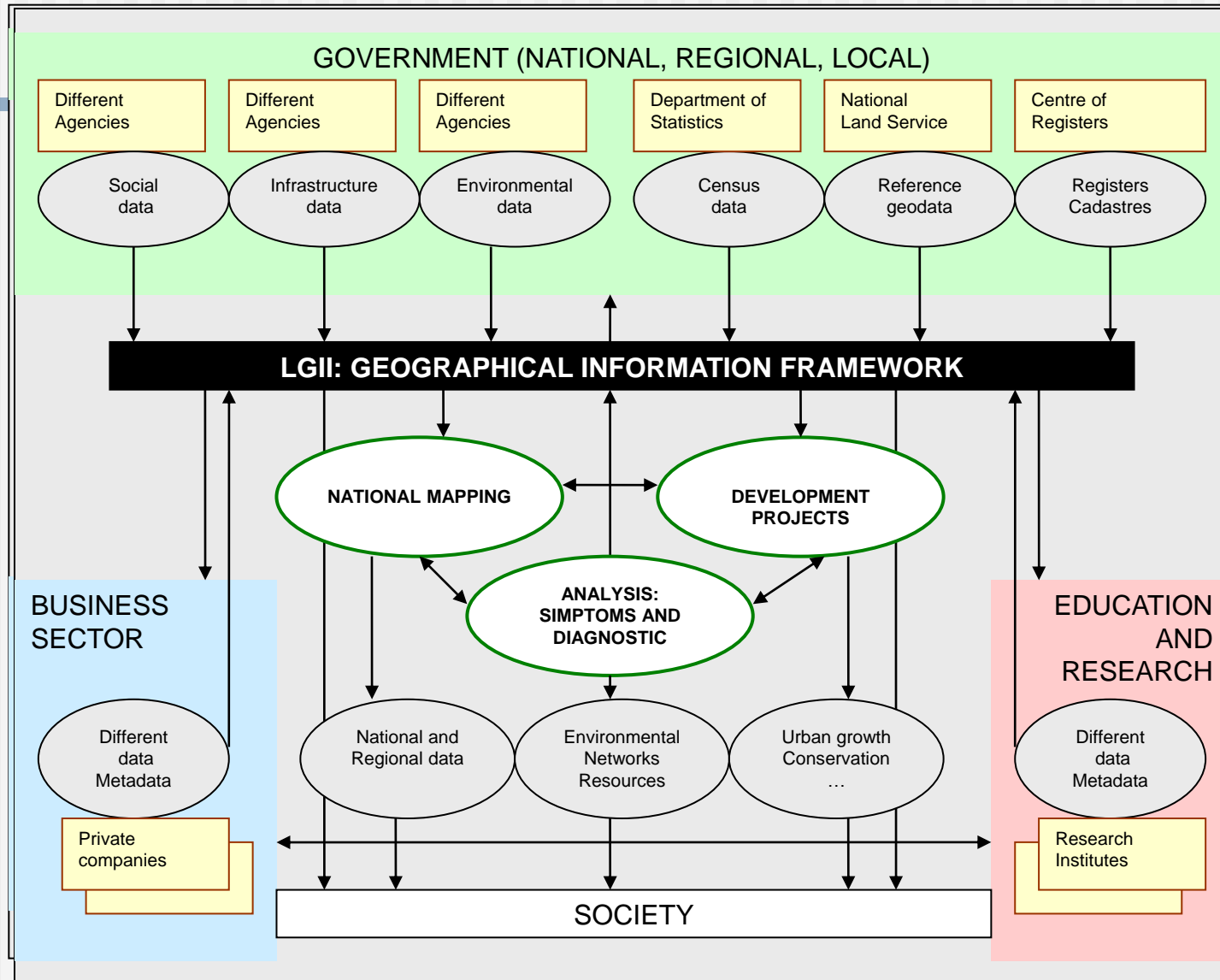
Economical benefits

- Increased business efficiency due to
 - better GI management
 - GI data standardisation
- Resource saving due to specialisation of GI producers
- Higher competition because of much informative business environment
- Higher turnover because of increase amount of data and metadata
- Intensive regional development using regional (municipal) GI data
- Increased use of GIS, better qualification
- Grow of occupation (employment)
- Better life quality because of e-services and GI products

LGII - Economic Cost and Benefits - 10 year horizon



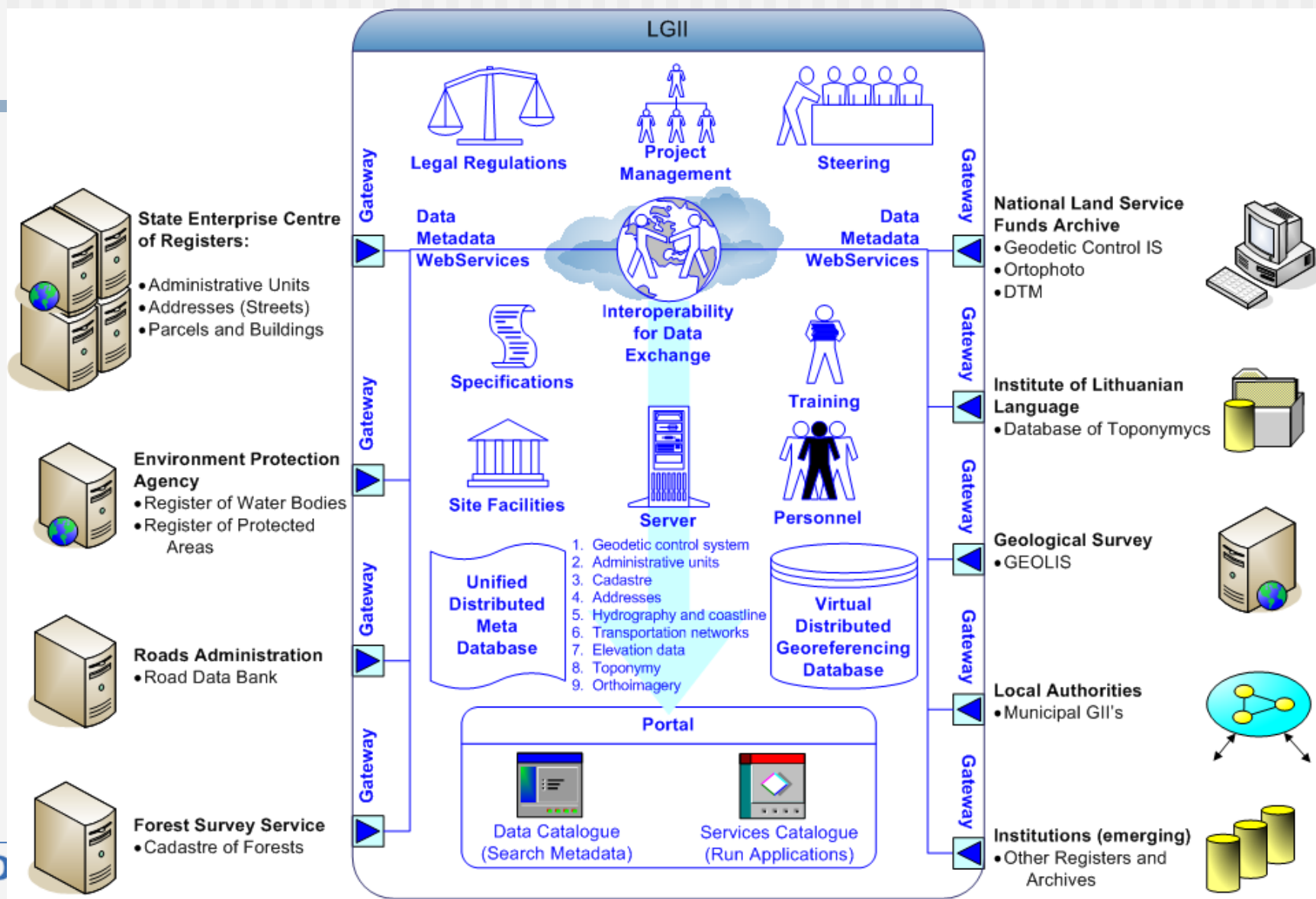
LGII: Data streams



LGII I-st stage project

- Project agreement was signed - July 2005
- Project leader – “GIS-Centras”
- Partners: 11 public authorities
- Budget: 17 mln Litas (about 5 mln EUR)
- Timeframe: 3 years
- Supervision:
 - Ministry of Agriculture
 - Ministry of Justice
 - Ministry of Environment
 - Ministry of Transport and Communication

LGII nodes



Stage I: Expected results

- LGII technological framework:
 - Data specifications
 - Interoperability (data exchange) mechanisms
 - Metadata system
- LGII central node and connections with related nodes
 - Fully operational system (hw/sw)
 - User interfaces (web-applications)
 - Harmonised referential data
 - Legal framework

LGII II-st stage project

Title "Qualification improvement for Lithuanian Geographical Information Infrastructure managers"

- Project agreement was signed - March 2006
- Project leader – National Land Service
- Partners: 16 public authorities (municipalities)
- Budget: 3 mln Litas (about 0,9 mln EUR)
- Timeframe: 3 years

Stage II: Expected results

- Fully operational e-learning portal
 - Tutorials – 9 GIS related disciplines
 - GIS basics
 - GI management
 - GI infrastructure applies
 - Geographical database management systems
 - Geodesy and Cartography
 - Spatial analysis and modelling
 - Content of Geographical information infrastructure
 - Web-programming for GI infrastructure
 - GIS training tools
 - Accreditation / remote management
 - Certification
- Training for 230 public servants (1091 courses)

Obstacle and needs at European level

- A lack of common:
 - Data modelling concept
 - Data exchange (conversion) means
 - Pricing & licensing frameworks
- Inefficient cross-boundary institutional collaboration
- Insufficient high resolution and reliable background (remote sensing) data

Thank you for the attention...