

# Challenges of sharing geospatial data in the Central Asian context

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October 31th – November 2nd, 2013  
Berne

# Agenda

1. Introduction
2. External factors
3. Internal factors
4. Knowledge management
5. Summary

Oct 31 – Nov 2, 2013  
Bern, Switzerland



[www.geosharing.unibe.ch](http://www.geosharing.unibe.ch)

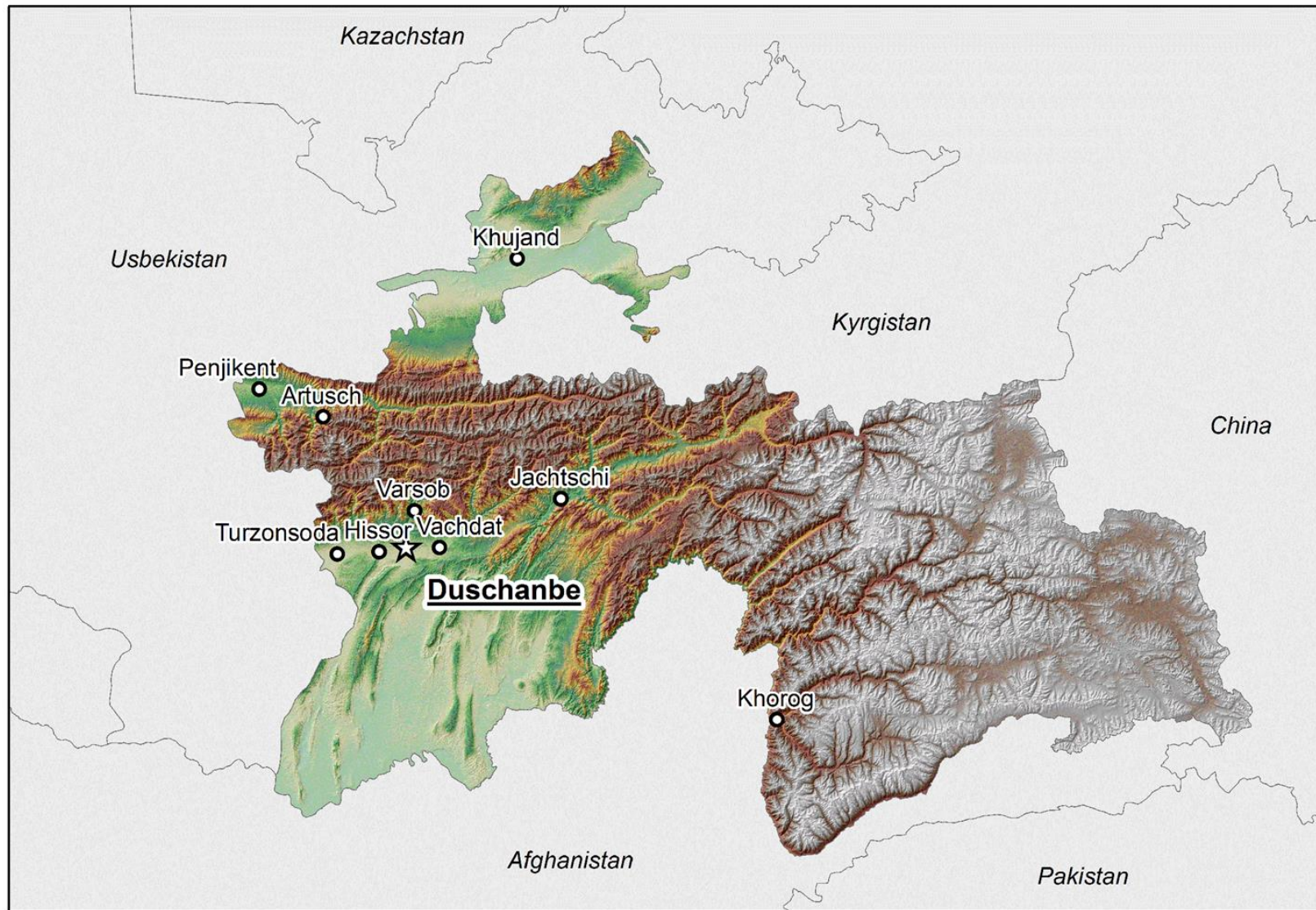
Oct 31 - Nov 2, 2013  
Bern, Switzerland

Sharing ← not

Ge  spatial

→ Data

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# Small-scale hydro power plants study

## Ministry of Energy

## Important GI component

1

Project launched  
 Project office not provided  
 Difficulty to find skilled GI staff  
 Knowledge about existing geodata not available  
 Project office after not planned renovation available  
 Thematic GIS layers within the government not available

5

Base maps within the government not available  
 Data of international hydrological projects not accessible  
 Hydrological data not provided

10

Staff after salary payment not at work anymore  
 Hydrological data with massive Copy-Paste errors provided  
 Project office sealed  
 Expert mapping of watersheds failed  
 Expert assessment of hydrological data failed

15

Project closed. No further access to the data.

Project time [month]



# Groups of factors for success



# External factors





# State secrecy -> corruption

„... Topographical, thematic and other maps in scale **1: 100 000 and larger (1: 50 000, 1: 25 000, etc.)** according to the law "On State Secrets", **are seen as restricted materials**. Provision of this act shall be binding on the territory of the Republic of Tajikistan and beyond, regardless of the source of information. ...“

“... The State Committee on land use planning and Geodesy of the Republic of Tajikistan, Tajik Geology, Company and organizations **having the license may produce cartographic materials.** ...”

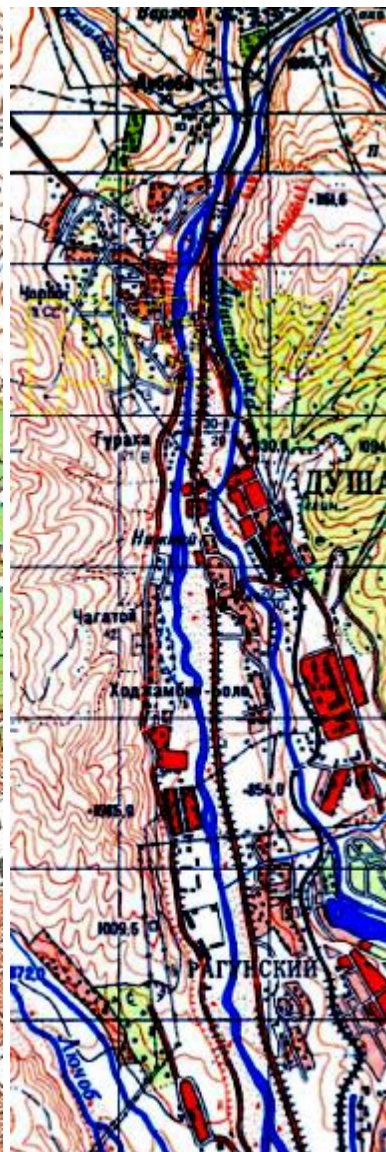
*Basic regulations for the protection of state secret, approved by the General Directorate of State Secrets under the Government of the RT (Parts 1 & 2, 2003)*



# State secrecy -> corruption

1. Geoinformation historically defined as state secret
2. No access to the information for local experts cuts off “Spatial Thinking”
3. Impossible to build an officially working SDI
4. Unclear access to data leads directly to corruption
5. International organizations limit their activities in the field of geoinformation
6. Geodetic transformation parameters are secret and limits data integration





1:25 000

1:50 000

1:100 000

1:200 000

1:500 000

Geo  
Idee

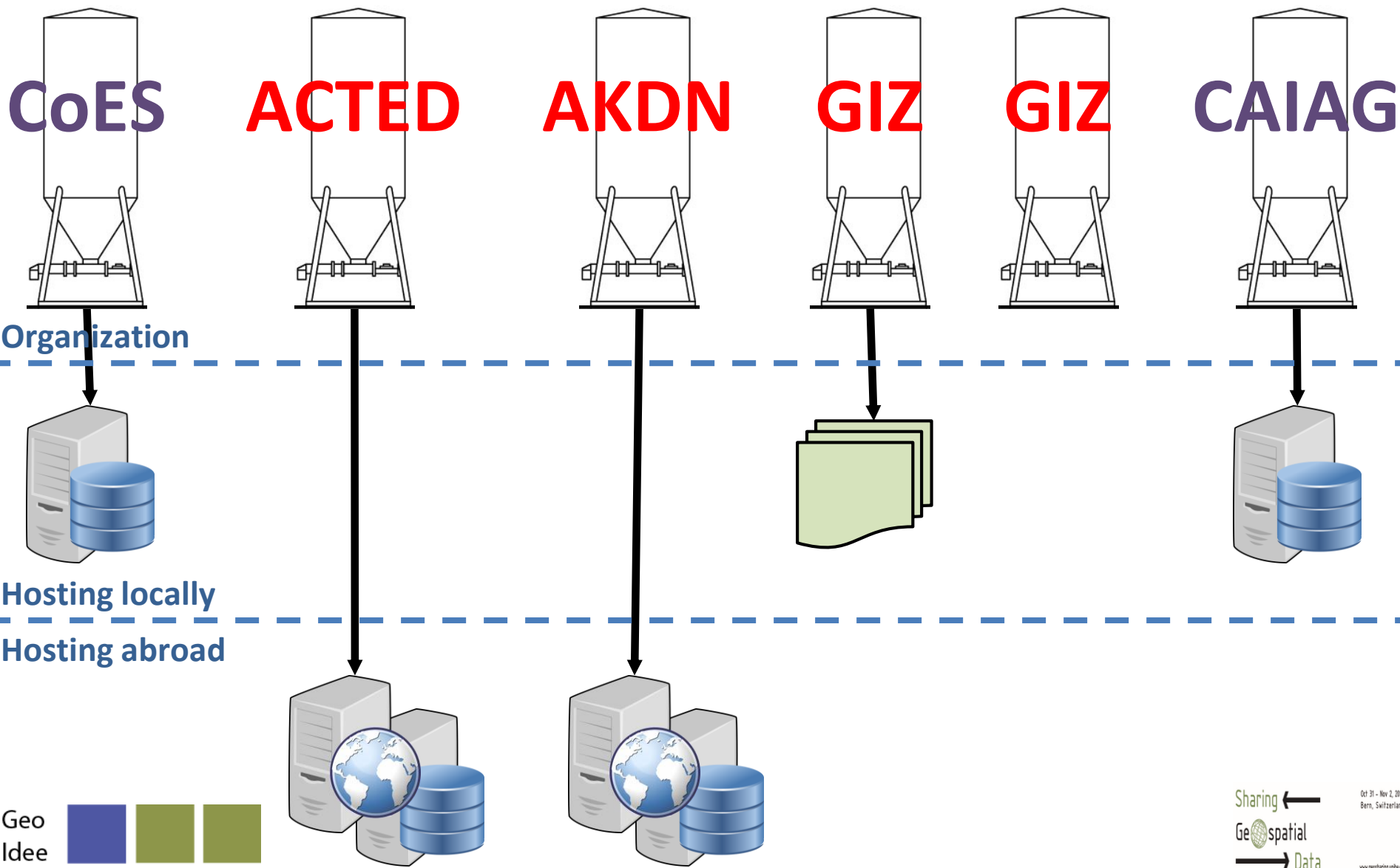
# Competition and missing cooperation between organizations

- Development cooperation is an industry
- Missing independent (governmental) body managing geodata
- Many organizations acting like silos
- Silos can be right next to each other, but they do not *interact*



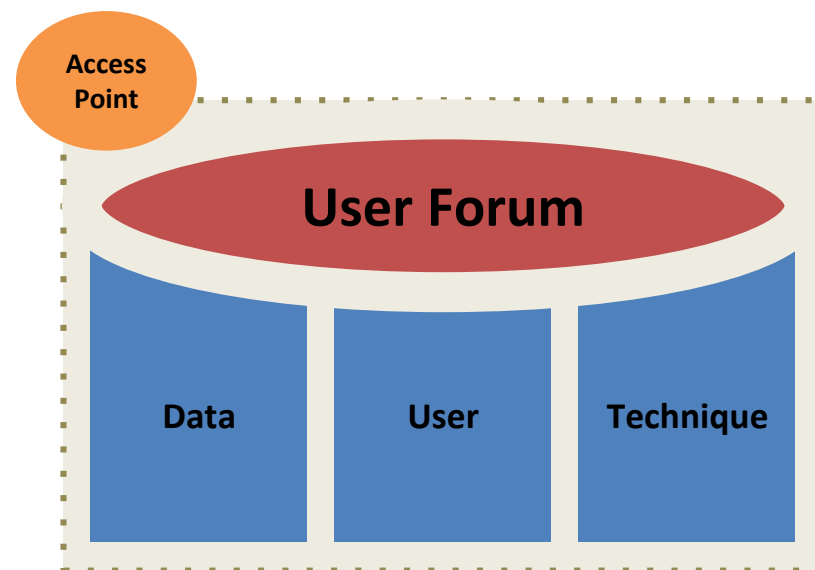
Foto: Martin Dürrschnabel Lizenz: Creative Commons by-sa 3.0

# Example Geodatabases Natural Hazard



# Missing coordination of international organizations

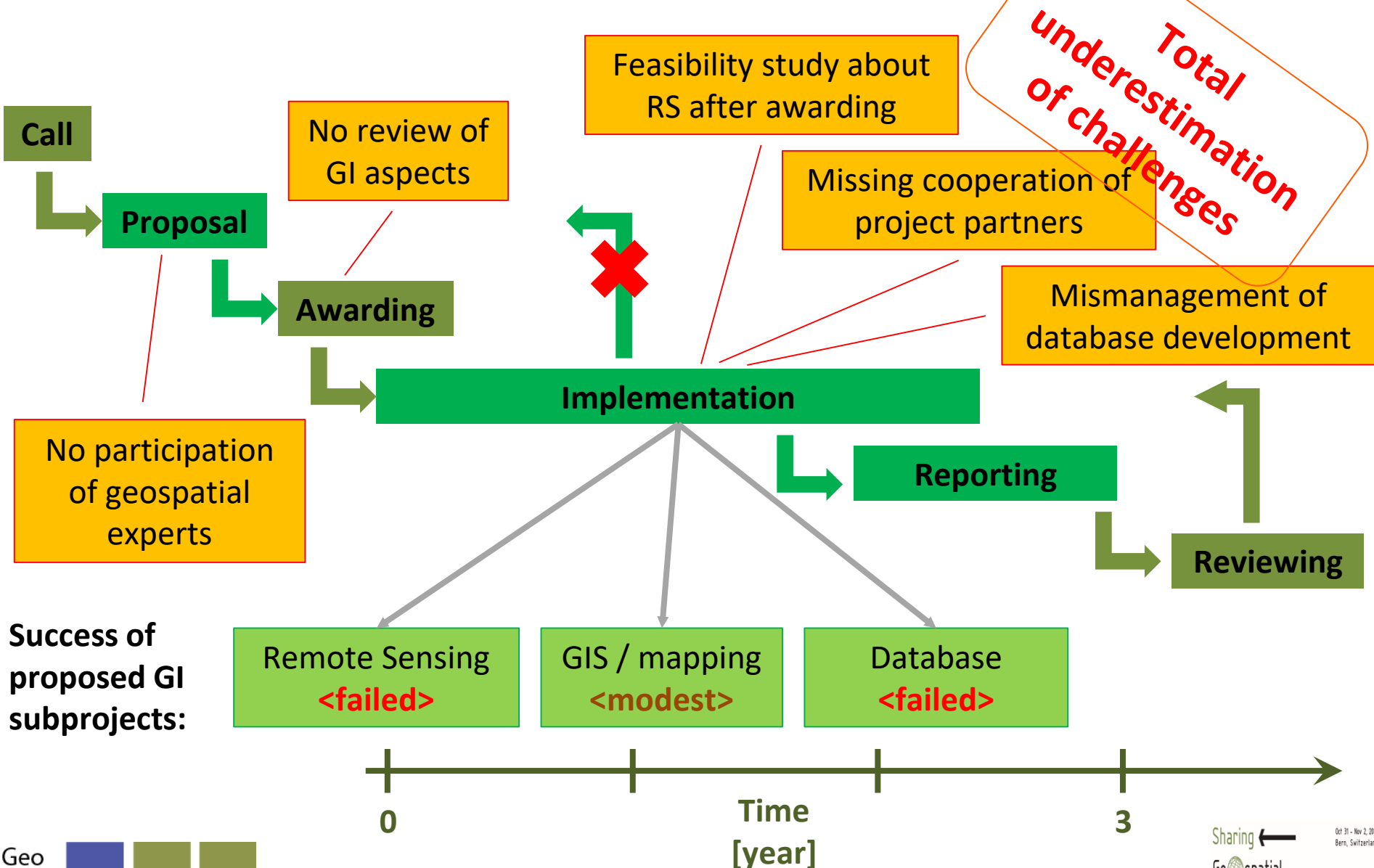
- At management level limited awareness about GI.
- Cost-efficiency has low priority.
- Requires political influence at governmental level.
- Needs long-term engagement in the field of GI.



# Internal factors



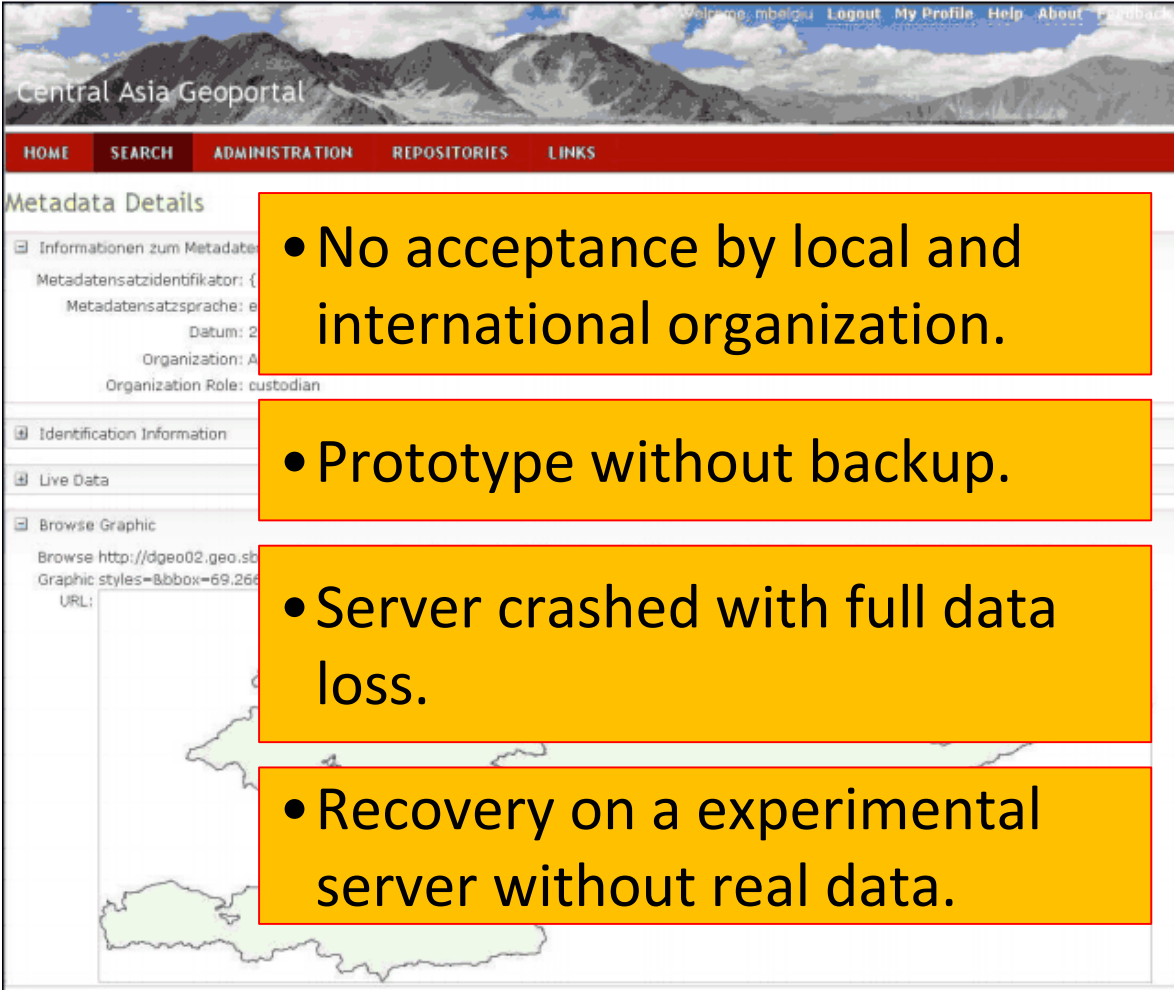
# Example NRM project





# Example Metadatabase

- No financing for long-term infrastructures.
- Missing superior structure with long-term perspective.
- Prototype versus Implementation



Central Asia Geoportal

HOME SEARCH ADMINISTRATION REPOSITORIES LINKS

Metadata Details

- Informationen zum Metadaten
  - Metadatensatzidentifikator: {
  - Metadatensatzsprache: B
  - Datum: 2
  - Organization: A
  - Organization Role: custodian
- Identification Information
- Live Data
- Browse Graphic
  - Browse <http://dgeo02.geo.st>
  - Graphic styles=[8bbox=69.266](#)
  - URL:

• No acceptance by local and international organization.

• Prototype without backup.

• Server crashed with full data loss.

• Recovery on a experimental server without real data.

# Knowledge management



Availability of data

Quality of data

Projects completed,  
ongoing and forthcoming

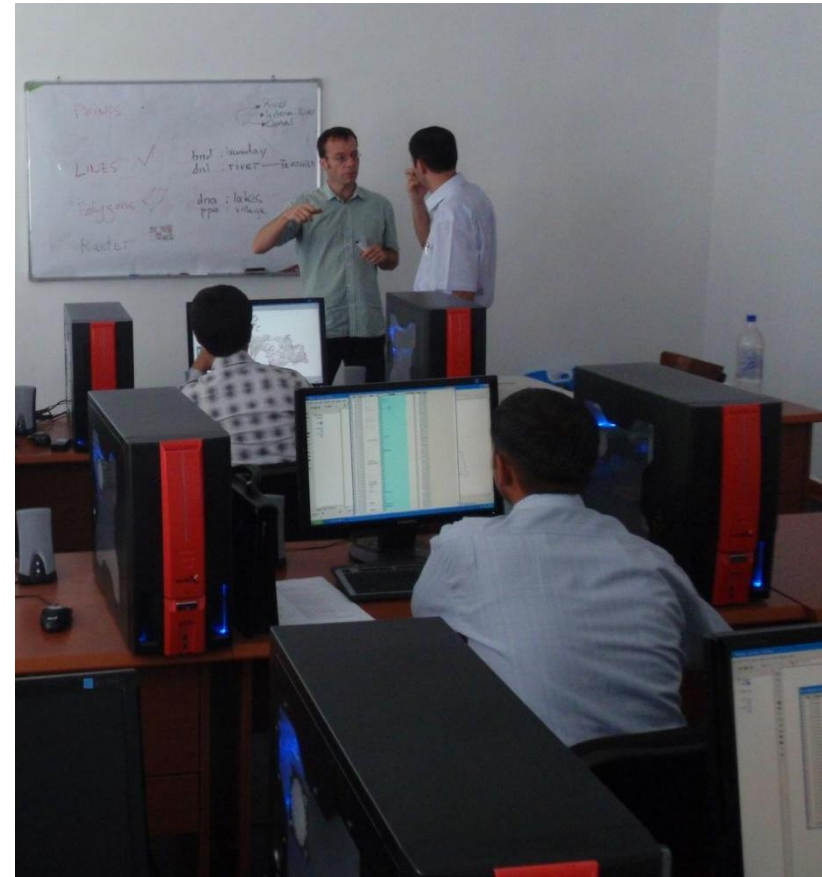
Capacity building  
Map literacy

Staffing policies

Knowledge of key persons  
and organizations

# Capacity building

- Brain drain and emigration.
- Post civil war generation.
- Differentiation between Research / Teaching / Implementation.
- Corruption.
- Low level primary and secondary schools.
- Missing language skills.

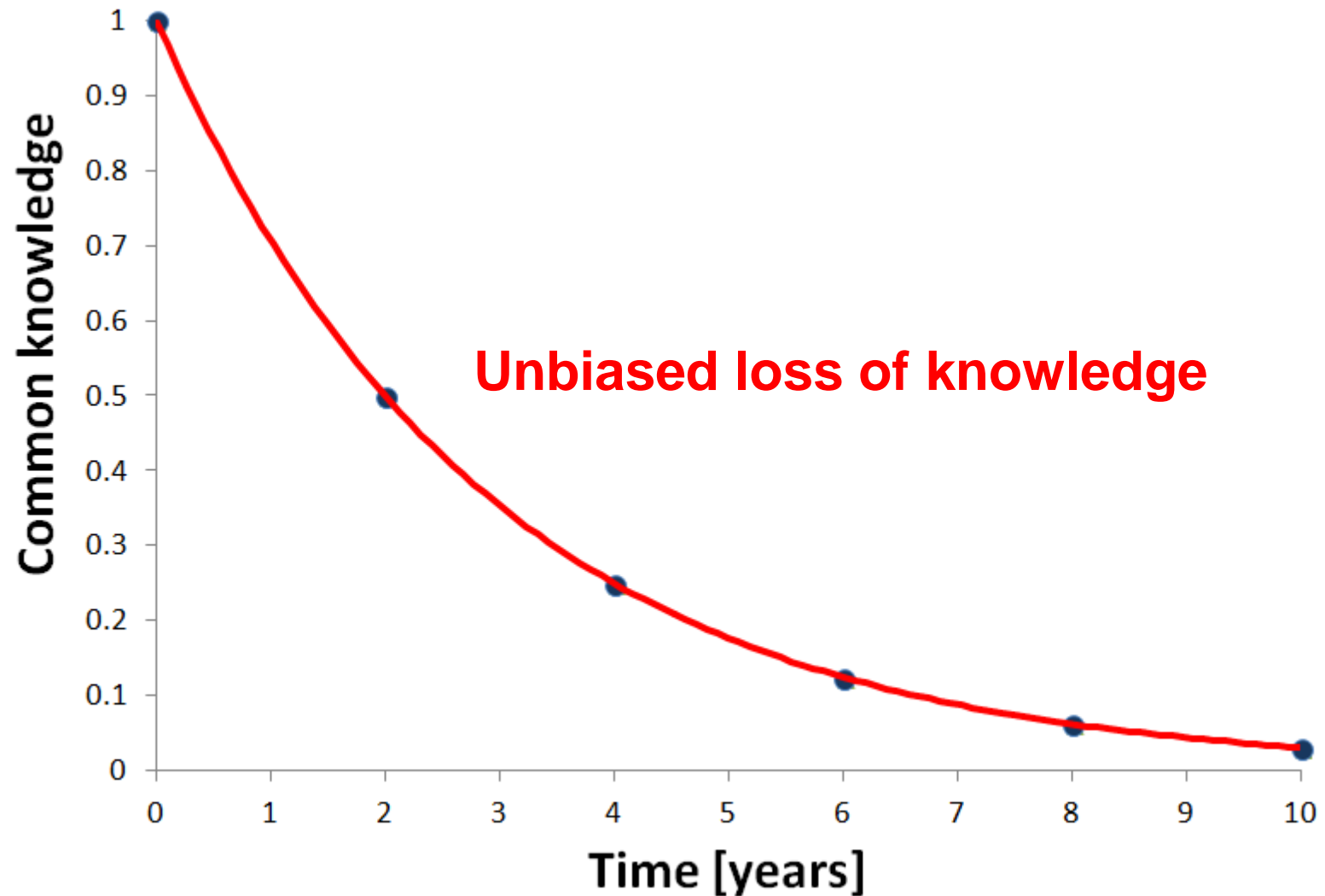


# Staffing policies

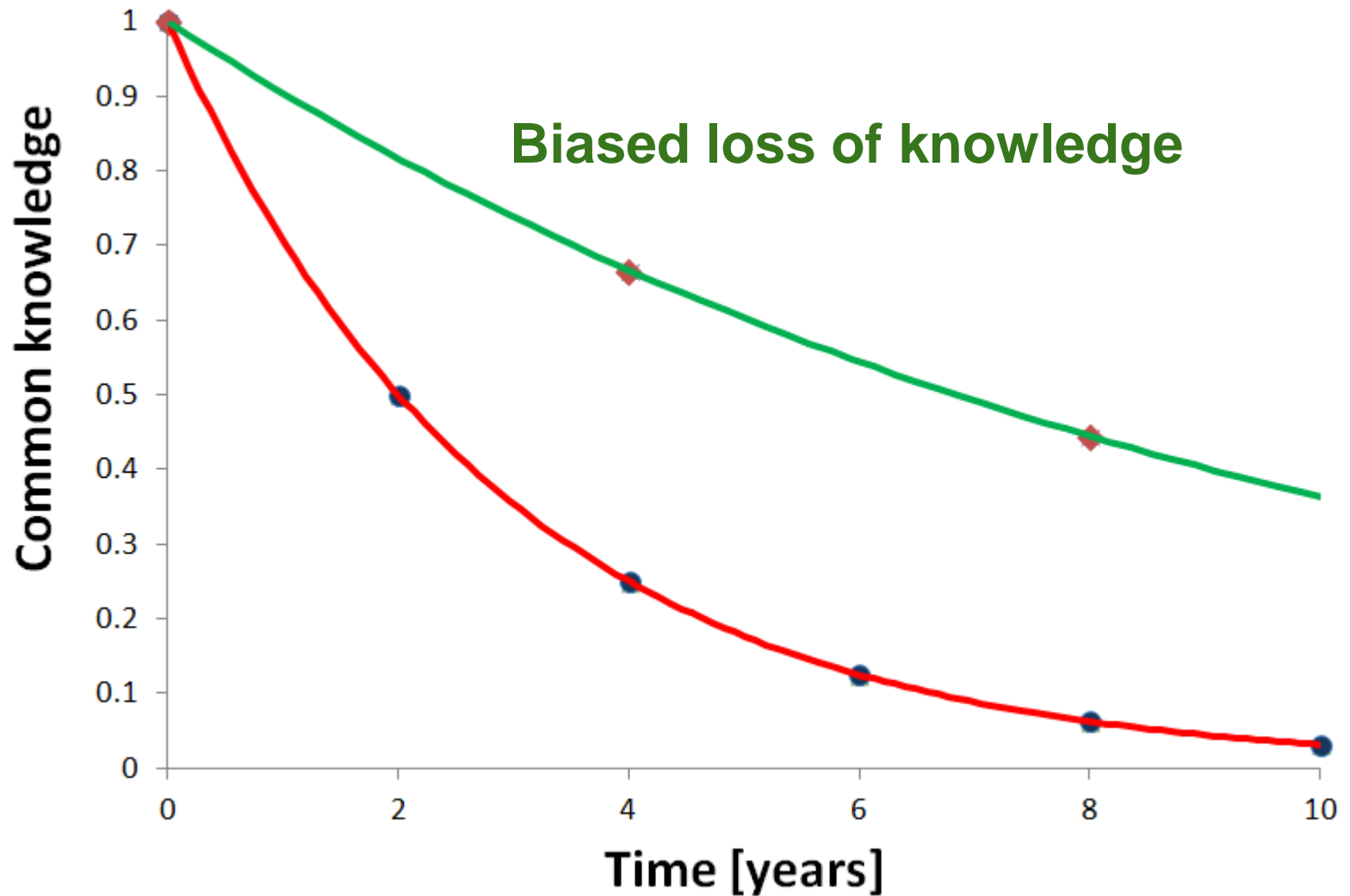
- Limited engineering positions in project management.
- Almost no senior geospatial experts in project and review teams.
- Design and layout of GI projects done by juniors.
- Average duration of stay of international staff about 2 years.



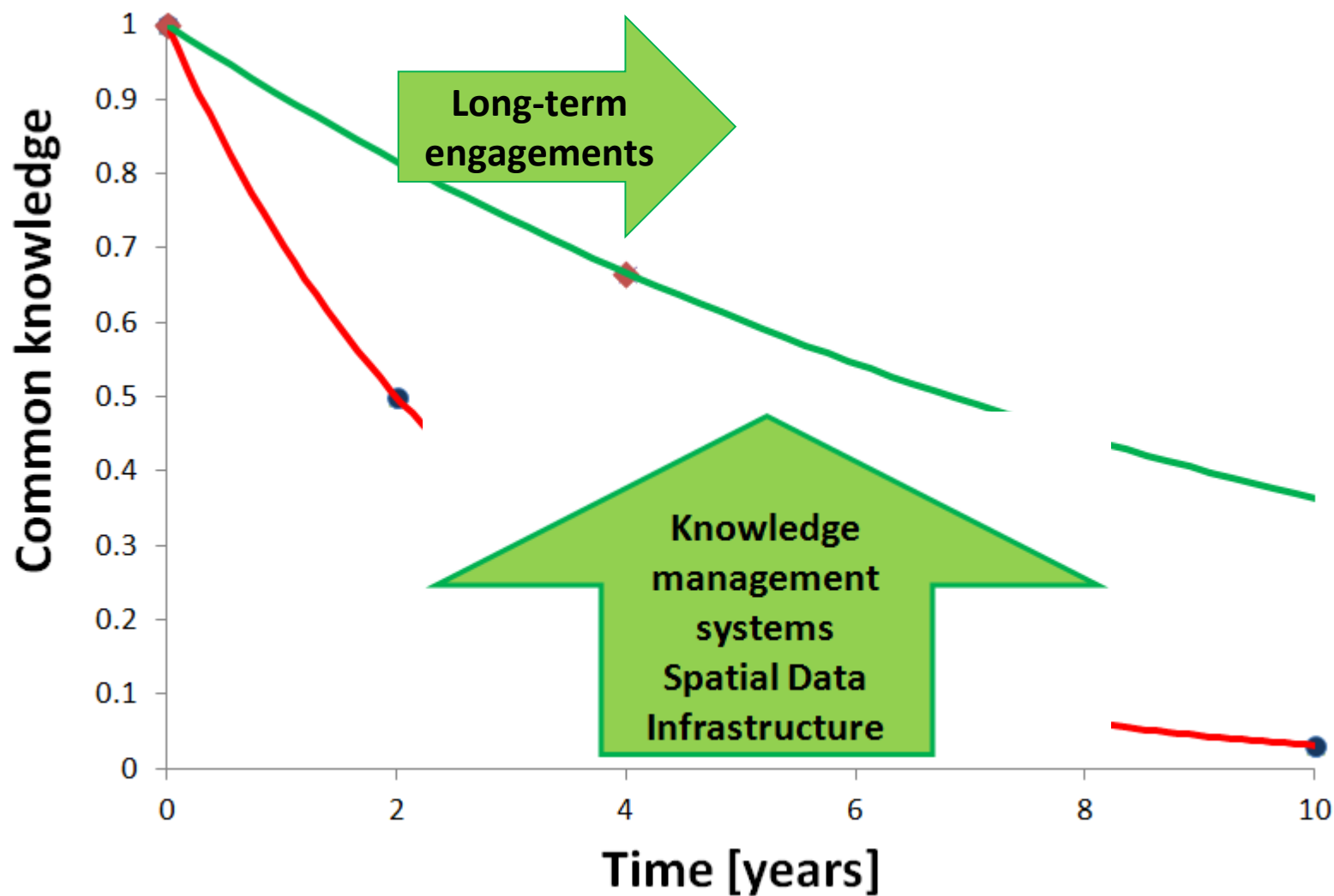
# Half-life of collective memory



# Half-life of collective memory

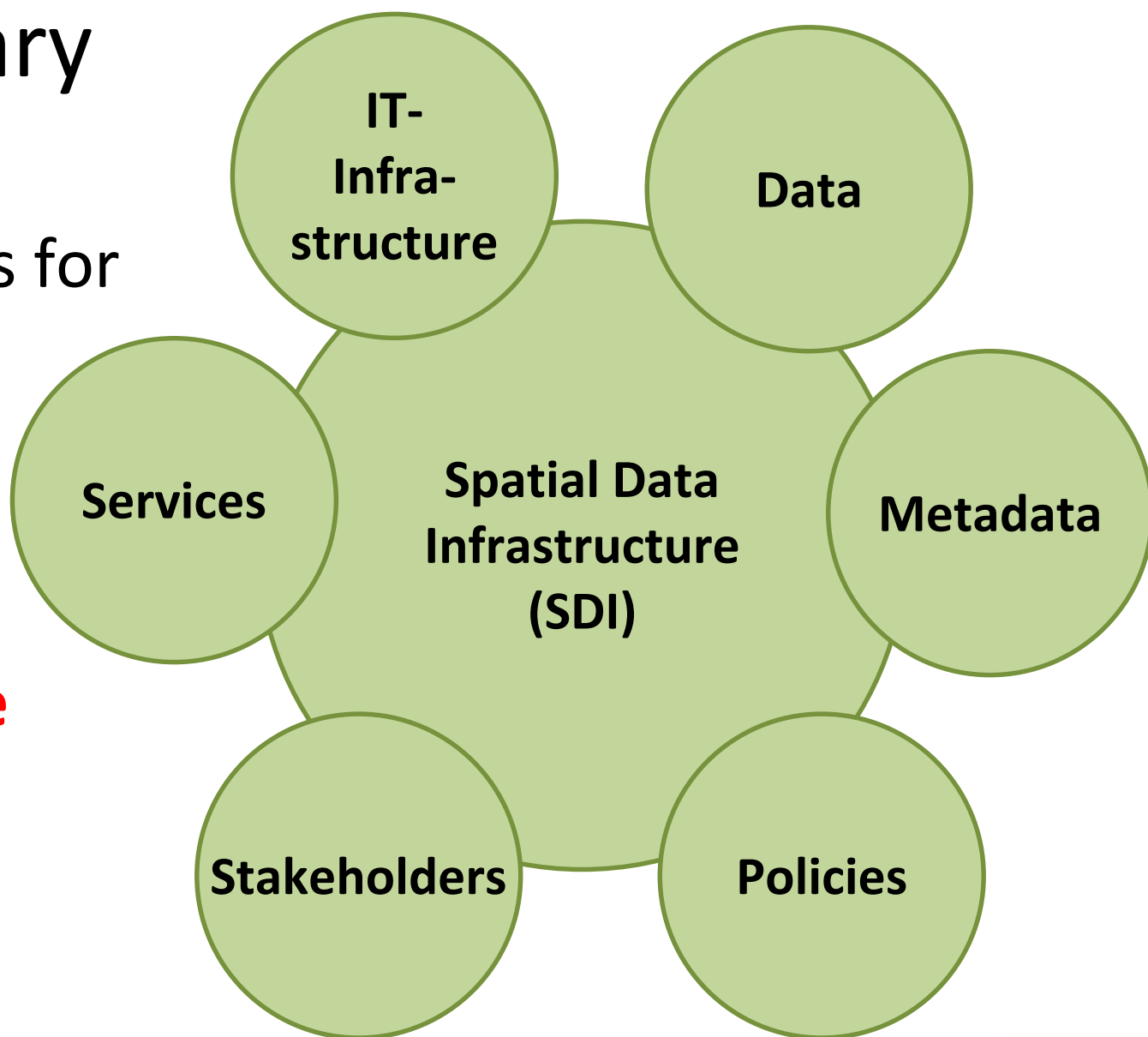


# Half-life of collective memory



# Summary

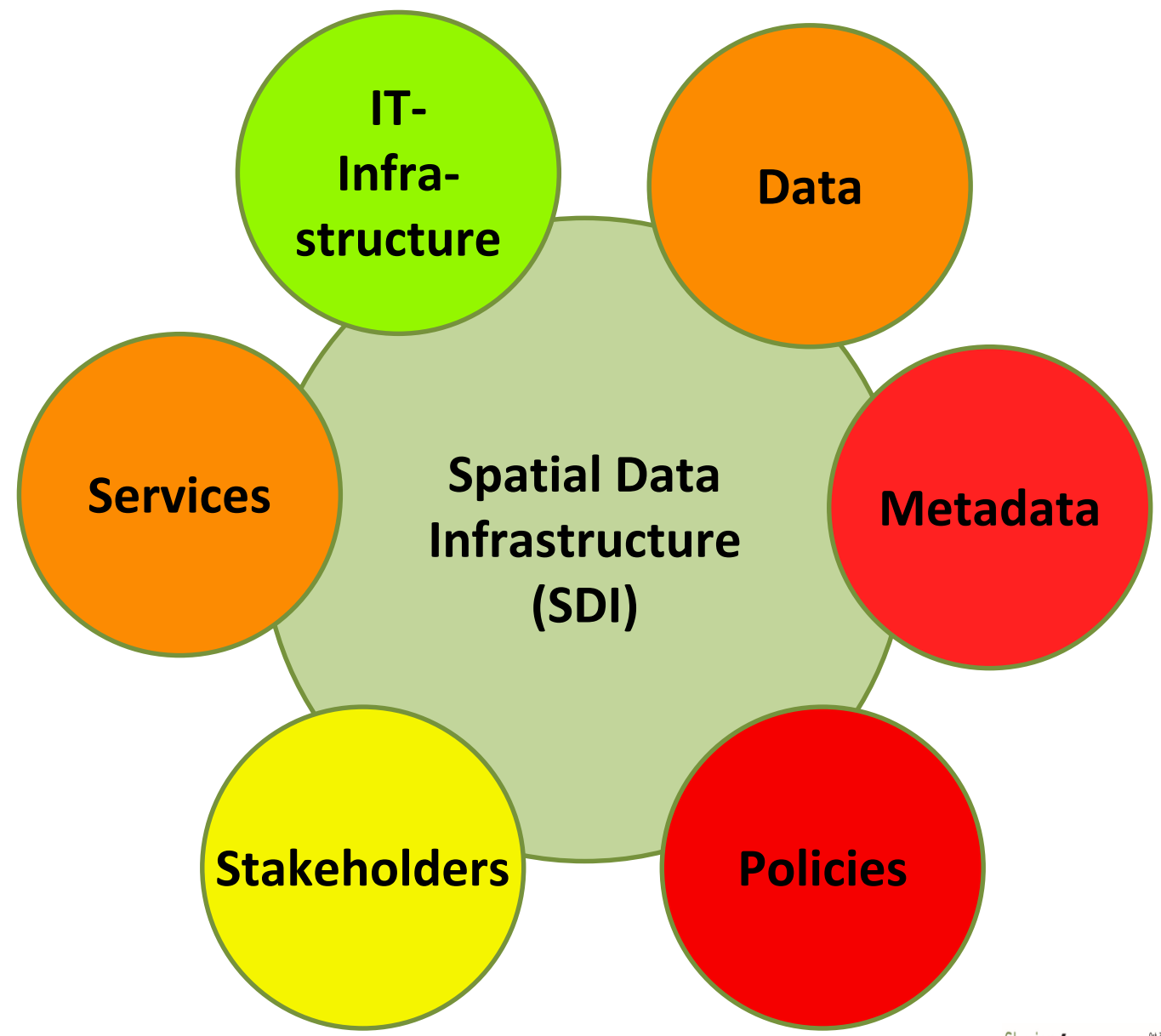
Consequences for **spatial data sharing** and **spatial data infrastructure**



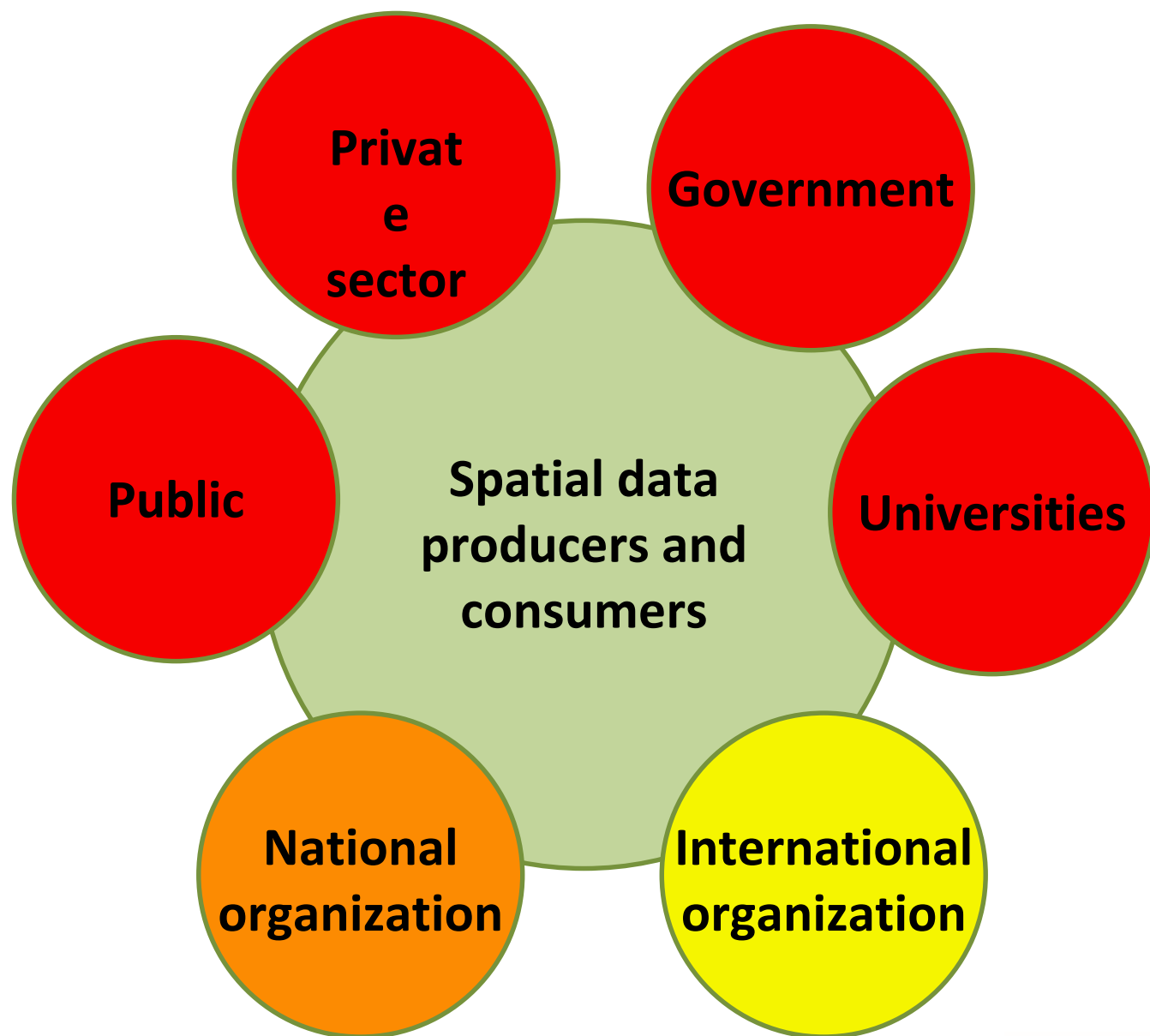


**Legend of hope**

-  Satisfying
- 
- 
- 
-  High need for action



Legend of hope



Thank you for your attention, and  
let's share ideas ... and beer ...



... at the GeoBeer #5 tonight 19:30