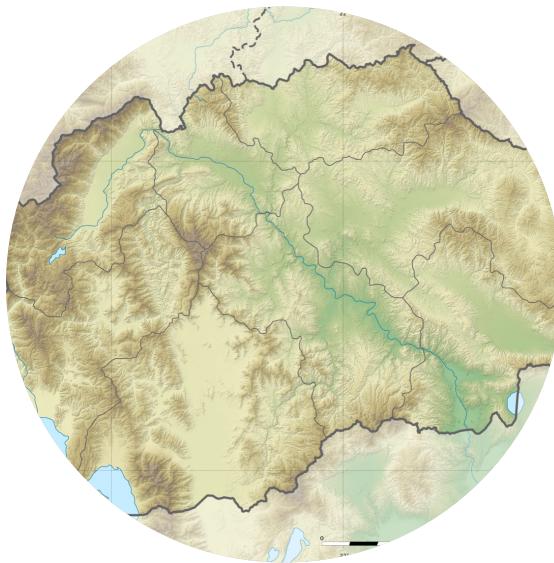
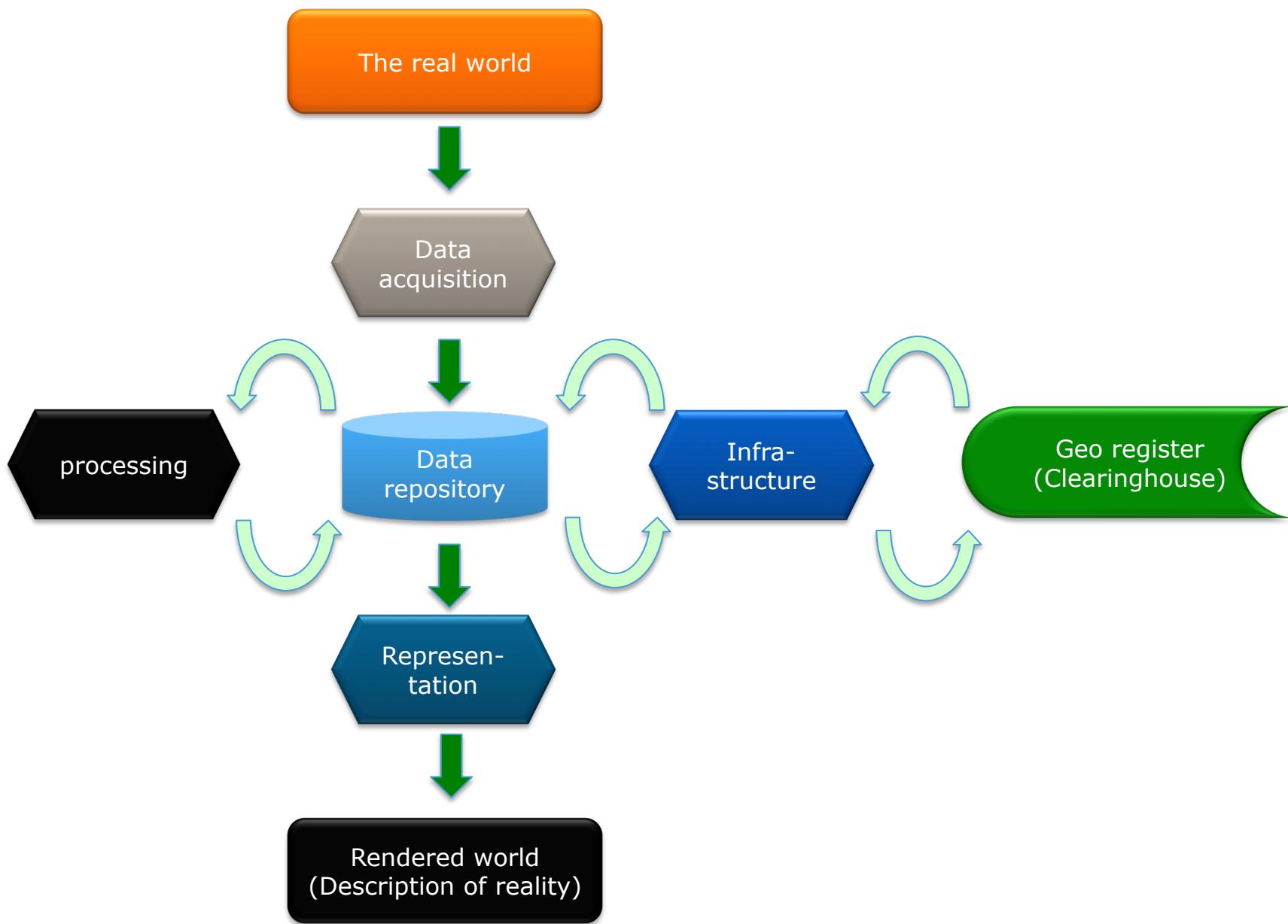


SDI basic concepts

Jandirk Bulens, Jeroen Hogeboom, Wouter Visscher

23-25 May

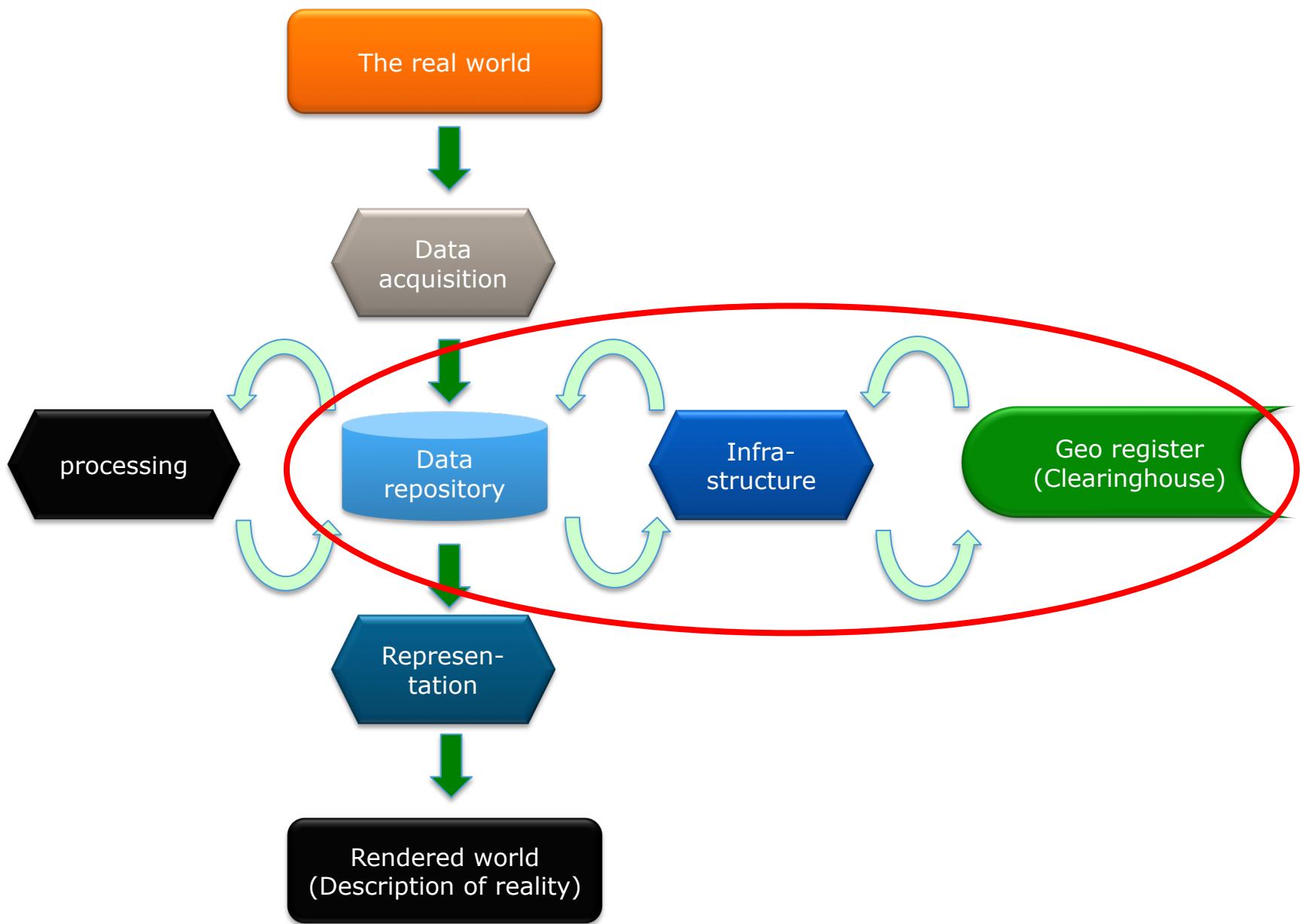




SDI basic concepts

■ What to tell about data?





Spatial Data Infrastructure

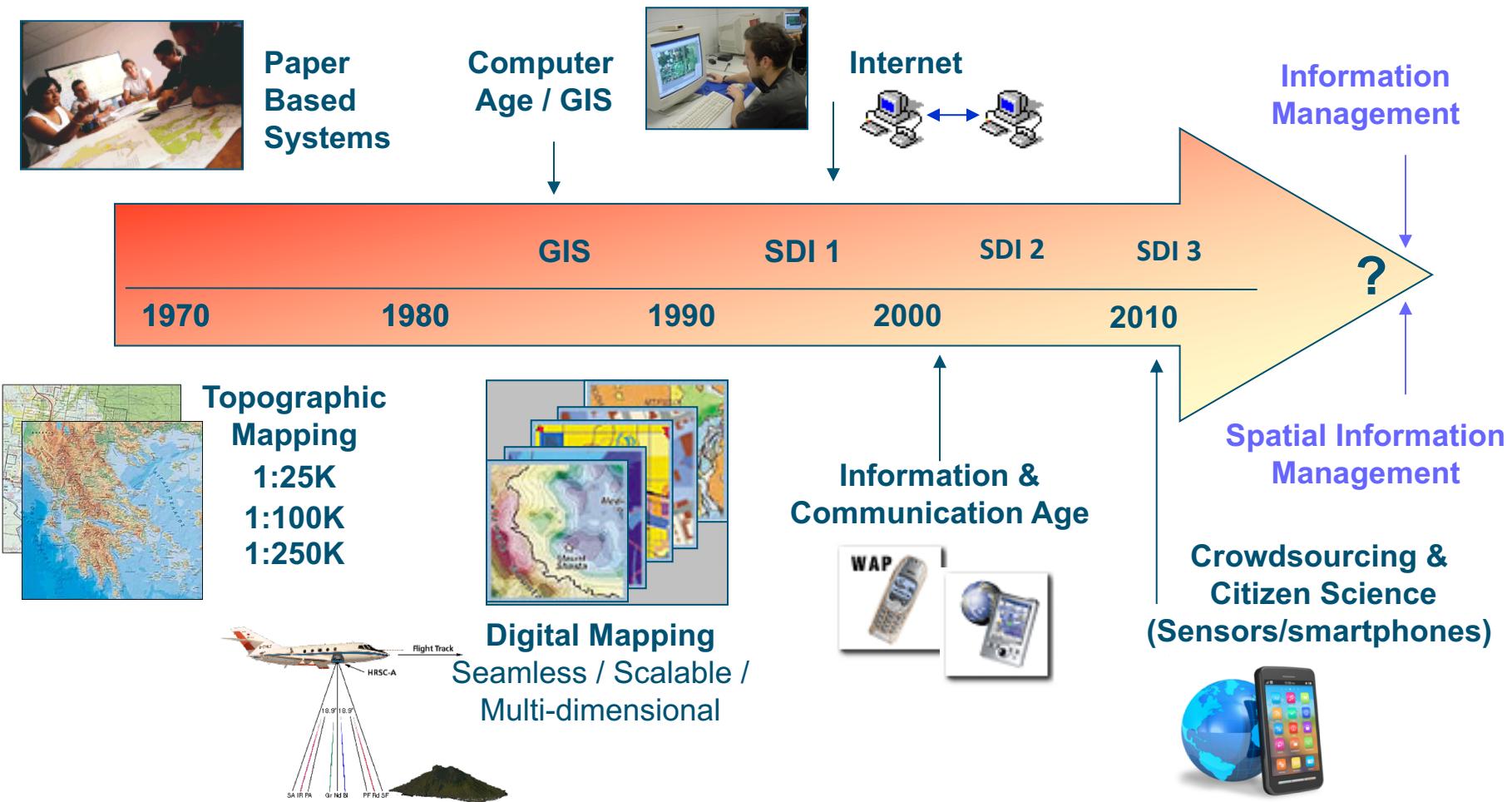
- SDI is an initiative necessary for the efficient and effective collection, management, access, delivery and utilization of spatial data
- SDI is whole about facilitation and coordination of the exchange and sharing of spatial data;
- First generation of SDIs development has emerged since mid 1980s.

SDI

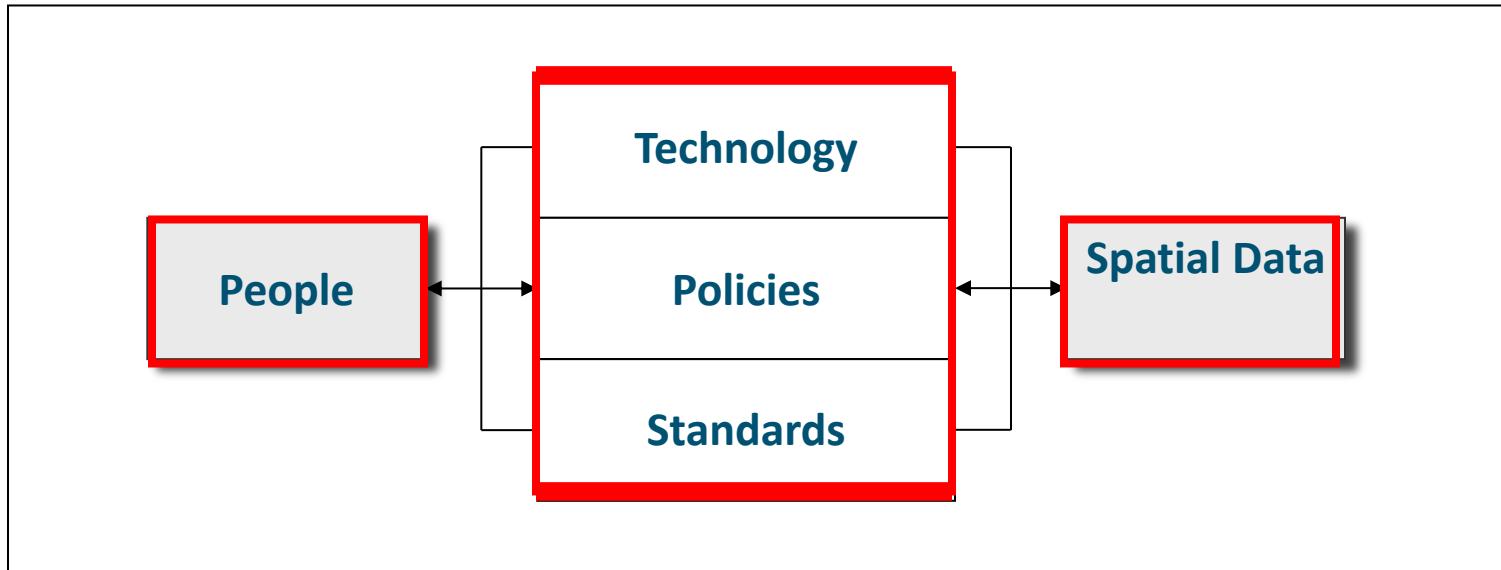
Also called:

- Geospatial Data Infrastructure
- Geographic Data Infrastructure, or even
- Geographic Information Infrastructure

An Evolution of SDI

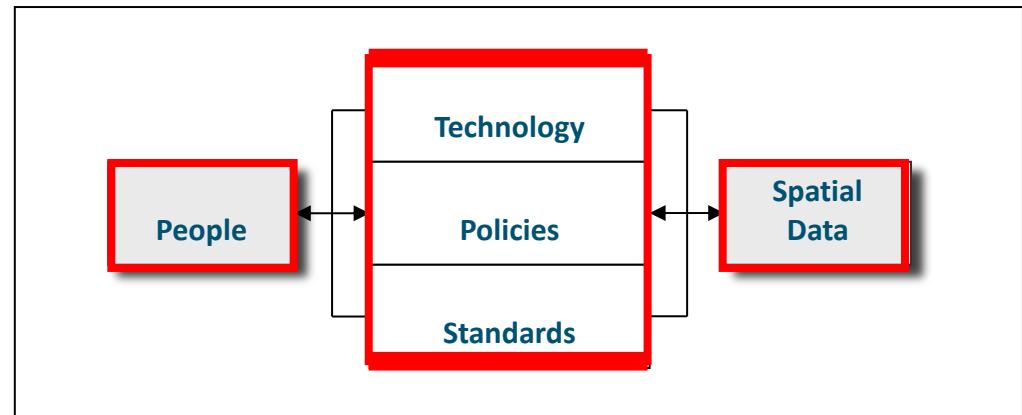


Nature of SDI



Nature of SDI

- **Spatial Data:** Fundamental Datasets
- **People:** Communication, Partnerships
- **Policies:** Policy, Legislation
- **Technology:** Access, Distribution, Storage
- **Standards:** Data Models, Metadata, Transfer



People

- Users, Providers, Administrators, Custodians, Value Added Resellers, Corporate or Individual
- Public or Private
- Partnerships, Collaboration



Technology

- Access and distribution networks, Clearinghouses, Geoportals
- GIS, Relational Databases
- Web Enabled, Online GIS
- Storage, Data Warehouse
- Data acquisition, integration, maintenance, enhancement
- Interoperability, Open Systems



Policies

- Administration
- Coordination
- Policy
- Legislation
- Organisational partnerships and collaboration



Standards

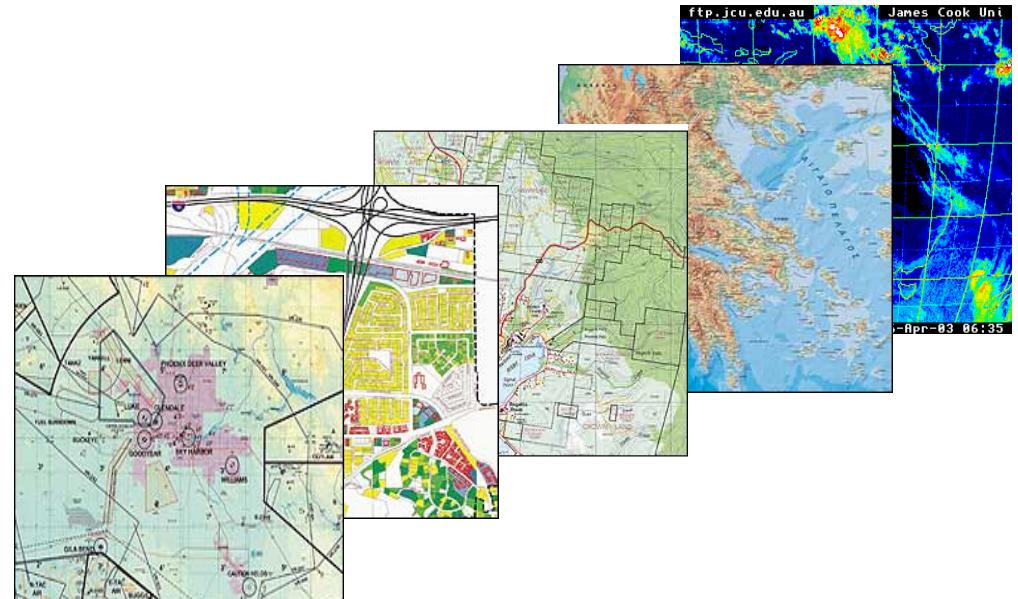
- Data Models
- Metadata Standards
- Spatial Data Transfer Standard
- Open GIS, Interoperability
- Consistent Policy – Pricing, Access, use & restrictions



Spatial Data

■ Datasets

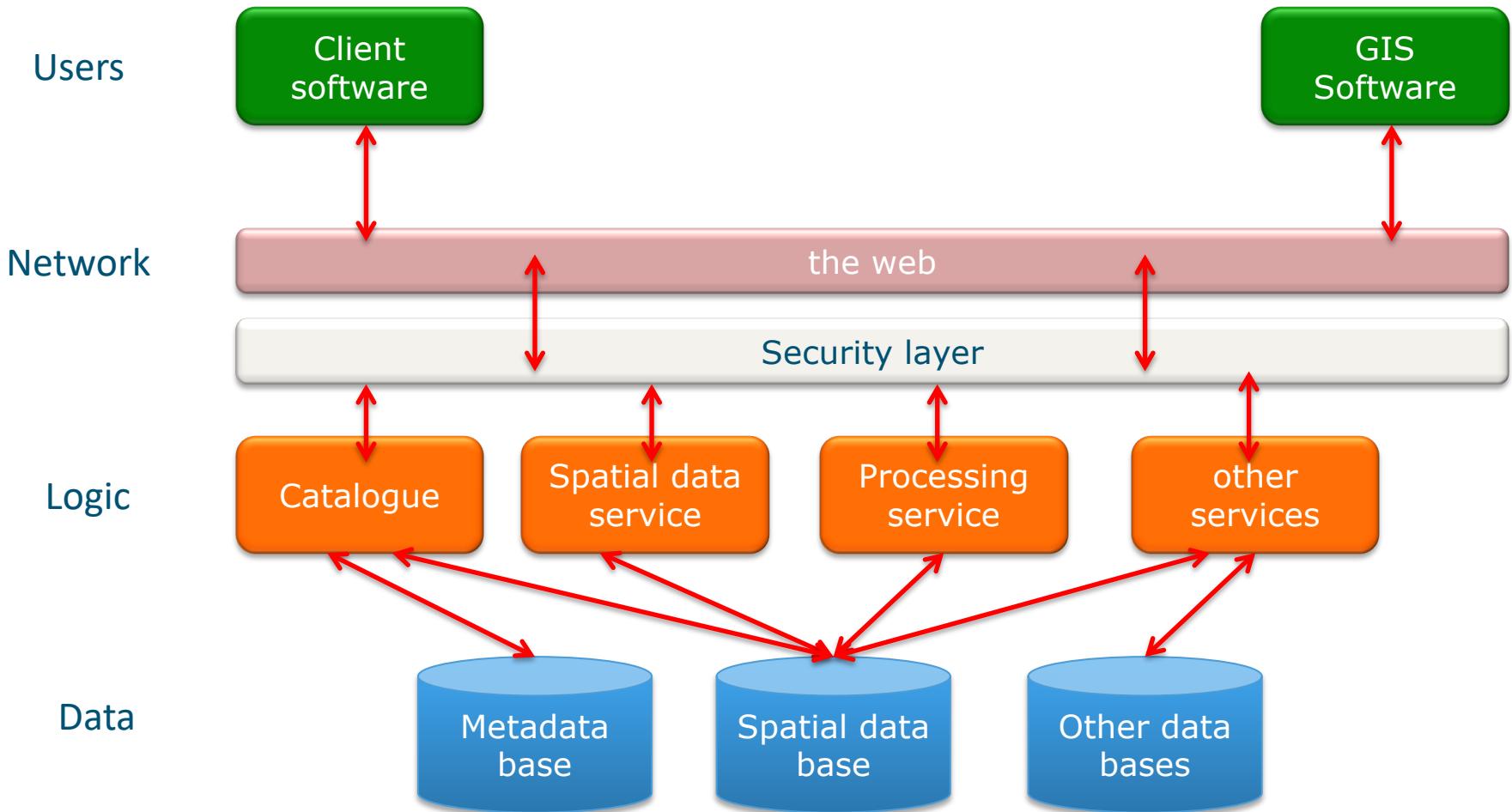
- Geodetic
- Cadastre
- Topography
- Administration
- Land Use
- Hydrology
- Environment
- Other



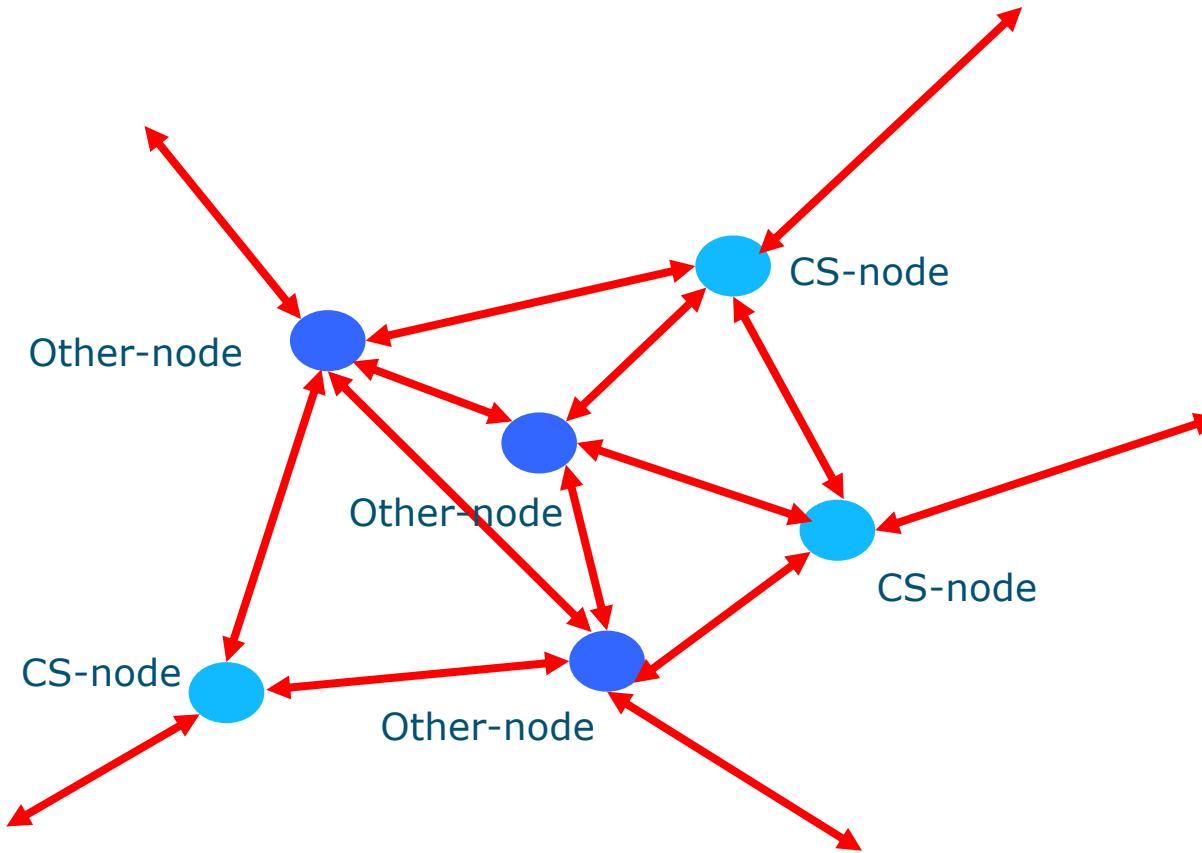
Spatial Data

- Spatial data/information is one of the most critical elements underpinning decision making for many disciplines
(e.g. agriculture, urban planning, health care, disaster management, military, emergency services)
- an estimated 90% of all information used by government has geo-spatial characteristics or attributes
- 70-80% cost of any GIS project spend for data collection, maintenance,...

Basic components in the SDI architecture



SDI seen as a network



End



- Questions