



جمهوری اسلامی ایران

Empowering regional cooperation by Spatial Data Infrastructure (SDI)

N. Jahangard

Deputy of ICT Minister
& Head of IT Organization of I. R. Iran



A world map with the ECO region highlighted in green. The ECO region includes Turkey, Iraq, Iran, Afghanistan, Pakistan, and India. The rest of the world is shown in light blue and white. The title 'The ECO' is written in green text above the map.

The ECO

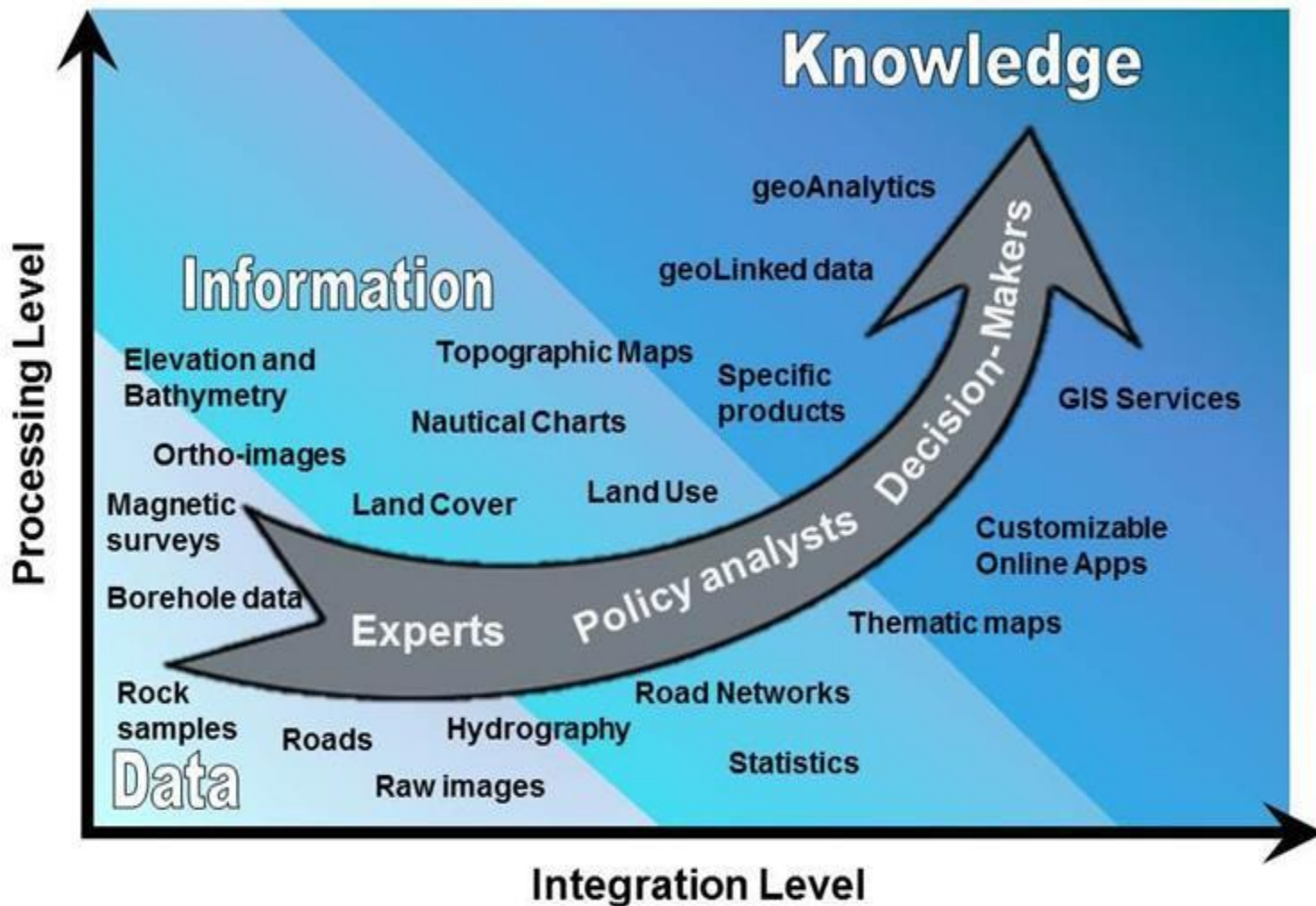
- **8/6 mill km²**
- **10 Slamic countries**
- **~330 mill people**
- **Oil, Gas,**
- **Industries**
- **,Tourism**

Issue transformation in last decade

- **Problem solving needs more integrated approach**
 - More interaction & complexity
 - Policy interaction (including cumulative impacts)
 - Environmental aspects integrated in sectoral policies, ...
 - Natural disasters
 - Transports
 - Trans-boundary issues (e.g., Agriculture, River Basin Mgt.,),
- **System of systems**



DATA TO KNOWLEDGE



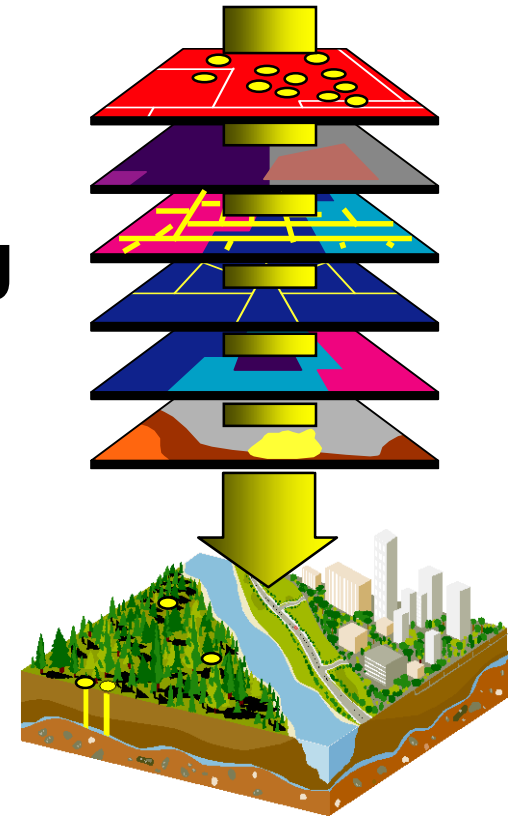
What is a Spatial Data Infrastructure (SDI)?

“The SDI provides a basis for spatial data *discovery, evaluation, and application* for users and providers within all levels of government, the commercial sector, the non-profit sector, academia and by citizens in general.”



SDIs & Decision Support

**SDI is developed to enable
and support decision-making
at different scales for
multiple purposes...**



ECO SDI (RSDI) framework

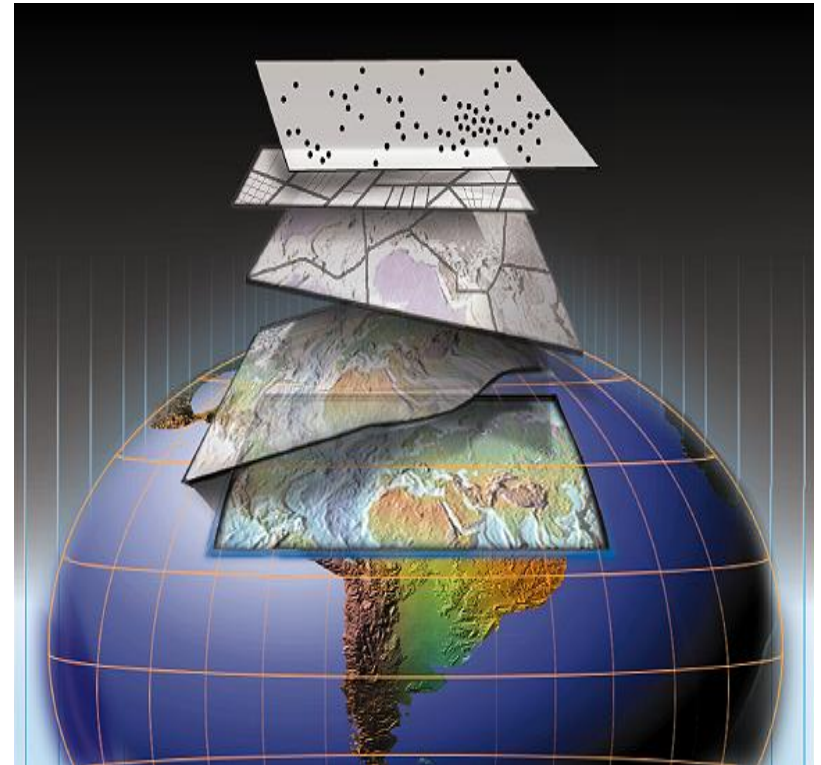
Goal: To provide politicians, governments, policy makers, scientists, private enterprises and citizens in the ECO **access to geographically related ECO data**, digital maps and tools to facilitate monitoring and decision making

Vision: An ECO SDI – based on **sustainable** co-operation between national planning organizations /data governance agencies – which will **provide** for **access to spatially related reliable information among the ECO members** to facilitate & support decision making

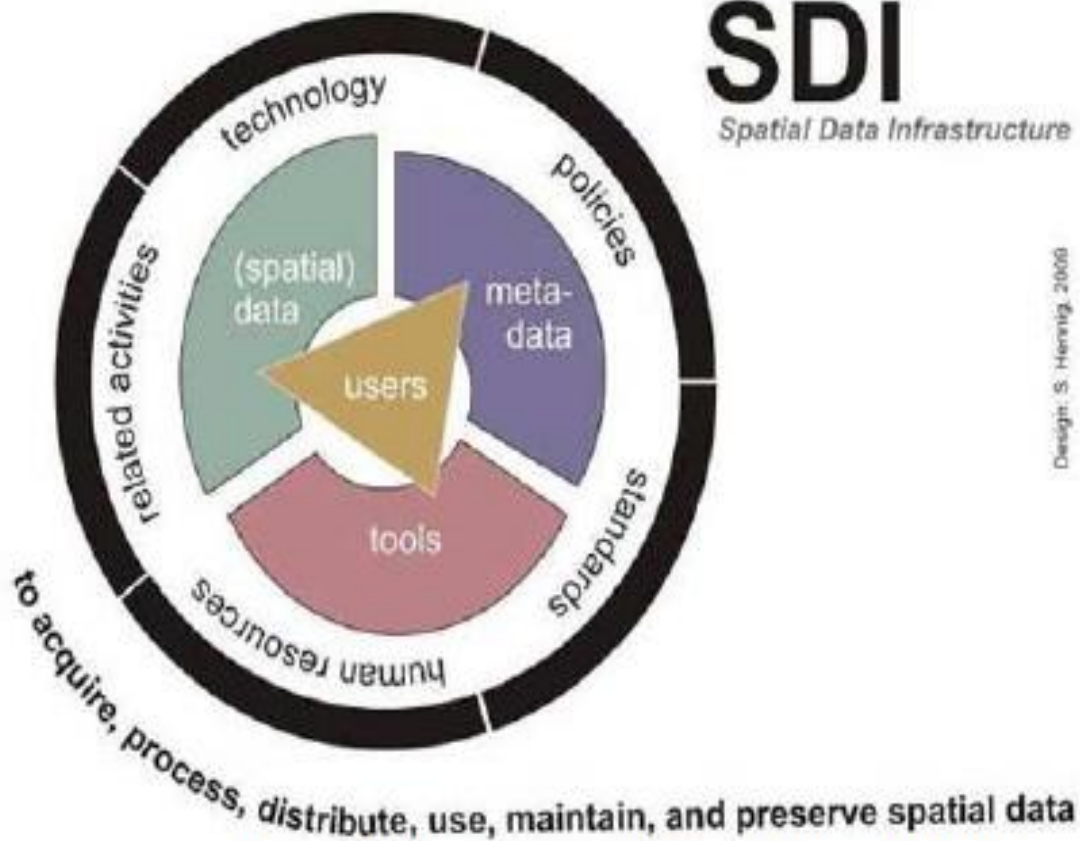


Who needs access to coordinated geographic information?

- Land Records Adjudication
- Disaster Response
- Transportation Management
- Water, gas & electric planning
- Public Protection
- Defense
- Natural Resource Management
- Telecommunications Infrastructure
- Economic Development
- Civic Entrepreneurs
- Regional Stewards



SDI Components



Common components:

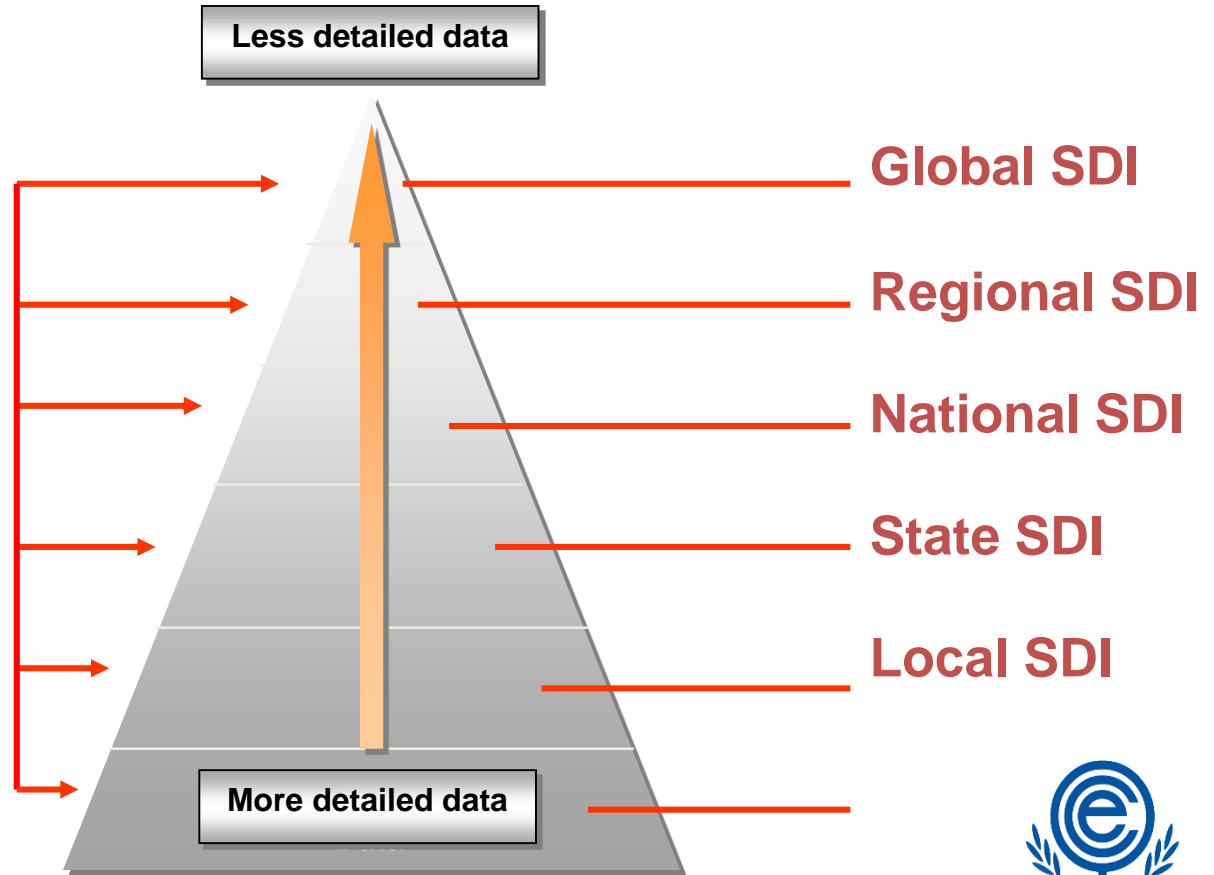
- USERS
- DATA (DATASET, METADATA)
- POLICIES
- STANDARDS
- TECHNOLOGY

A user-centric SDI components (NatureSDI website)



SDI Development

The principle objective for any stakeholder is to support their decision-making.



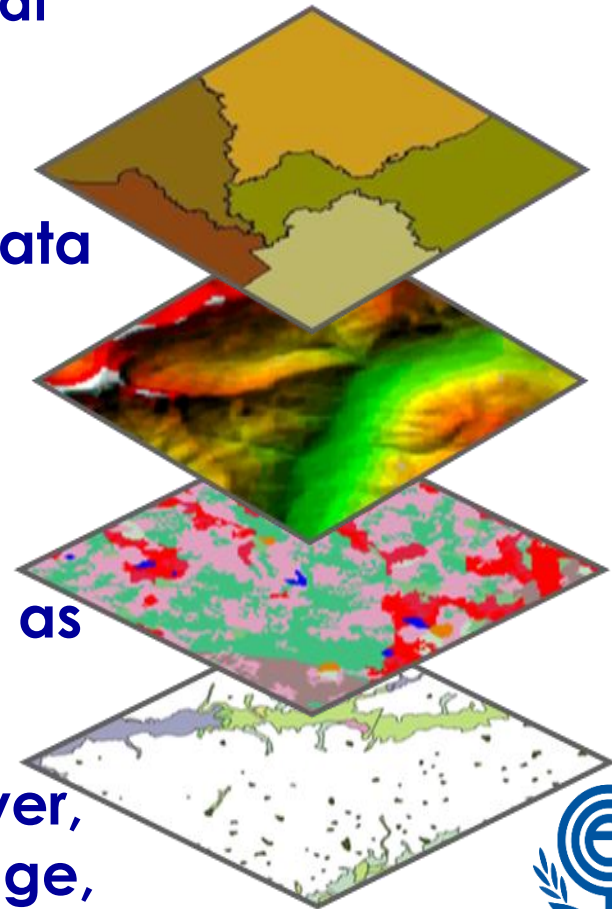
BEST PRACTICES



Main Content of the Arctic SDI

The Arctic SDI is an infrastructure that provides a web portal with easy access to:

- A geoportal for geospatial data viewing and discovery
- A searchable metadata catalogue
- Authoritative reference data as a Web Map Service (WMS)
- Thematic data (birds, icecover, ship routes, land cover change, flora etc.)



Phases of the Arctic SDI

SDI Engagement Phase 2015/2020

- Leverage Global/National SDI Communities
- Stakeholder Engagement and Requirements
- From Strategy to Roadmap to Projects
- SDI Interoperability
- Resource Allocation and Business Models
- Voluntary Resource Commitment to Tasks
- Performance Metrics
- Standards Coordination

Operational Phase 2014/2015

- Geoportal
- Metadata Catalogue
- Web Map Service- National Mapping Data
- Thematic Data Provider
- Partnerships- CAFF

Establishing Phase 2011/2014

- Memorandum of Understanding, 2014
- Simplified Governance
- Reference Model
- Working Groups Established

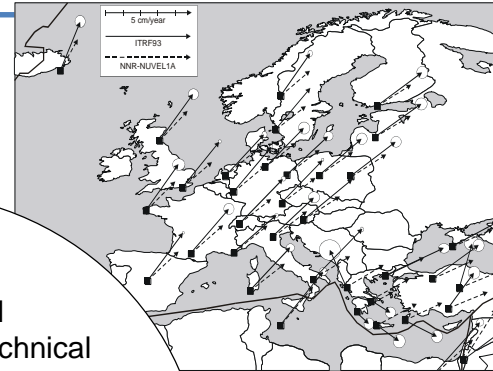
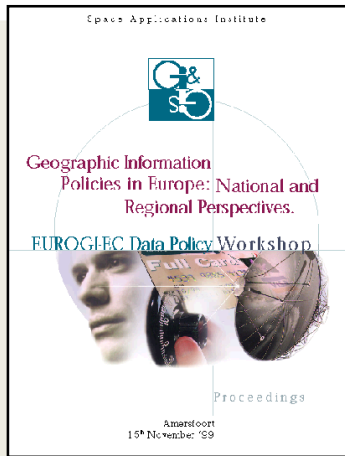
Structuring Phase 2010/2011

- Council Links
- Management
- Group
- Committee

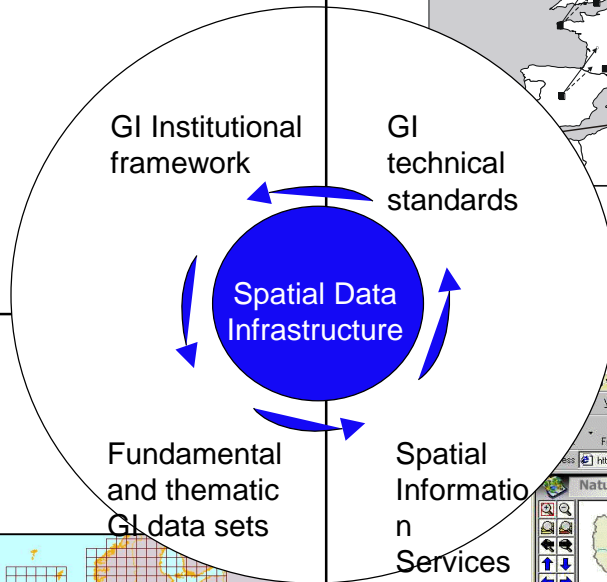
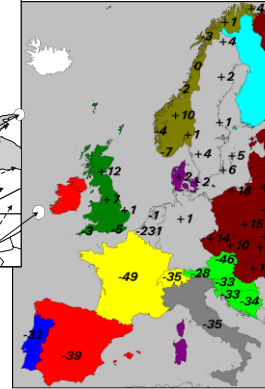


European Spatial Data Infrastructure

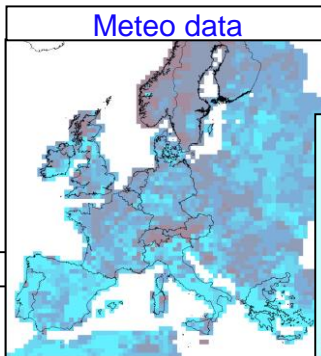
Different Policies and standards



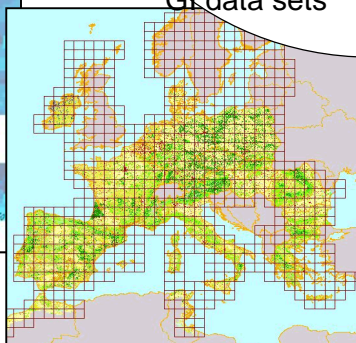
Different sea levels in Europe



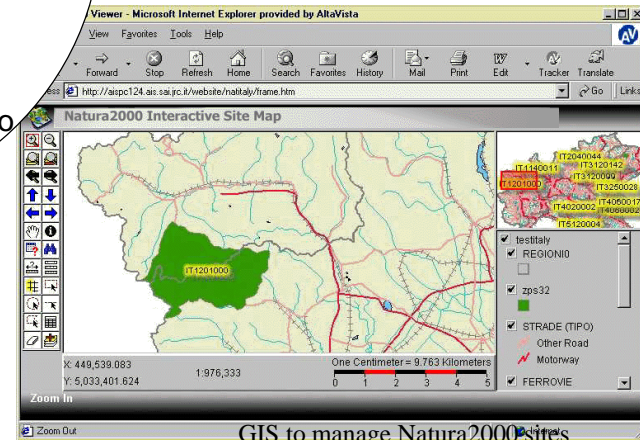
Catchments



Meteo data



Land Cover



GIS to manage Natura2000 sites

Needs to create european spatial data sets

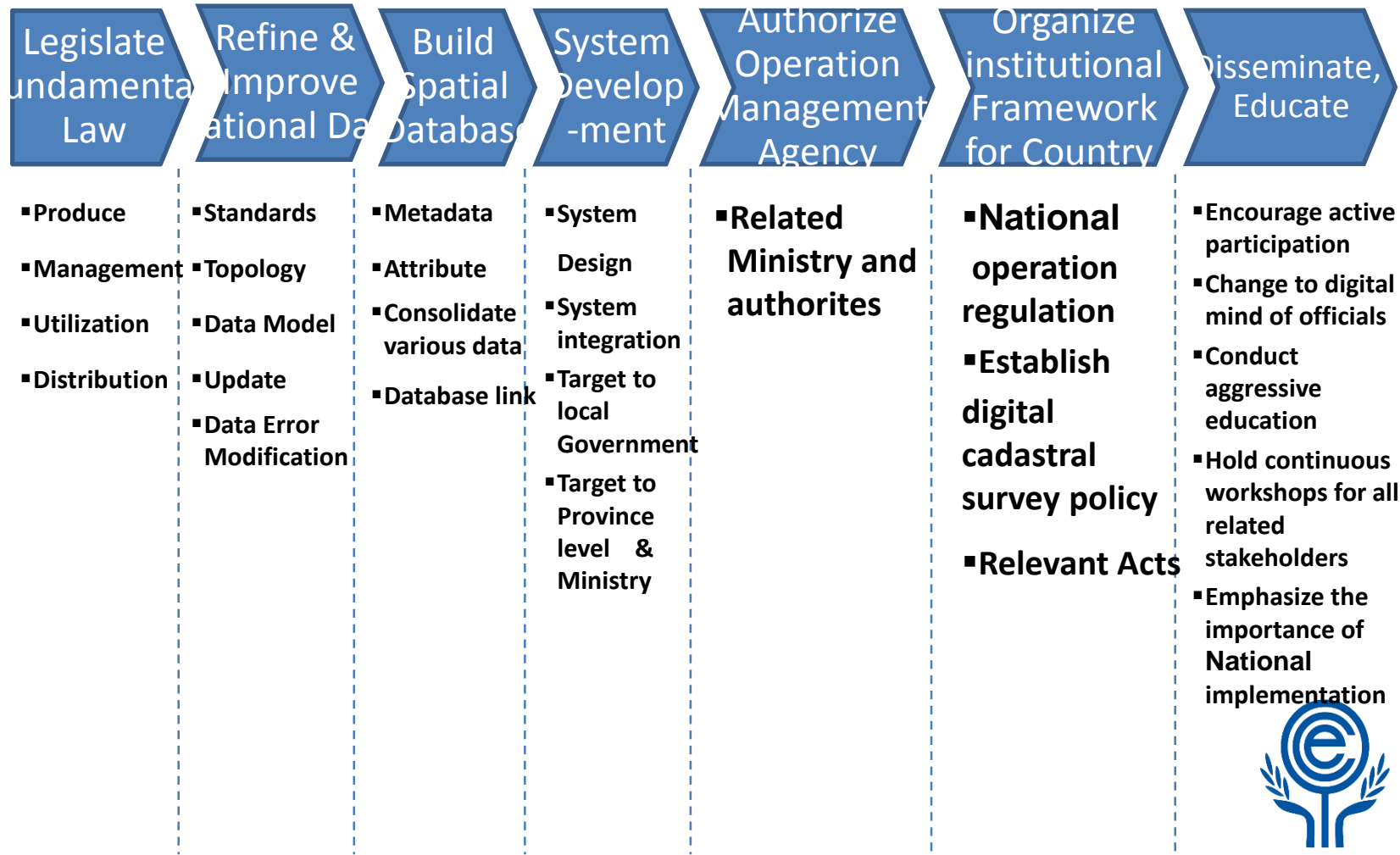
eEurope : eGovernment on line

RSDI framework / General principles

- Establishment of Committee for coordinating, Monitoring and reporting
- Linked to legal basis, Protection of the environment, Sustainable development, Integration
- licensing framework for sharing between member countries
- Policy measures, Require datasets , Require metadata, Require harmonization , Require services



HOW CAN WE IMPLEMENT NSDI IN OUR COUNTRIES





Ministry of ICT
Information Technology Organization of
IRAN

Thank You

