GSDI
Global Spatial Data Infrastructure

Convergences between Geo Spatial Communities: key decision for "decision making"

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- Rapidly changing geo spatial landscape
- Global problems
- Geo spatial community responsiveness.....
- Conclusions

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- Rapidly changing geo spatial landscape

  - fast growing internet and mobile technologies
  - fast growing Digital Earth and Virtual Earth related industries
  - citizens more spatially enabled
  - strong growth geodesy sciences, products and innovative approaches
  - increasing voluntary user communities
  - increasing use of cloud computing systems

- Global world problems
- Geo spatial community responsiveness.....
- Conclusions

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Slide 1:

- Rapidly changing geo spatial landscape
- Global world problems
- Geo spatial community responsiveness.....
- Conclusions

Slide 2:

Global World Problems

- Increasing global warming
- Wasting of energies & resources
- Extreme emissions growth
  - Carbin dioxide (CO2)
  - Greenhouse gas (CH4)
  - Sulphate dioxide (SF6)
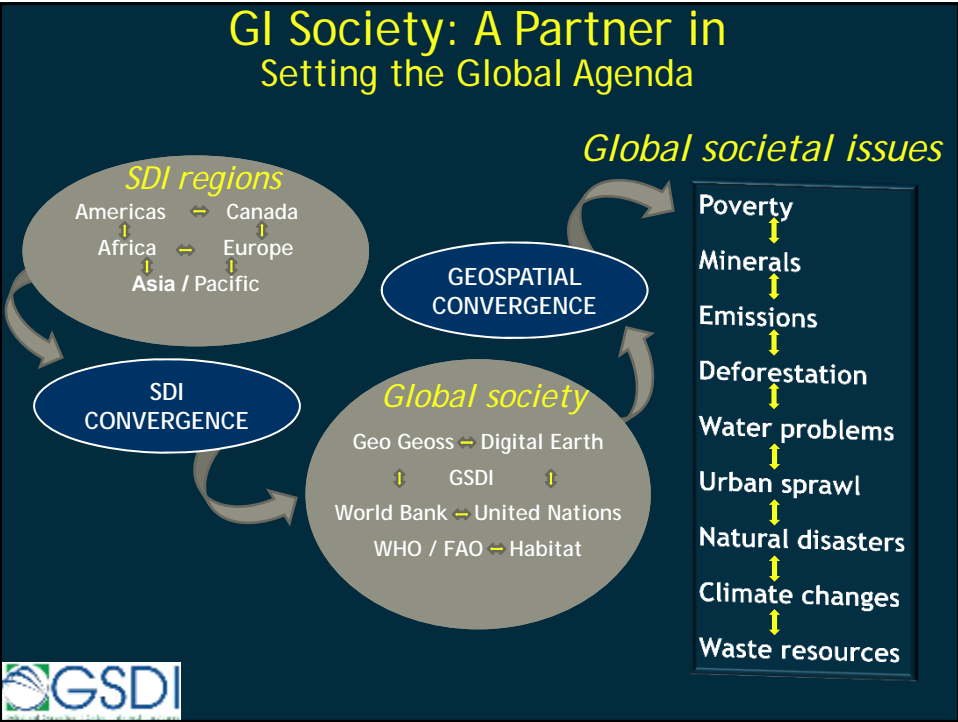 - Nitrogen dioxide (NO2)

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Setting the Global Agenda

Global societal issues

SDI regions
Americas → Canada
Africa → Europe
Asia / Pacific

GEOSPATIAL
CONVERGENCE

SDI
CONVERGENCE

Global society
Geo Geoss → Digital Earth
↕ GSDI ↕
World Bank → United Nations
WHO / FAO → Habitat

Poverty
Minerals
Emissions
Deforestation
Water problems
Urban sprawl
Natural disasters
Climate changes
Waste resources
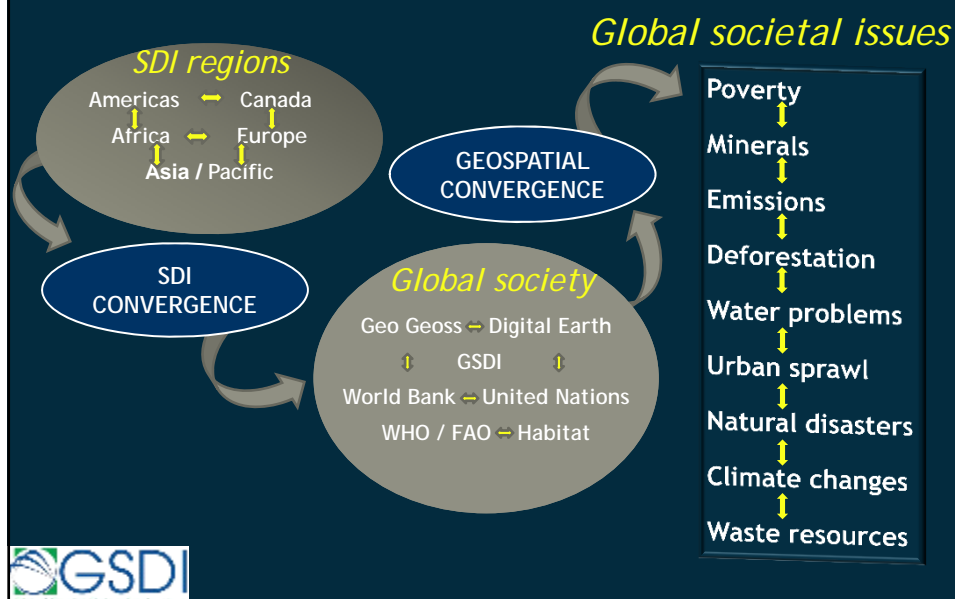
Driver European SDI Successes

- Leadership defined and accepted
- SDI laid down in Directive and National EU legislations
- Participation on all levels arranged
- High quality data sets and access tools essential part of legal framework

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Italy: EIA application integrated in EU-geoportal

France: CARMEN environmental info system

Latvia: IACS-LPIS view services

Slovenia: real estate market value register

Hungary: OKIR environmental info system

Germany: GDI-DE organisational structure

Lithuania: LGII discovery service

Estonia: road and traffic information systems

Spain: interoperable Cadastre

UK: Geohub Northern Ireland

Austria: 9 states,1 geoservice

Iceland: getting ready for INSPIRE

Finland: open source viewer

Netherlands: Space for GeoInformation

Cyprus: National Land Information Systems

Norway: Norge Digitalt

Country	Transpose	Coordination			Implementation	
		NMA	ENV	Other	Centralised	Federated
Italy	🙂		✓			✓
France	🙂		✓		✓	
Latvia	🙂		✓	✓	✓	
Slovenia	🙂	✓	✓		✓	
Hungary	✓		✓		✓	
Germany	🙂		✓			✓
Lithuania	🙂	✓			✓	
Estonia	🙂		✓		✓	
Spain	🙂			✓		✓
UK	🙂		✓		✓	
Austria	🙂		✓			✓
Iceland	🙂	✓	✓		✓	
Finland	✓	✓			✓	
Netherlands	✓		✓		✓	
Cyprus	🙂			✓	✓	
Denmark	✓		✓		✓	
Norway	🙂	✓	✓		✓	
Ireland	🙂		✓		✓	

Source: INSPIRE

Dutch Kadaster information hub in eGovernment

- Key register cadastre
- Key register topography
- Distributor building and address
  information

(Possible) future tasks:
- Distributor large scale base map
- Distributor planning/zoning information
- Distributor valuation information
- Distributor sub-soil information

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USA catalyst SDI Developments

- Clinton Order
- Federal Geographic Data Committee
- National Clearinghouse
- Partnership marketplace
- Geospatial One Stop Shop OMB E government initiatives

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New Initiatives in the USA

- Data. Gov in January 2009
- White Paper "Place Based Policies" August 2009
- Increasingly active role in the Space Community

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User Driven Approach and Partnership Building in Canada

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> **Outline**

- GeoConnections Program
- Public Health Community
- Public Safety/Security Community
- Closing thoughts

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Canada

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Successful SDI Development
India

- India departments and public organisation use space observation data for SDIs.

- Minister of Science and Technology works on **National GEO Authority**.

- India industry and knowledge capacities grow and develop new media.

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Vision and Goals of SG-SPACE

Vision
Towards a spatially enabled Singapore

Goals
Providing a mechanism to make available the interoperable, organised and authoritative geospatial information for:

- National level decision making;
- Public security;
- Cost effective business; and
- Location awareness among citizens.

Business Hub

Land Data Hub

People Hub

Security Hub
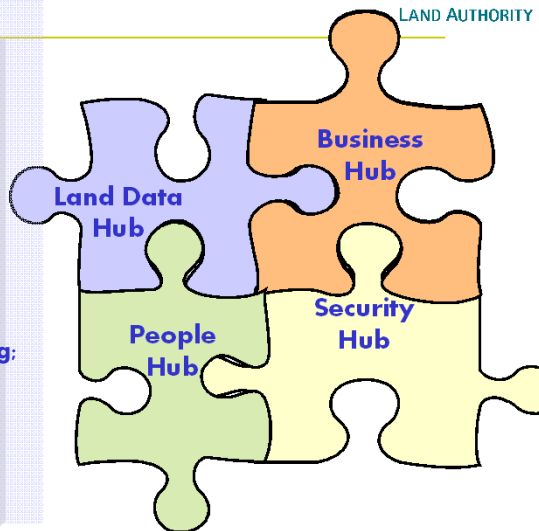
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Basic Vision in Australia
"Spatial Enabled Government"

- Federal level: Priorities on national address files
- State of Victoria: Google Agreement Cadastral parcel locations
- State of Queensland: Integrated portal Cadastral Data
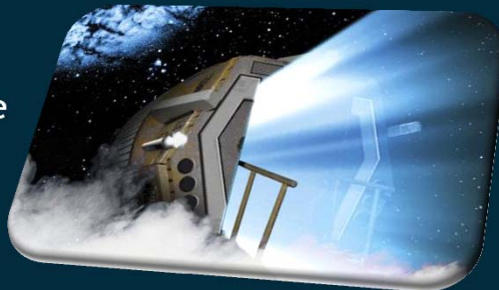- State of West Australia: Shared Land Information Portal

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Examples current relationships SDI and Earth Observation communities
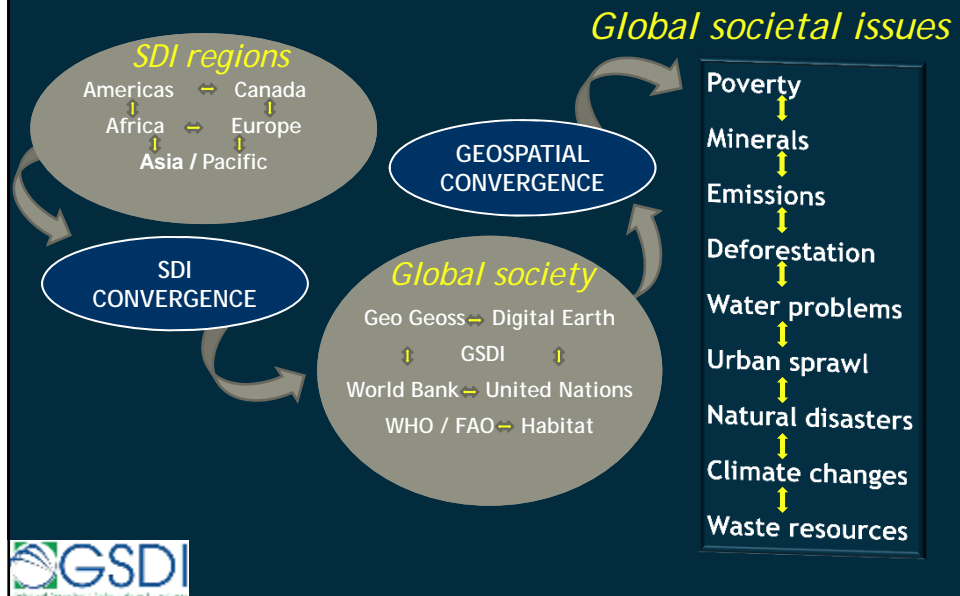
- USA: synergies between communities exchange spatial data and space data.
- India: through free access space information impact Survey of India.
- South America: increasingly use space information, impact on NCMA's .

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Minerals
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Water problems
Urban sprawl
Natural disasters
Climate changes
Waste resources

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Next Steps

• Joint convergences GEO/GEOSS community
  and Digital Earth

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GSDI Statement for Cooperation with GEO GEOSS

- *On Technical level: architecture similar- stimulating interoperability*
  -SDI registration with GEOSS
  -Share GSDI Cookbook with GEOSS

- *On Organizational level*
  -Support more data sharing principles

- *Creating Strategic Alliance*
  -Amplify success of both organizations
  -Seek similar level of ministerial and executive visibility
  -Support of contributed systems, products and services through
   coordinated efforts

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Preparations for Cooperation with Digital Earth

- *Work on optimized information access for different user groups*

- *Making preparations to set up strategic alliance with Digital Earth*

  -*Collaboration realization " Next Generation Digital Earth"*
  -*Composing Global Knowledge Infrastructure for different communities*
  -*Conversion process spatial data in relevant user framework information.*

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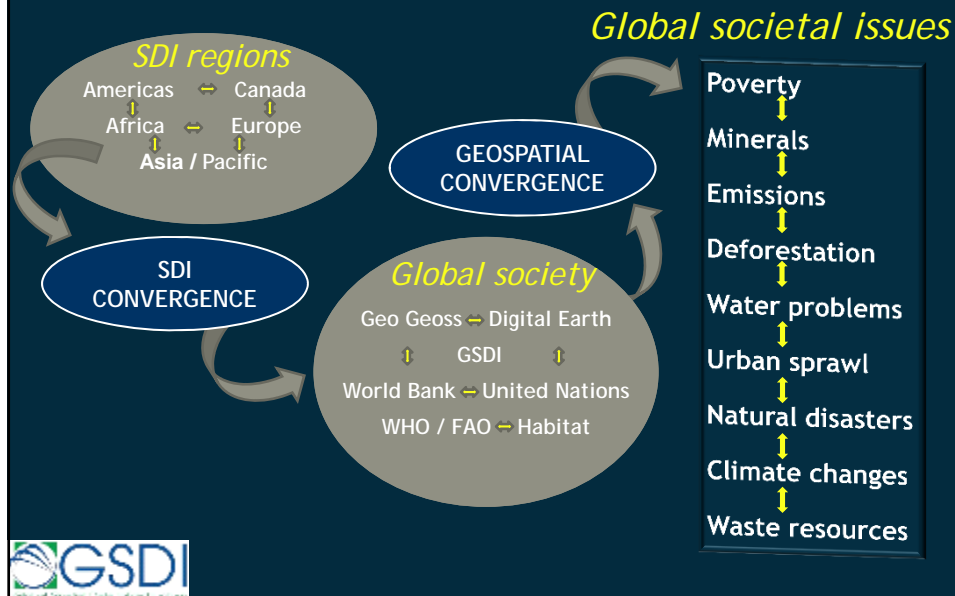
Convergences geo spatial communities for global decision making

- Rapidly changing geo spatial landscape
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- Geo spatial community responsiveness.....

Conclusions
- Making use of successful approaches in regions.
- GEO GEOSS and Digital Earth making fast progress.
- Geo spatial sector sound partner in solving today's global problems.

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