

SPATIAL DATA INFRASTRUCTURE (SDI) OF MEXICO



Content

II. SDI in Mexico – Law SNIEG

- Legal Basis
- National System of Statistical and Geographic Information(SNIEG For its acronym in Spanish)
- National Information Subsystems
- National Subsystem of Geographic and the Environment Information (SNIGMA for its acronym in Spanish)

III. The SNIEG as SDI

- Transition to International Level
- Components
- Organizational Framework
- Regulatory Framework
- Thematic Framework
- Technological Framework

IV. Expectations



SNIEG INEGI
SISTEMA NACIONAL DE INFORMACIÓN ESTADÍSTICA Y GEOGRÁFICA





II. SDI in Mexico – SNIEG Law

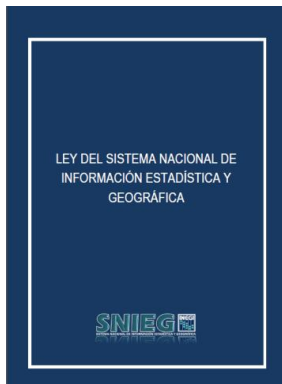
SDI in Mexico – SNIEG Law

Legal support



(Amendment to Art. 26, 2006)

<http://www.diputados.gob.mx/LeyesBiblio/htm/1.htm>



(Published in the Official Journal of the Federation, 2008)

<http://www.snieg.gob.mx/contenidos/espanol/normatividad/marcojuridico/LSNIEG.pdf>

The SDI of Mexico

The State will have a **National System of Statistical and Geographic Information** (SNIEG for its acronym in Spanish) whose data will be considered official. (Art. 26, CPEUM 2015)

INEGI is responsible for this System

(Art. 26, CPEUM 2015)



<http://www.snieg.gob.mx>



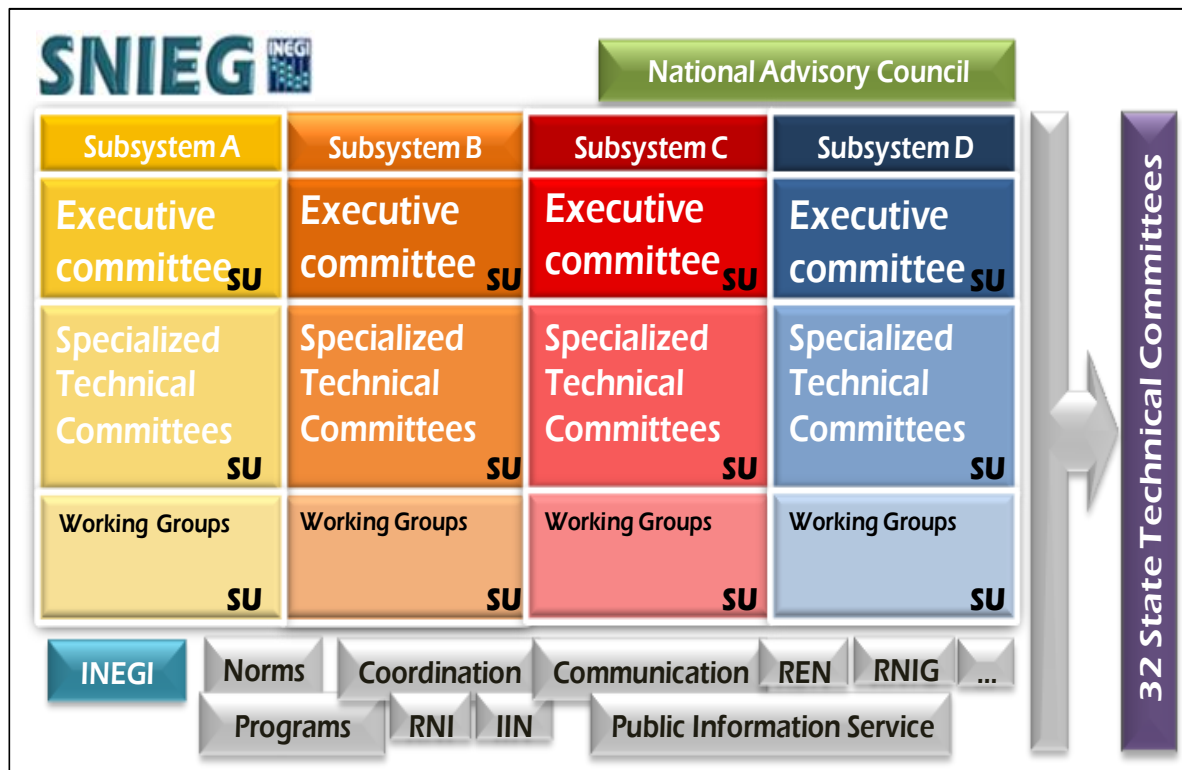
SDI in Mexico – SNIEG Law

National System of Statistical and Geographic Information (SNIEG for its acronym in Spanish)

Set of Units organized through subsystems, coordinated by the Institute* and articulated by the National Information Network, in order to produce and distribute authoritative information.

(Art. 2 LSNIEG, 2008)

<http://www.snieg.gob.mx/#top>



* SU.- State Units

<http://www.snieg.gob.mx/#top>

(SNIEG, 2015)

SDI in Mexico – SNIEG Law

National Information Subsystem

To Organize the National System, the next four National Information Subsystems are set.

Each subsystem produces, integrates and distributes authoritative information:

(Art. 17 LSNIEG, 2008)

<http://www.snieg.gob.mx/#5>



National Subsystem of Geographic and Environment Information

Art. 26 LSNIEG

Geographic Component

Data Groups



Geographical Names

Cadastral Data,
Topographic,
Natural Resource
and Climate

Continental, Insular
and Submarine
Relief

Coastal,
International, State
and Municipal
boundaries

Geodetic Reference
Frame



Spatial Data Infrastructure of
Mexico

The SDI of Mexico

Art. 27 LSNIEG

Environment Component

Indicators



Atmosphere



Water



Soil



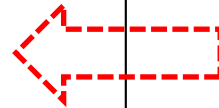
Flora

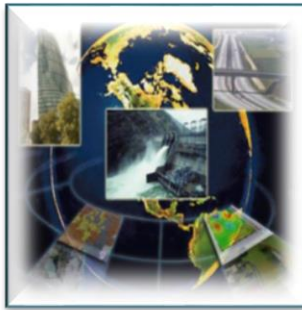


Fauna



Hazardous and Solid
Waste

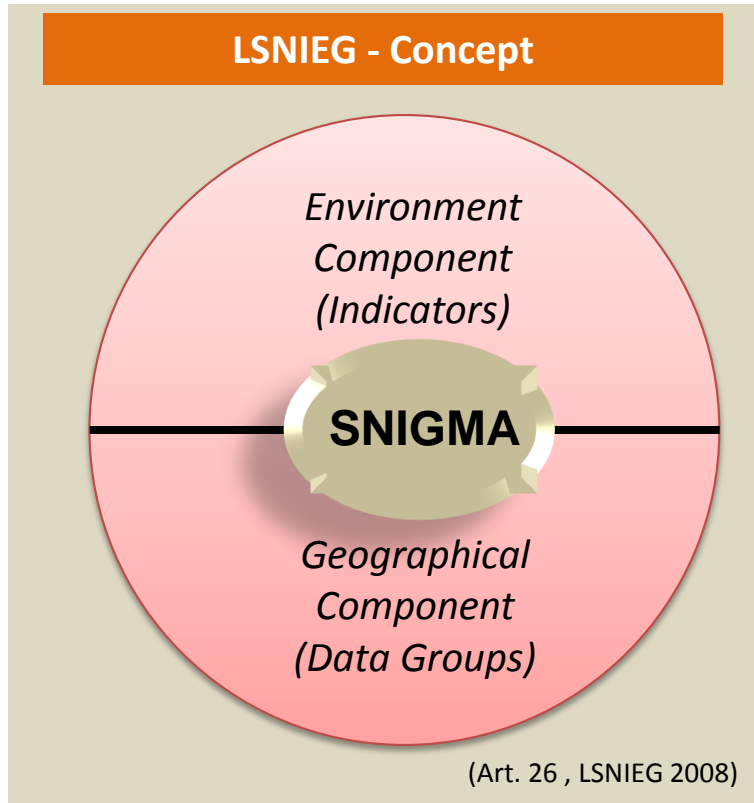




III. The SNIEG as SDI



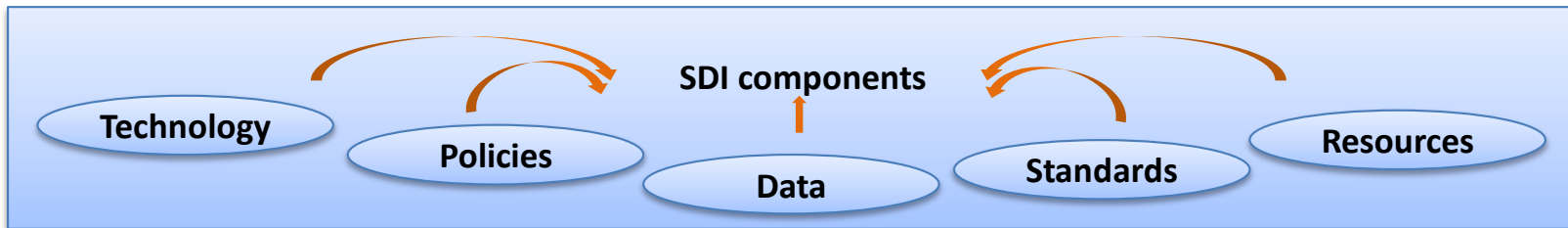
The SNIEG as SDI



Internationalization (UN-GGIM)

An SDI must be more than a single data set or database ...

(Nebert, 2004)

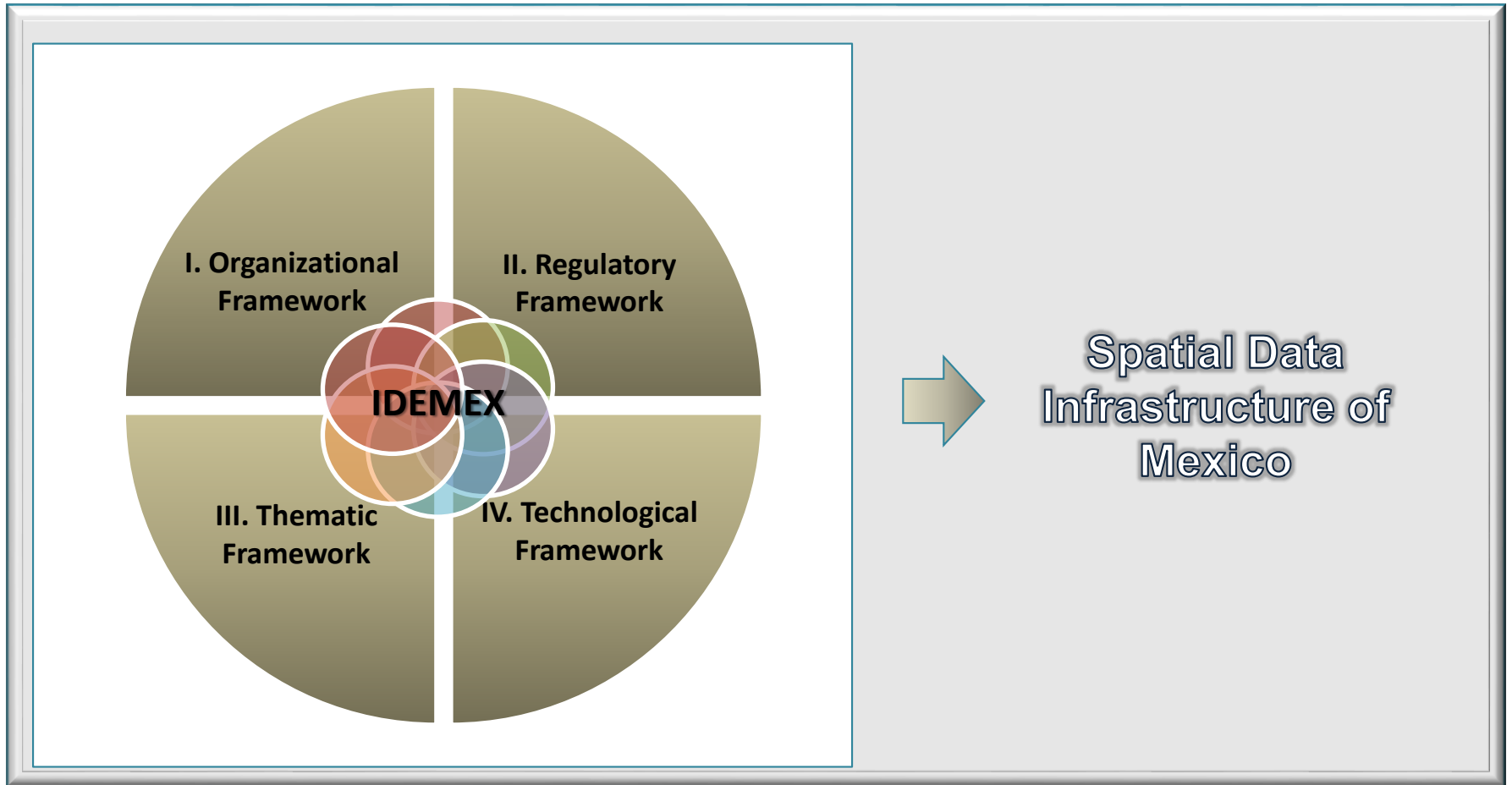


The SDI of Mexico

(Cookbook, 2009)



The SNIEG as SDI






III. The SNIEG as SDI: Organizational Framework




Specialized Technical Committees (STC)

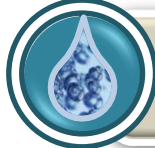
8 STC - National Subsystem of Geographic and the Environment Information



Basic Geographical Information 9



Cadastral and Registry Information 7



Water 7




Land Use, Vegetation and Forest Resources 7



Emissions, Waste and Dangerous Substances 7



Climate Change 6

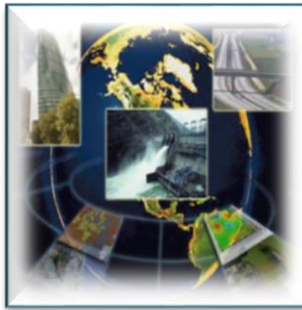


Energy Sector 10



Regional and Urban Development. 9

State Units: 40



III. The SNIEG as SDI: Regulatory Framework

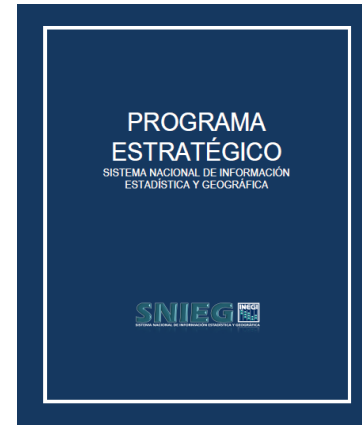


Regulatory Framework



SNIEG Programmatic Instruments

- SNIEG Strategic Program (24 years)



<http://www.snieg.mx/contenidos/espanol/programas/pesnieg.pdf>

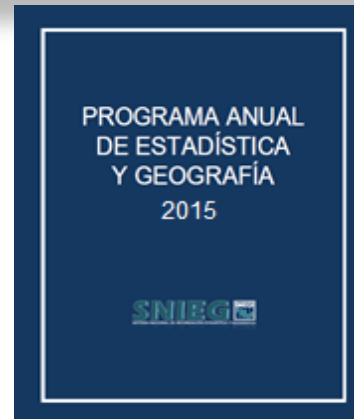
(Art. 9 LSNIEG, 2008)

- National Program of Statistics and Geography (6 years)



<http://www.snieg.mx/contenidos/espanol/programas/PNEG%202013-2018.pdf>

- Annual Program of Statistics and Geography



<http://www.snieg.mx/Contenidos/espanol/Programas/PAEG2014.pdf>

The SDI of Mexico



Normative for SNIEG Coordination

11 Documents

- Operation rules of SNIEG
- National interest's data definition rules
- National Advisory Board, integration and operation rules
- Executive Committees of the National Information Subsystems, integration and operation rules
- Specialized Technical Committees, integration and operation rules
- Agreement on the Use of the National Catalogue of Indicators about National interest's data
- Rules of Public Service of Statistics and Geographical Information
- Principles and Best Practices of Statistics and Geographic Activities of SNIEG.
- Integration and administration rules of the National interest's data collection
- Ethics code for members of SNIEG
- Standard for Quality Assurance of Statistical and Geographical Information INEGI

Technical Normative on Geographic Activities



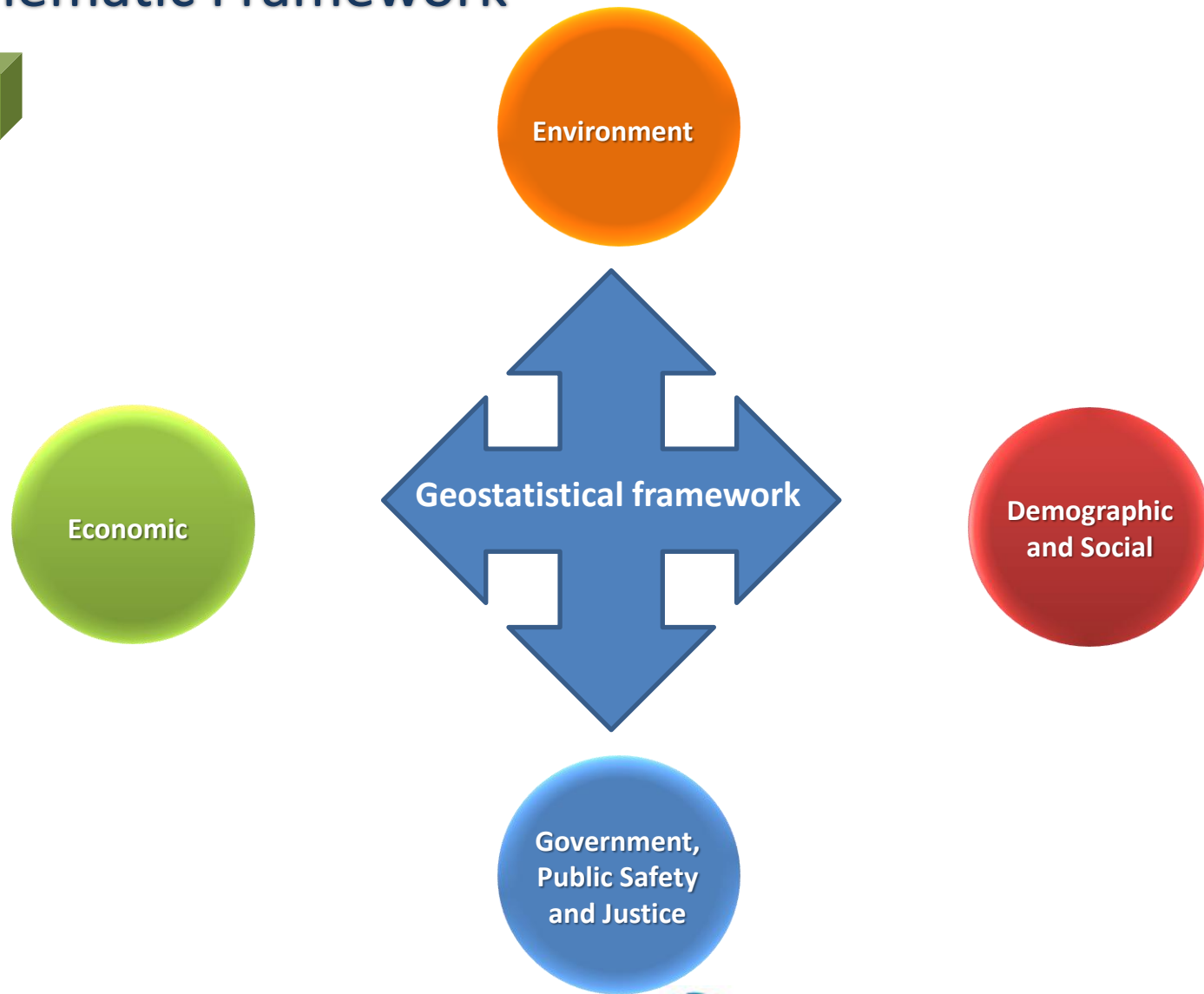
9 documents

- Geographic address – Nov. 12, 2010.
- National Geodetic System – Dec. 23, 2010.
- Positional Accuracy Standards - Dec. 23, 2010.
- Development of Geographic Metadata - December 24, 2010.
- Production, Collection and Integration of Cadastre and Register Data with Statistical and Geographic purposes - Jan 16, 2012.
- Use of the Catalog of Undersea Features Generic Terms - . December 28, 2012
- Generation of Digital Elevation Models with geographic purposes – December 2, 2014.
- Exchange of Cadastral Information for Statistical and Geographic purposes - June 23, 2015.
- Continental and Insular Geographic Names for Statistical and Geographic purposes register - June 25, 2015.



III. The SNIEG as SDI: Thematic Framework

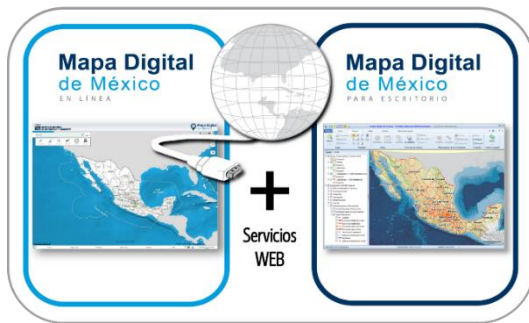
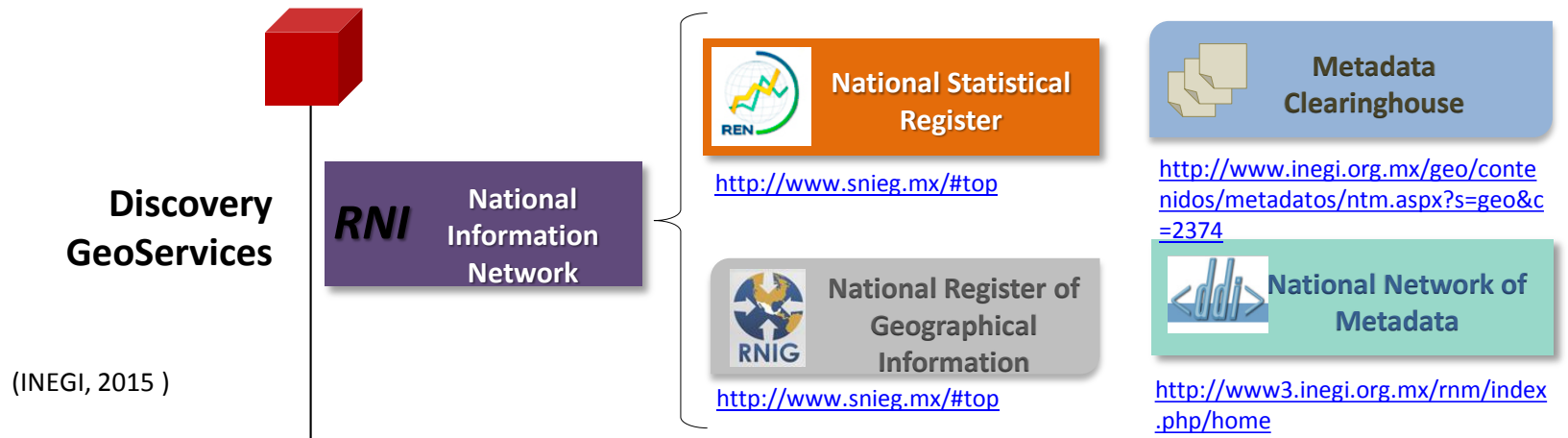
Thematic Framework





III. The SNIEG as SDI

Technological Framework: Examples



<http://www.inegi.org.mx/geo/contenidos/mapadigital/>



<http://www.inegi.org.mx/sistemas/bie/>



http://antares.inegi.org.mx/analisis/red_hidro/SIATL/#



<http://www.atlasdemexico.gob.mx/>



<http://www3.inegi.org.mx/sistemas/mapa/denu/default.aspx>

Data viewers

(INEGI, 2015)



Technological Framework: examples

Catalog Download GeoServices

(INEGI, 2015)



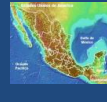
Continuous Mexican Elevations CEM 3.0

<http://www.inegi.org.mx/geo/contenidos/datosrelieve/continental/descarga.aspx>



Active National Geodetic Network RGNA


<http://www.inegi.org.mx/geo/contenidos/geodesia/drgna2.aspx>



Geostatistical areas, State, Municipal and Locations Unique Catalog keys

<http://www.inegi.org.mx/geo/contenidos/geoestadistica/catalogoclaves.aspx>

Topographic

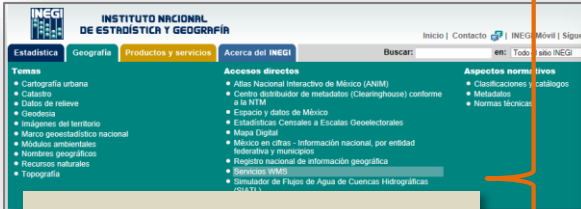


<http://www.inegi.org.mx/geo/contenidos/topografia/default.aspx>

Natural Resources



<http://www.inegi.org.mx/geo/contenidos/recnat/default.aspx>


Geographic Information Web Services

<http://www.inegi.org.mx/inegi/contenidos/serviciosweb/infogeografica.aspx>

Grupo	Descripción	
Ortofotos	Ortofotos escala 1:20 000 y 1:10 000	Detalles
Datos de relieve	Hipsográfico con resolución de 30m por pixel	Detalles
T1M	Información topográfica escala 1 : 1 000 000	Detalles
MGE	Límites Estatales y Municipales a nivel Nacional	Detalles
RNG	Nombres geográficos (Registro Nacional)	Detalles
Red Carretera	Red Carretera Nacional escala 1:50 000	Detalles
Geodesia	Puntos de medición de la Red Geodésica Pasiva	Detalles
T50	Información topográfica escala 1: 50 000	Detalles
T250	Información topográfica escala 1: 250 000. Representación del relieve	Detalles
Recursos Naturales	Información de Recursos Naturales	Detalles
Percepción Remota	Cobertura de imágenes de Satélite	Detalles

WMS Services

Direct Access GeoServices

(INEGI, 2015)



IV. Expectations

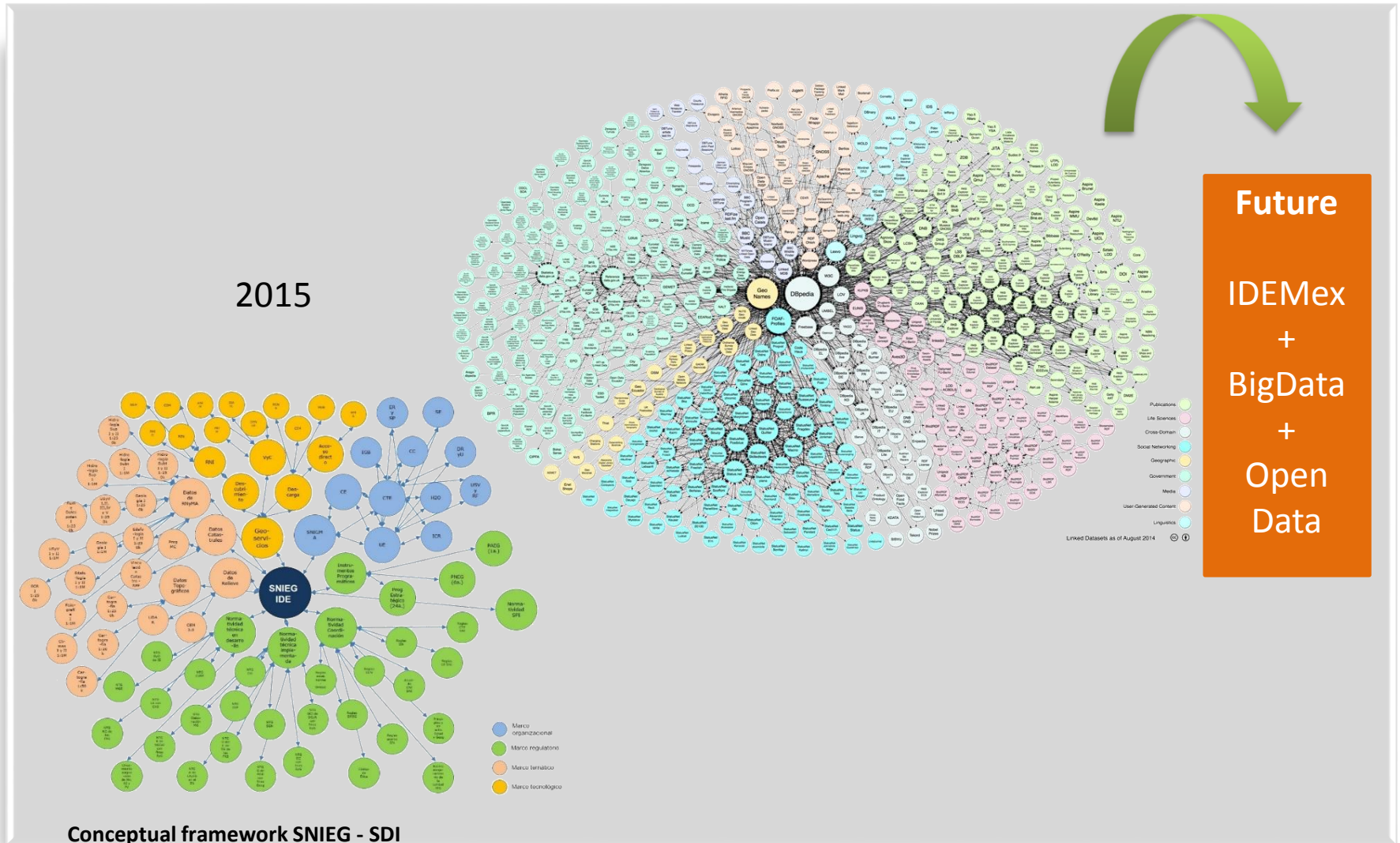
Expectations

SNIEG – IDE Strategic Goals

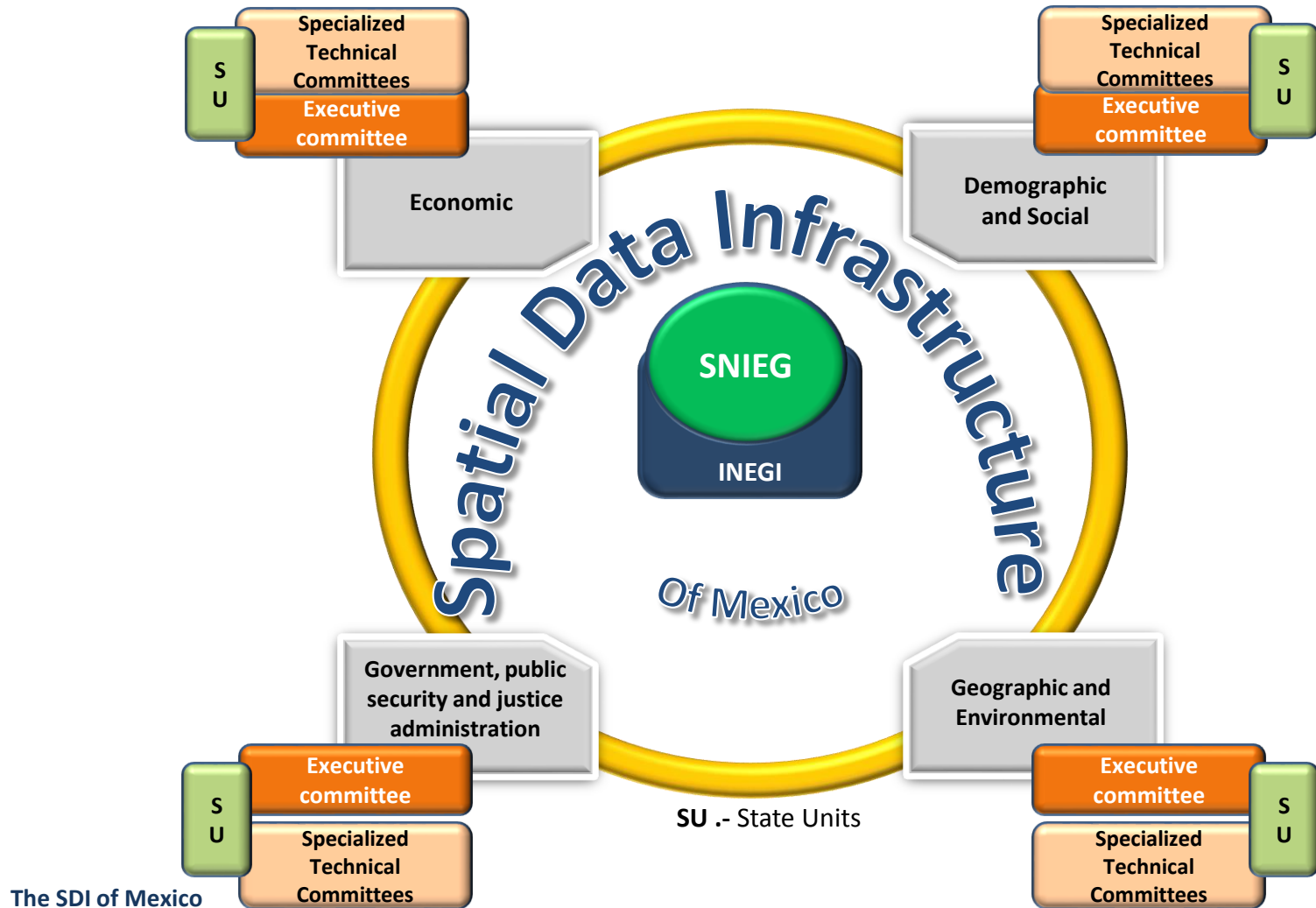


- Establishing the conceptual Framework of SNIEG as an SDI (Regulations).
- Consolidate the leadership of INEGI as the central authority of the SNIEG.
- Consolidate Public Information Service as Geoportal

Expectations



Conclusion



Conociendo México

01 800 111 46 34

www.inegi.org.mx

atencion.usuarios@inegi.org.mx



@inegi_informa



INEGI Informa

