

-IGR en las Políticas Públicas-

Necesidades actuales en el ámbito nacional, europeo y global



¿Por qué IGR?

**“Everything happens
somewhere.”**

Nancy Tosta



¿Por qué IGR?



“Geospatial information is fundamental to decision making, policy formulation, measuring and monitoring development elements, all critical to the post 2015 sustainable development agenda.”

Wu Hongbo, Under-Secretary-General for Economic and Social Affairs, 2014

¿Por qué IGR?

Información Geográfica de Referencia: información oficial del territorio para que cualquier usuario y aplicación puedan referenciar sus datos

- ✓ Provee una **localización precisa** sin ambigüedades
- ✓ Posibilita la **combinación de datos**
- ✓ Debe estar sometida a un proceso claro de **mantenimiento**
- ✓ **Oficial**: es producida y facilitada desde una fuente competente, con mandato legal

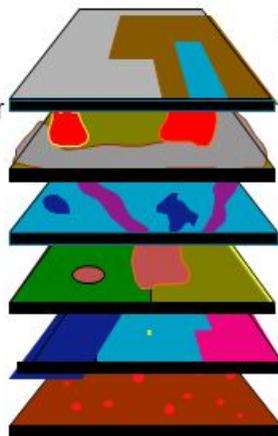


IGR – UN GGIM



High quality, timely and reliable data

Geodetic
Elevation
Water/Ocean
Land use/cover
Transport
Cadastral
Population
Infrastructure
Settlements
Admin. Bdys.
Imagery
Geology/soils
Observations
etc.



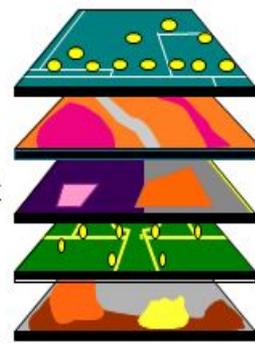
National Spatial Data Infrastructure



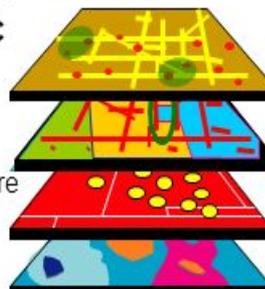
UN-GGIM

United Nations Secretariat
Global Geospatial Information Management

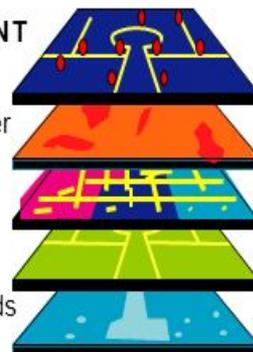
SOCIAL
Society
Poverty
Education
Health
Population
Employment
Water
Sanitation
Equality
Gender
Governance



ECONOMIC
Well-being
Cities
Water
Energy
Infrastructure
Industry
Sanitation
Economy



ENVIRONMENT
Water
Seas/oceans
Land use/cover
Ecosystems
Forests
Agriculture
Climate
Biodiversity
Natural hazards
Pollution



*Positioning Geospatial Information to address global challenges, by Greg Scott
Inter-Regional Advisor at UN-GGIM/United Nations Statistics Division
(2016/03/02)*

Positioning geospatial information to address global challenges

ggim.un.org

IGR – UN GGIM



Subcomité:

1. Subcomité de Geodesia (anteriormente GT sobre el Marco de Referencia Geodésico Global)

Grupos de expertos:

1. Grupo de expertos sobre la integración de información estadística y geoespacial
2. Grupo de expertos en administración y gestión de tierras

Grupos de trabajo:

1. Grupo de trabajo sobre el desarrollo de una declaración de principios compartidos para el manejo de la información geoespacial
2. Grupo de trabajo sobre tendencias en los arreglos institucionales nacionales en la gestión de la información geoespacial
3. Grupo de trabajo sobre información geoespacial y servicios para desastres
- 4. Grupo de trabajo sobre temas globales de datos geoespaciales fundamentales (FDT)**
5. Grupo de trabajo sobre marcos jurídicos y de políticas para la gestión de la información geoespacial
6. Grupo de trabajo sobre información geoespacial marina

IGR – UN GGIM

Fundamental Data Themes



Global Geodetic Reference Frame



Geographical Names



Addresses



Functional Areas



Buildings and Settlements



Land Parcels



Transport Networks



Elevation and Depth



Population Distribution



Land Cover and Use



Geology and Soils



Physical Infrastructure



Water



Orthoimagery

SDG Requirements approach

INSPIRE Theme	Sustainable Development Goal													
	1	2	3	5	6	7	8	9	11	12	13	14	15	
Address														
Administrative units														
Cadastral parcels														
Geographical Names														
Hydrography														
Transport networks (road, rail, water, air, cable)														
Protected sites														
Elevation														
Land cover														
Ortho-Imagery														
Geology														
Buildings														
Land use (existing , planned)														
Soils														
Human health														
Governmental services and utilities														
Environmental Monitoring facilities														
Production facilities														
Agricultural facilities														
Population distribution/ Statistical Units														
Area management - Regulated areas														
Natural risk zones														
Sea regions														
Oceanographic features														
Atmospheric conditions – meteorologic features														
Biogeographical regions														
Habitats and biotope														
Species distribution														
Energy resources														
Mineral resources														

'Common Denominator' approach

UN-GGIM: Europe	UNECA and GSDR	ANZLIC	UNGGIM NIA	UN-GGIM Arab States
Geographical names	Geographic names	Place names	Geographical names	Names
Administrative units	Boundaries	Administrative boundaries	Administrative units	Administrative Boundaries
Transport networks	Transportation	Transport	Transport networks	Transport Networks
Hydrography	Hydrography Drainage	Water	Hydrography	Hydrography
Orthoimagery	Imagery	Imagery	Imagery	Imagery
Elevation	Hypsography	Elevation and depth	Elevation	Elevation
Land cover	Natural environment	Land cover	Land Cover	Land cover
Cadastral parcels	Tenure/parcels (part of land management theme)	Land parcel and property	Cadastral parcels	Land parcels
Buildings	Populated places (part of Boundaries theme)		Settlements	
Addresses	Street addresses (part of land management theme)	Geocoded addressing		Addresses
Utilities and government services	Utilities and services			Utilities
Area Management	Land management units/areas			
Statistical Units				
Land Use				

IGR – UN GGIM

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Orthoimagery

INSPIRE, Copernicus, LISIGE

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Physical Infrastructure



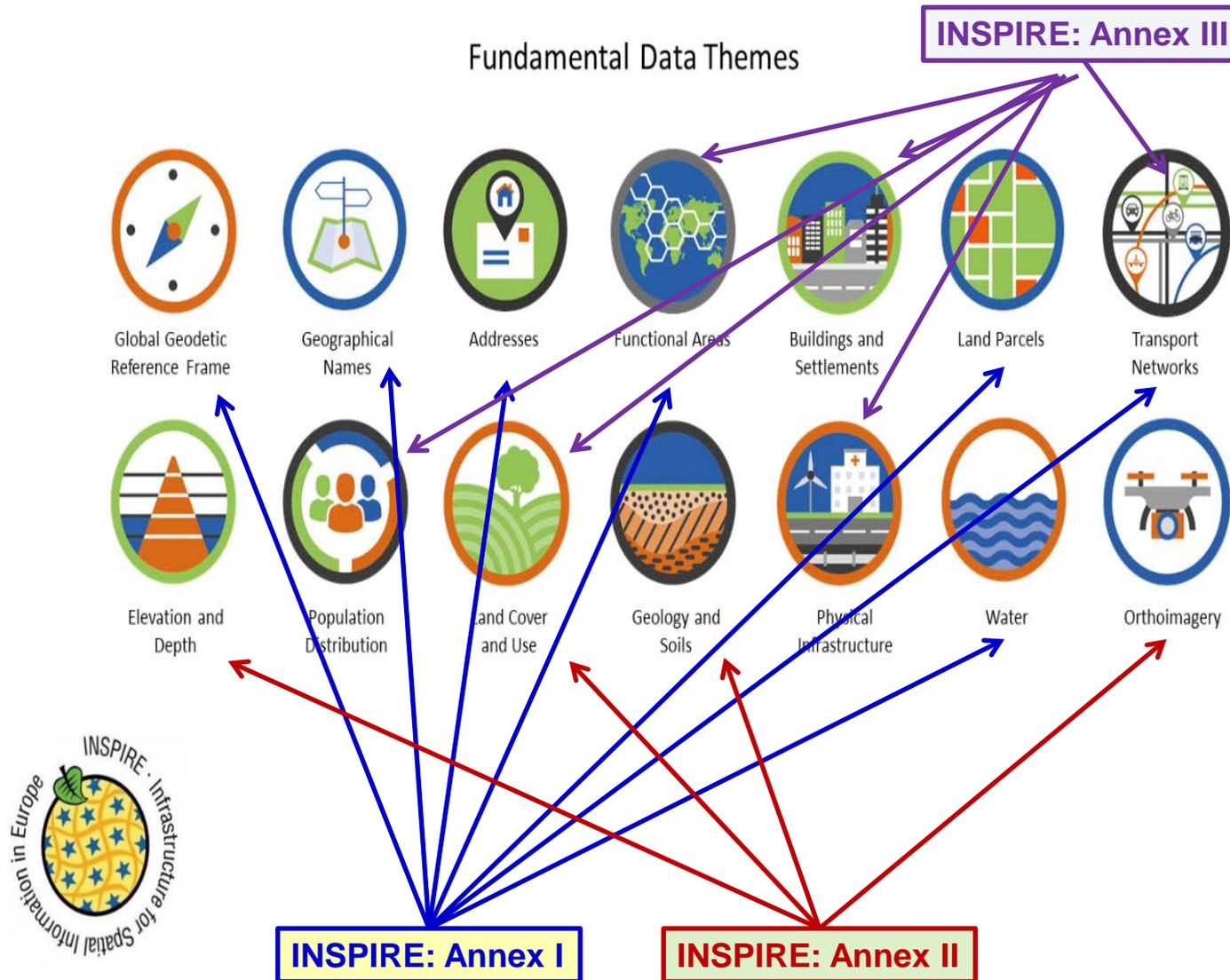
Water



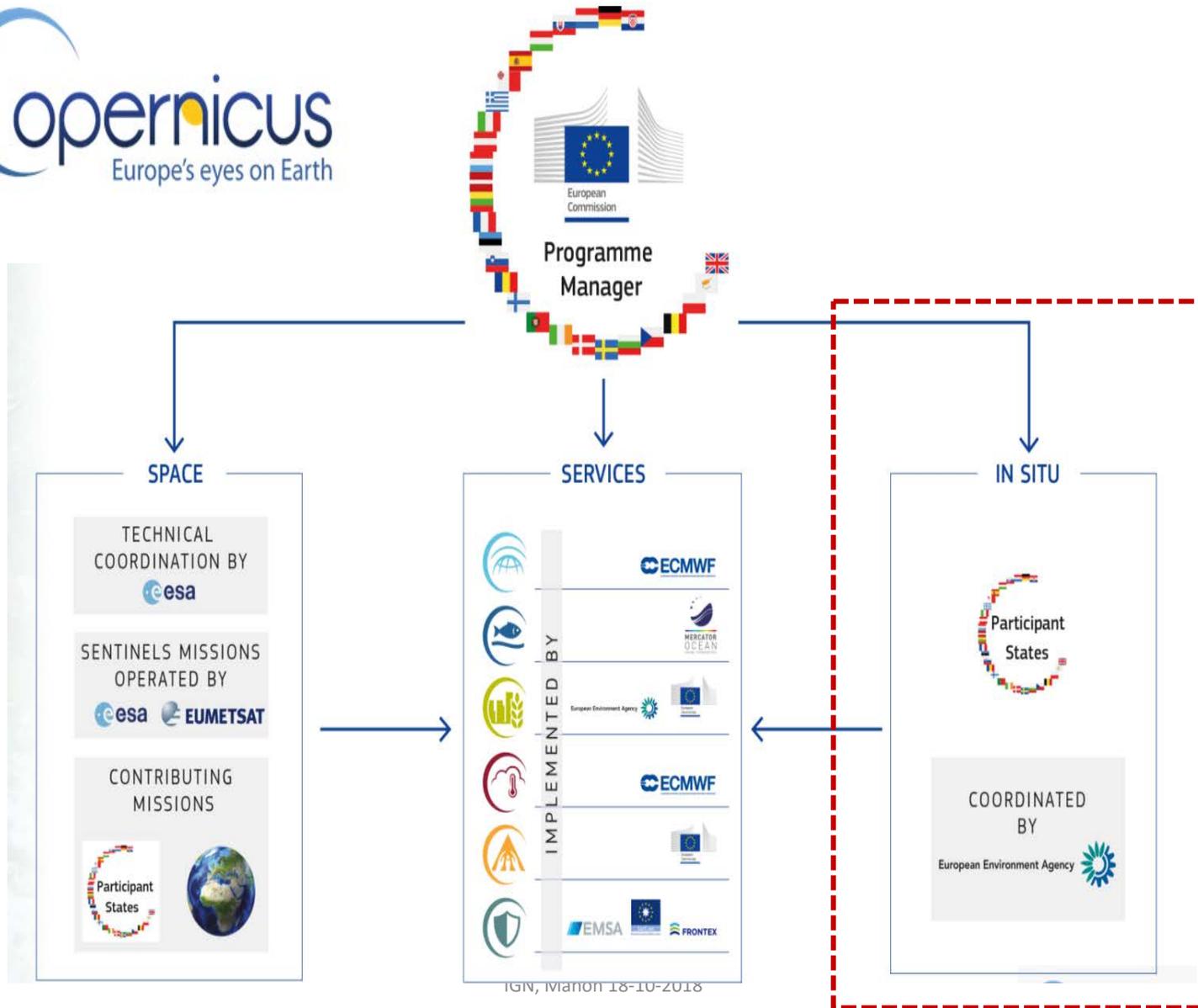
Orthoimagery



IGR – Inspire



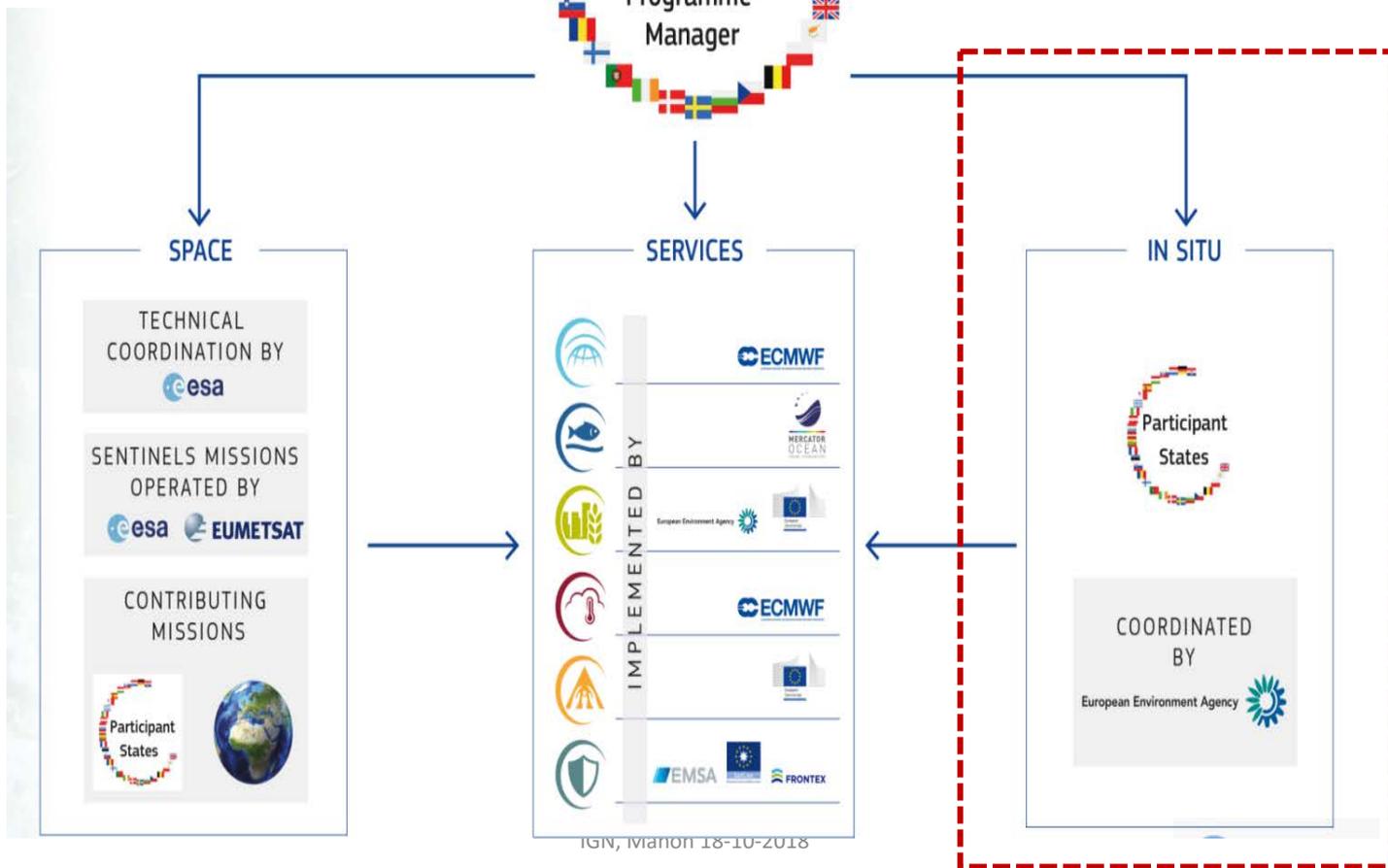
IGR – Copernicus



IGR – Copernicus



Spatial Data Observations



IGR – Copernicus



Spatial Data

hydrography, settlements, transport networks, land cover, digital elevation models, LPIS, aerial imagery, population/census, industry & utilities

Fundamental Data Themes



Global Geodetic Reference Frame



Geographical Names



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Water



Orthoimagery

IGR – Copernicus



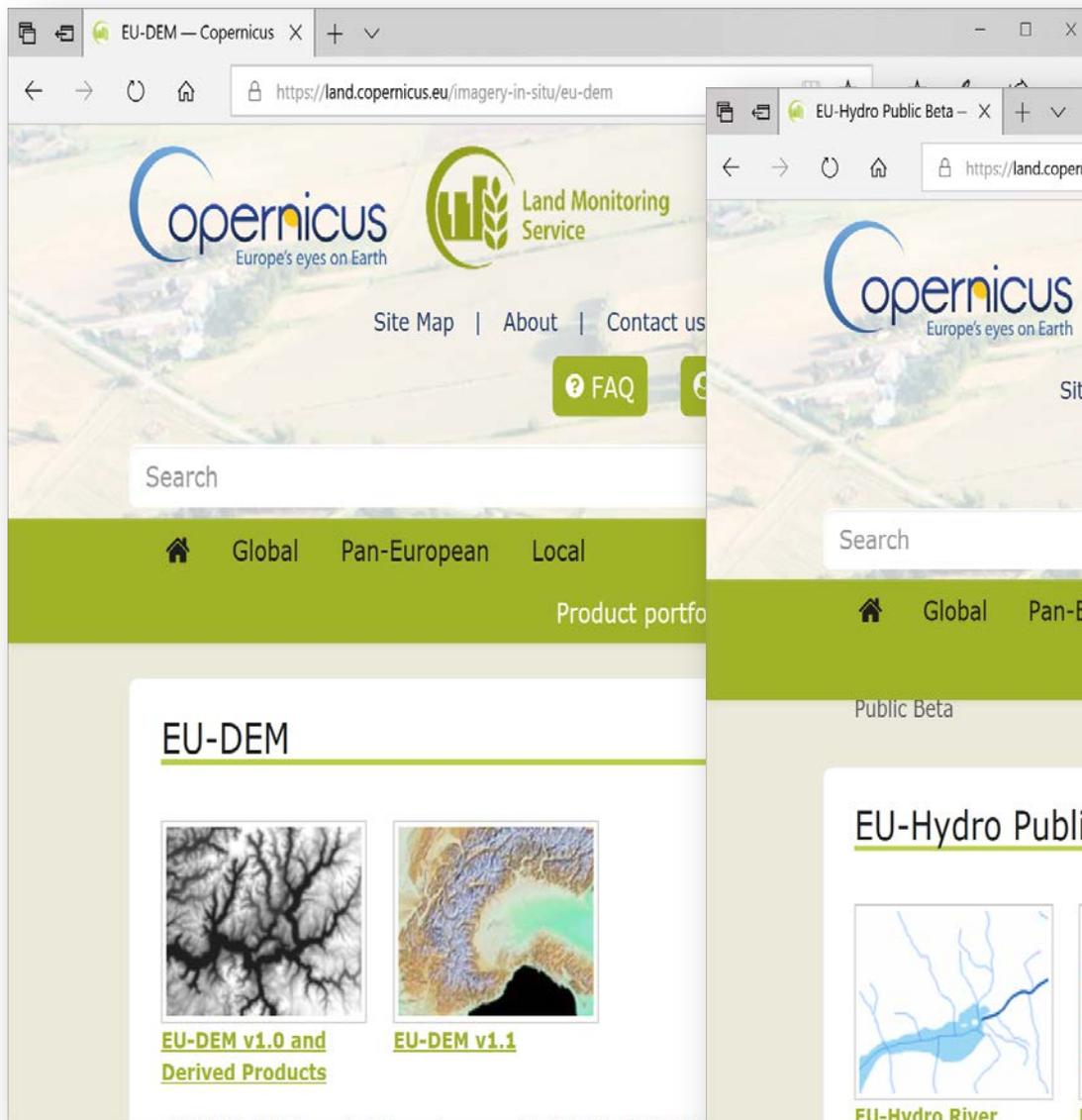
Spatial Data

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Fundamental Data Themes



IGR – Copernicus



EU-DEM — Copernicus

https://land.copernicus.eu/imagery-in-situ/eu-dem

Copernicus Europe's eyes on Earth
Land Monitoring Service

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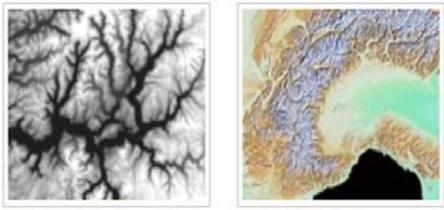
FAQ

Search

Global Pan-European Local

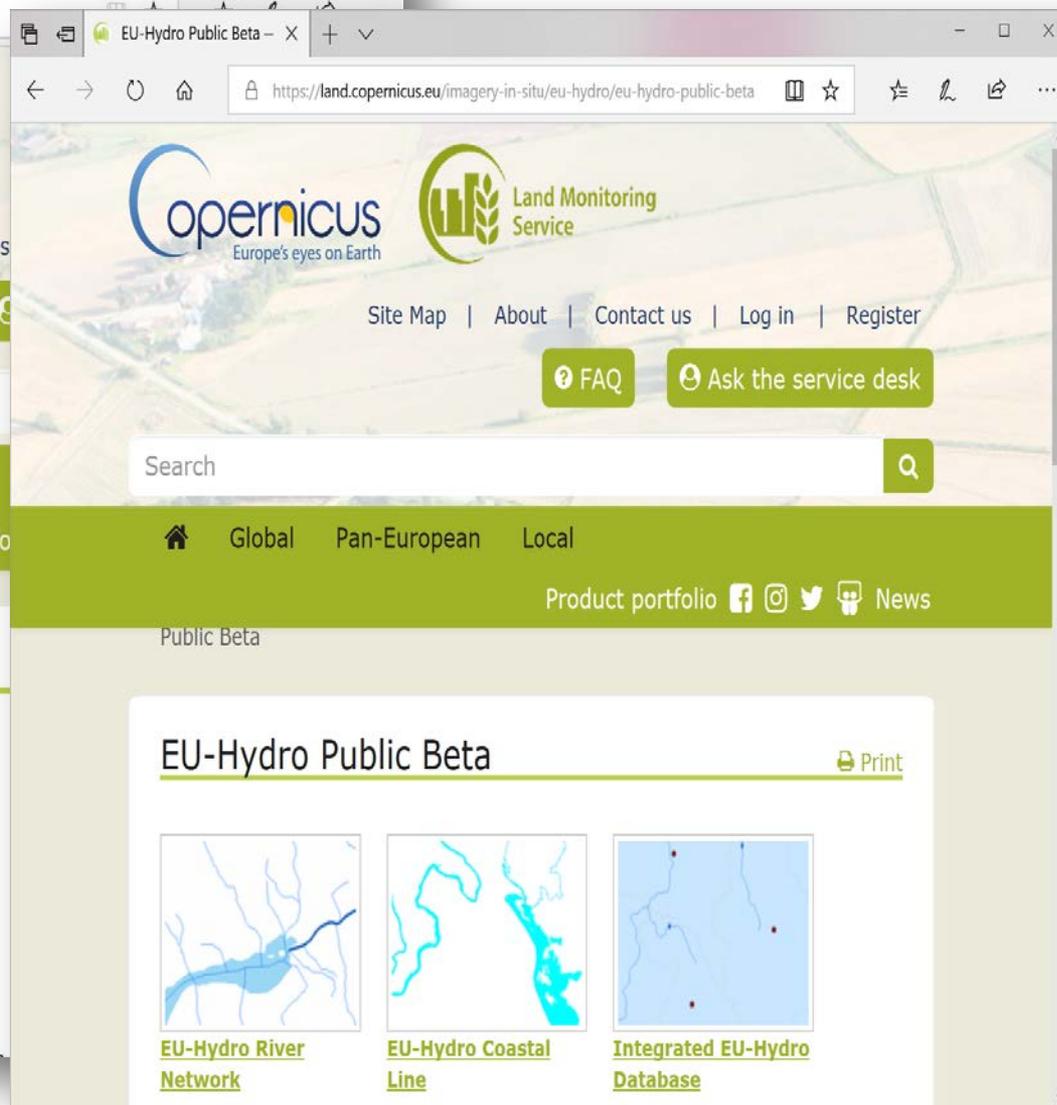
Product portfolio

EU-DEM



[EU-DEM v1.0 and Derived Products](#)

[EU-DEM v1.1](#)



EU-Hydro Public Beta

https://land.copernicus.eu/imagery-in-situ/eu-hydro/eu-hydro-public-beta

Copernicus Europe's eyes on Earth
Land Monitoring Service

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FAQ Ask the service desk

Search

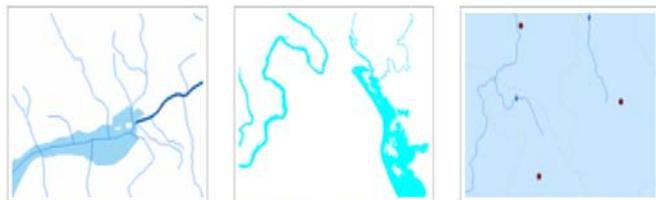
Global Pan-European Local

Product portfolio  News

Public Beta

EU-Hydro Public Beta

[Print](#)



[EU-Hydro River Network](#)

[EU-Hydro Coastal Line](#)

[Integrated EU-Hydro Database](#)

IGR – LISIGE

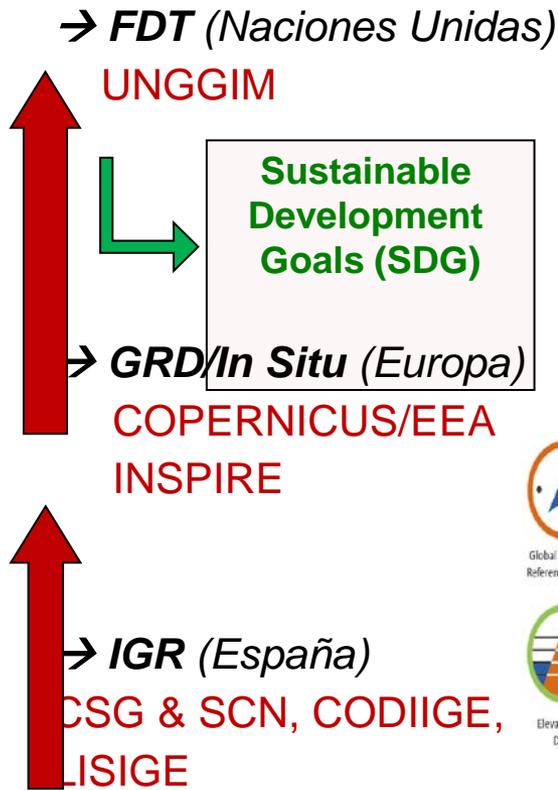


Fundamental Data Themes

IGR LISIGE Anexo I



IGR – De abajo arriba



+StU , LU



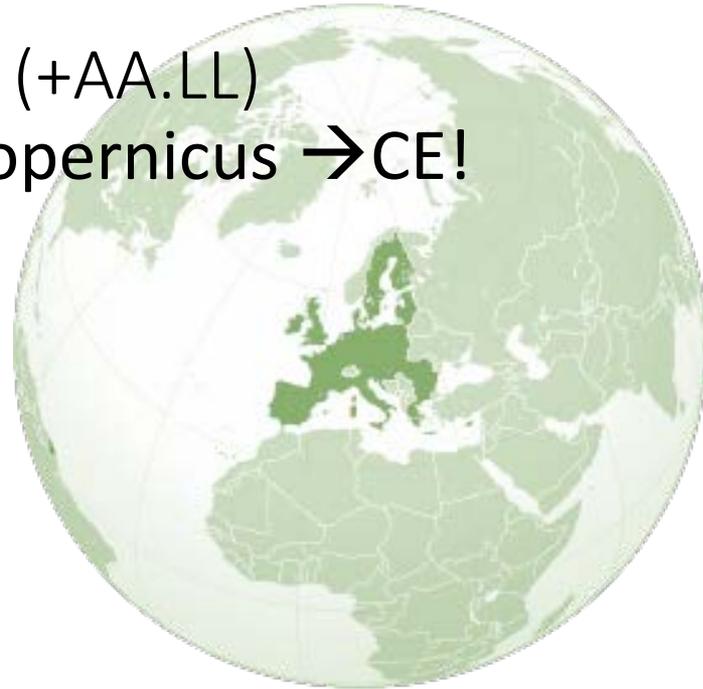
Conclusiones: beneficios IGR

- Información de referencia única y con la mayor resolución espacio-temporal posible
- Evita duplicidades en la producción → ahorro económico (+ 60%)
- Gestión de la Información Geoespacial más eficiente
- Información fiable y garantizada de los Estados Miembros
- Propiedad Intelectual de IGR corresponde a EM:
→ Política de datos óptima para el usuario

Para ello:

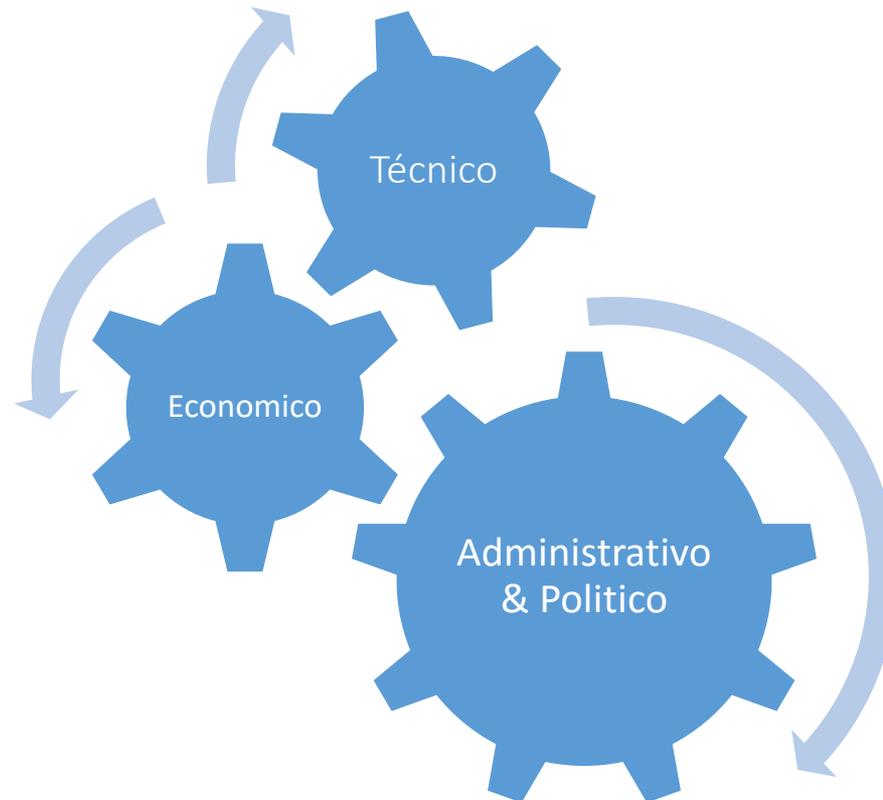
Para implementar IGR con enfoque Bottom-up, es necesaria una decisión política clara en todos los niveles de decisión:

- Nacional: AGE+CCAA (+AA.LL)
- Europeo: Inspire + Copernicus → CE!
- Global: UN GGIM



Para ello:

La implementación del nuevo paradigma (producción IGR) necesita la colaboración de los siguientes factores (UNGGIM/NIA):



¡ Muchas gracias !



Nuria Valcárcel
Antonio Arozarena
INSTITUTO GEOGRÁFICO NACIONAL