GREAT
Green Deal Data Space

ALIGNING LOCAL, REGIONAL, NATIONAL, CONTINENTAL & GLOBAL EFFOR
IN
THE GREEN DEAL DATA SPACE

Funded by
the European Union

The Green Deal Data Space

Single Market for data
COM/2020/66

Tackling climate and environmental-related challenges COM/2019/640

Green Deal Data Space

A federation of data ecosystems enabling policy makers, businesses, researchers and citizens, from Europe and around the world, **to jointly tackle climate change.**

Green Deal Data Space
Its Foundation & Community of Practice

GREAT

- **Duration:** 18 Months: September 2022 –February 2024
- **Consortium**: 11 Partners, 3 Associated Partners

IDC

EGI

cesnet

Consiglio Nazionale delle Ricerche

EARSC
European Association of Remote Sensing Companies

ECMWF

eodc

SURF

Utrecht University

WAGENINGEN UNIVERSITY & RESEARCH

seascape BELGIUM

EPOS ERI EUROPEAN RESEARCH INFRASTRUCTURE CONSORTIUM

ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA

Instytut Geofizyki Polskiej Akademii Nauk

DATA SPACES SUPPORT CENTRE

GREAT

Approach: Key Multidisciplinary Use Cases

Marine Task Force

EMODnet

A long-term marine data initiative for in situ marine environmental and human activities data, funded by the European Maritime, Fisheries and Aquaculture Fund, bringing on board marine ecosystem

Biodiversity
Zero pollution
Climate change adaptation

Water Task Force

Global hydrology modeling

Seasonal forecasting of water resources

Global hydrological simulations with the PCR-GLOBWB2 hydrological model, which is being used in seasonal forecasting of water resources.

Zero pollution – water
Climate change adaptation - geohazards

EPOS

EPOS, the European Plate Observing System, is a multidisciplinary, distributed research infrastructure that facilitates the integrated use of data, data products, and facilities from the solid Earth science community in Europe.

Zero pollution
Climate change adaptation

GOS4M

Global Observation System For Mercury (GOS4M) is a GEO Flagship aimed to support the Minamata Convention on Mercury Secretariat

Zero pollution - air

BioGIS 360

Tool for biodiversity monitoring providing information on the possible environmental impacts during the new green power plants planning.

Biodiversity
Climate change adaptation

YOUR USE CASE

GET INVOLVED

Biodiversity
Zero pollution
Climate change adaptation

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Green Deal Data Space

MULTI-SCALE ALIGNMENT → AN IMPORTANT FUNCTION, KEY TO QUALITY DATA

Funded by
the European Union

Designing Green Deal Data Space Governance To Accommodate Diversity:

Scale

Citizens ⟷ ”Elephants” – EEA, Copernicus, EMODNet, etc

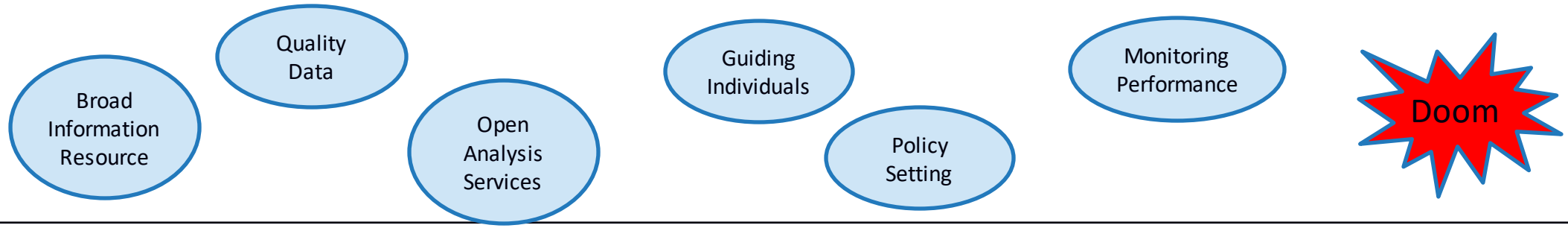
Scope

Local ⟷ Regional ⟷ Member States ⟷ EU ⟷ Global

Business Models

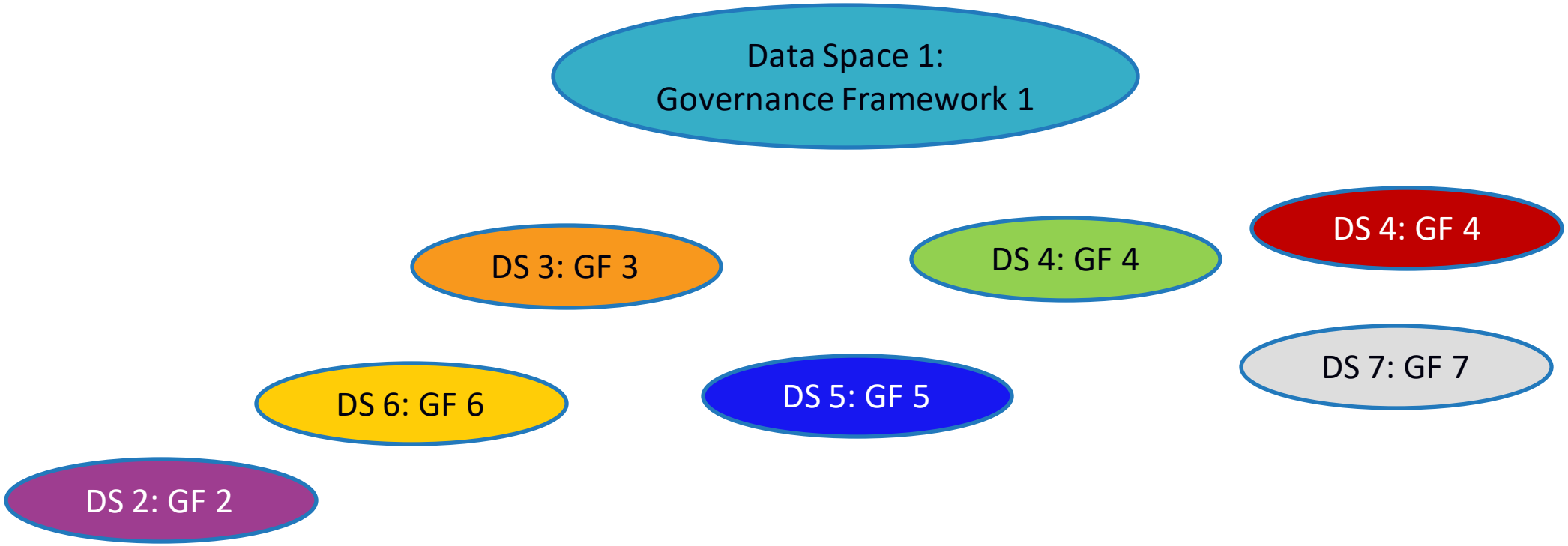
Public Good/ Altruism ⟷ Commercial Data Businesses

Objectives



Data Space Definition (from DSSC)

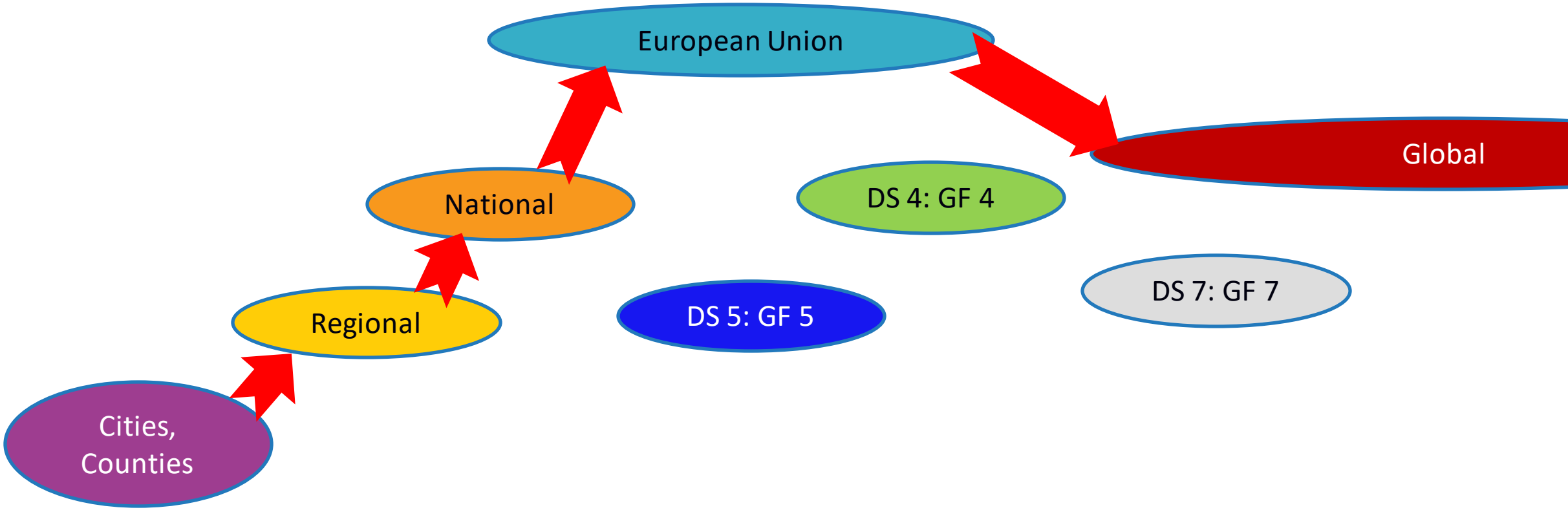
"an infrastructure that enables data transactions between different data ecosystem parties based on the governance framework of that data space"



No Automatic Hierarchy

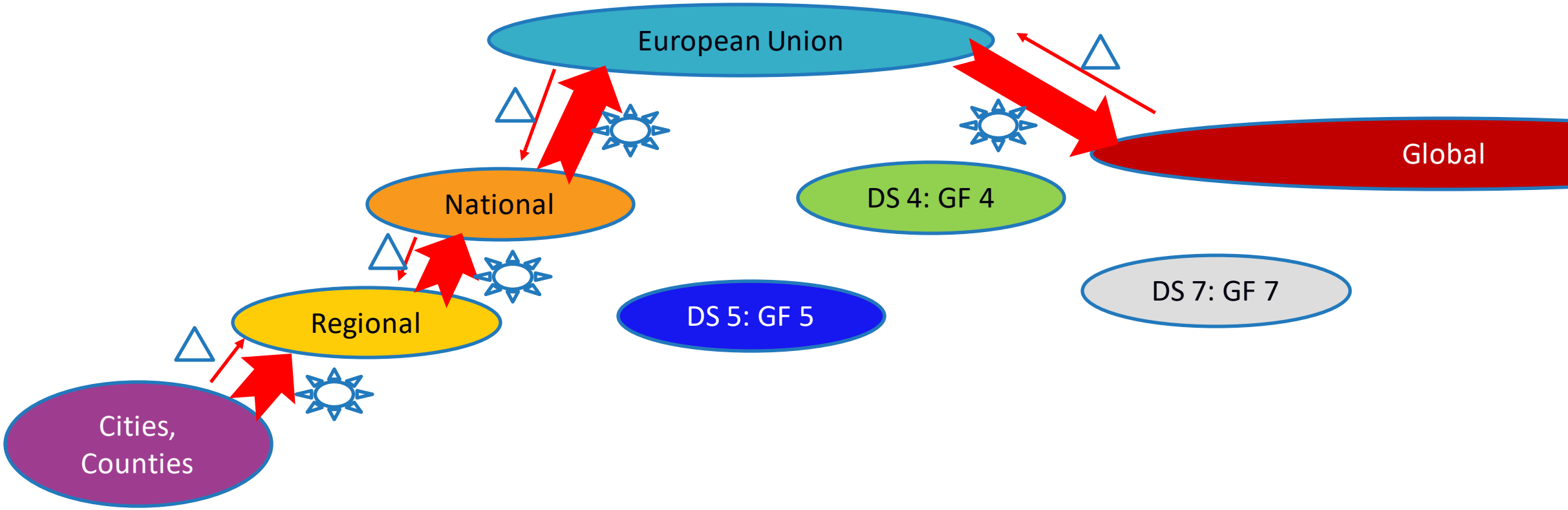
No automatic nesting or overlaps!

Relationships, pathways, must be explicit and explicitly governed



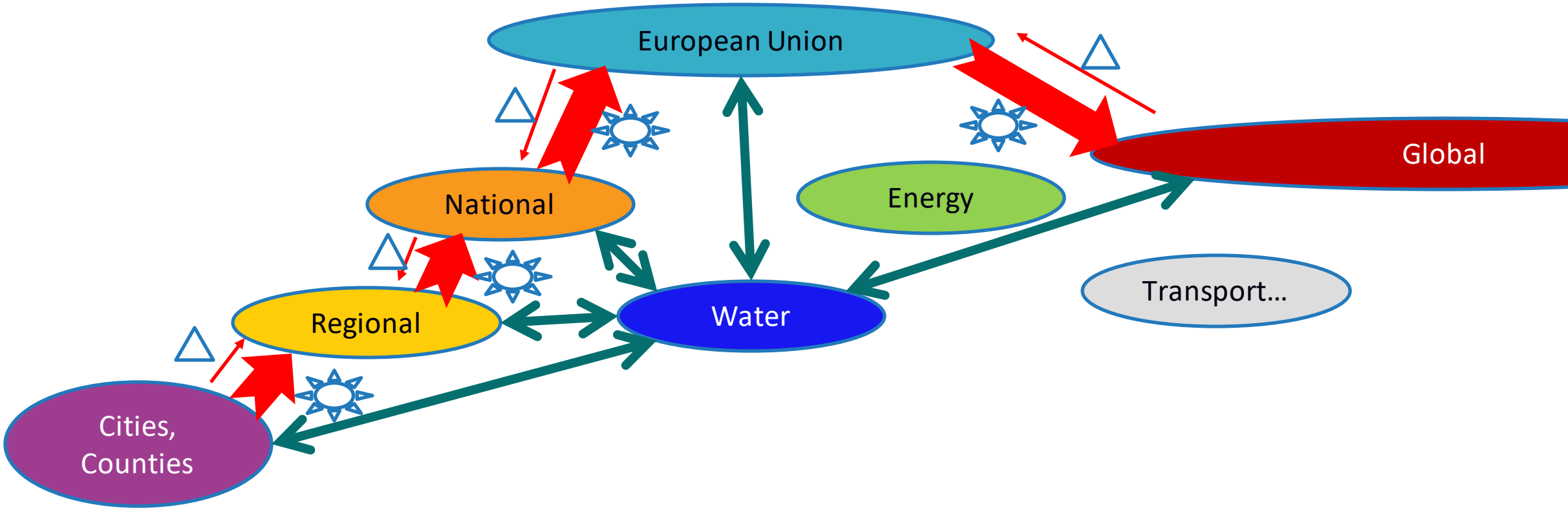
Achieving Quality, Consistency

Transformation, Deltas



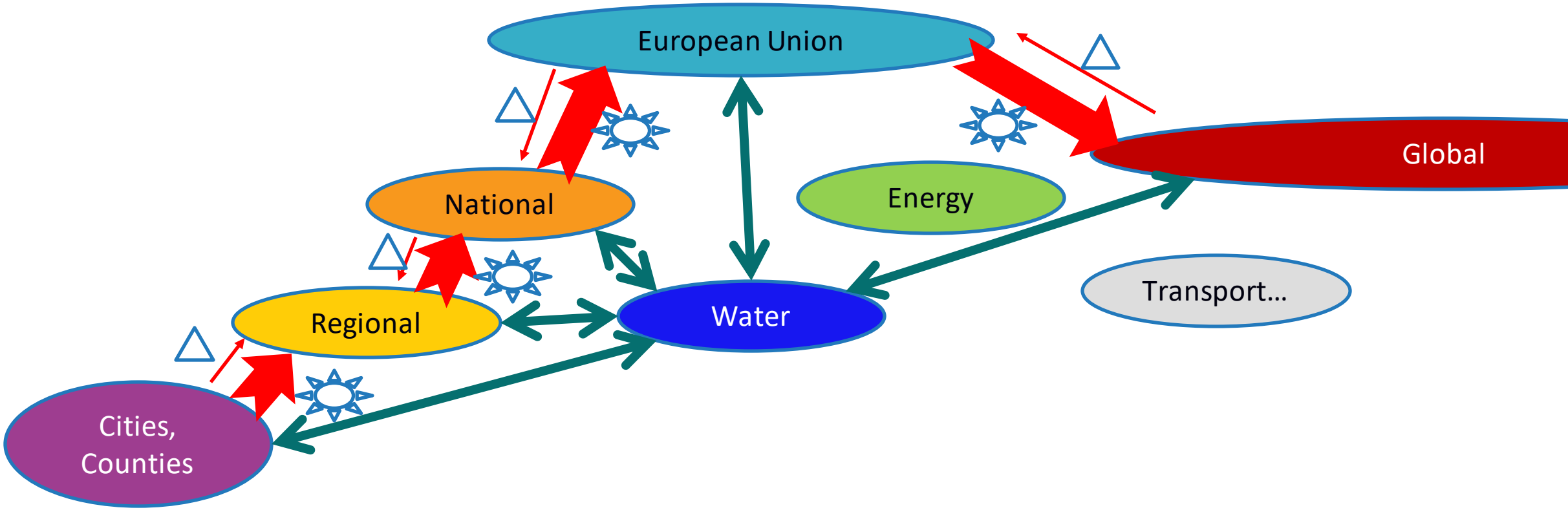
Thematic DSs

2-way Pathways



Interoperability: Essential ** Variables

→ Agreeing on Key Indicators
→ Measurement Protocols, Quality
→ Governance Processes



Governance: Organizing into 4 Layers x 4 Stages

	Formation	Operation	Monitoring	Dissolution
EU Laws & Regulation				
Digital Infrastructure Governance Best Practices				
Generic Data Space Governance				
Generic Data Governance				

- GDPR
- Data Governance Act
- Free Flow of Data
- High Value Datasets
- Data Act
- AI Act
- Digital Services Act
- Digital Markets Act

- Visibility (of metadata)
- Accessibility (of data)
- Usability (licensing, rights holders, consents, legal basis)
- Re-use

- Obligations on Data Providers (quality, etc.)
- Obligations on Service Providers (security, sovereignty)
- Business Models
- Structure for value creation and sharing (data monetization, “kick starter” projects, etc.)

- Assumed: Central governance “entity”, even with widely distributed architecture
- Multi-stakeholder, collaborative structures – mission/vision/guiding principles
- IT system governance
- Cybersecurity (data confidentiality, system integrity, system availability)

Governance: Sectoral/Thematic Issues

	Formation	Operation	Monitoring	Dissolution
EU Laws & Regulation				
Digital Infrastructure Governance Best Practices				
Generic Data Space Governance				
Generic Data Governance				

- EU Sectoral/Thematic
- MS Sectoral
- Local regulations

- Data Act
- AI Act
- Digital Services Act
- Digital Markets Act

- Visibility (of metadata)
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Mapping Requirements into 3 Domains

	Formation	Operation	Monitoring	Dissolution
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Digital Infrastructure Governance Best Practices				
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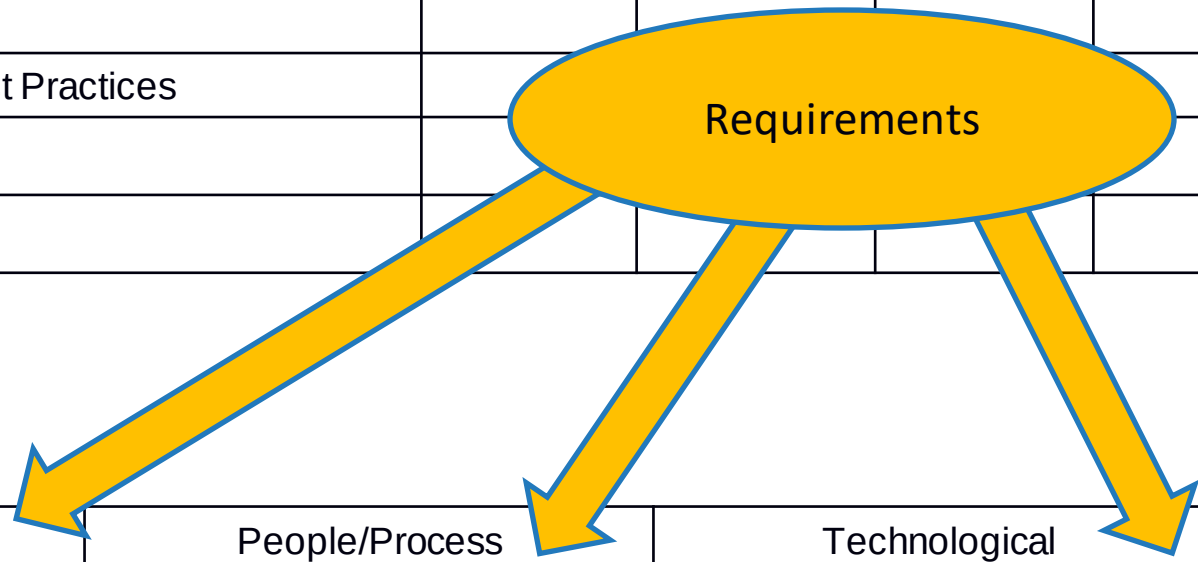
Generic Data Governance				



Legal/Contractual	People/Process	Technological

Thank you!

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