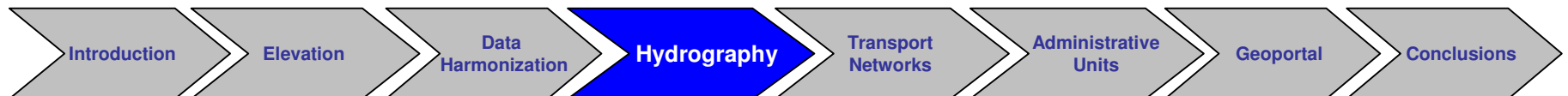Rui Reis

HYDROGRAPHY

Data available
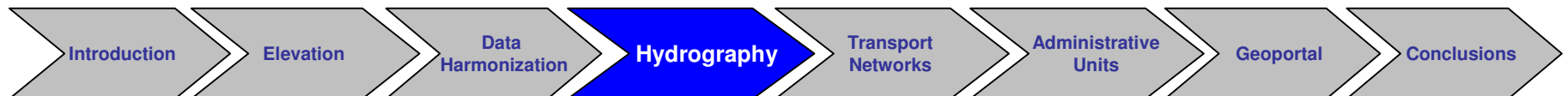
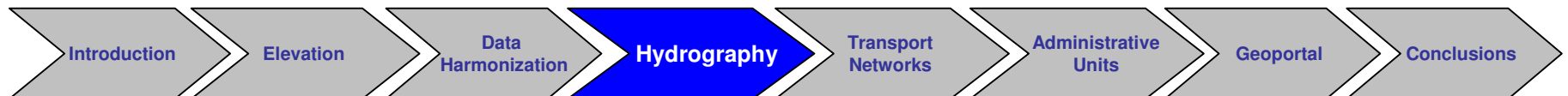| Data provider	Level	Dataset	Scale
VUGK	National	UNIBA-SK50	1:50 000
ICC	Regional	BT-5M	1:5 000
		BT-50M	1:50 000
RLIG	Regional	DBPrior10K	1:10 000
RPIE/CSI	Regional	DBPrior10K	1:10 000
CGE	Local	CTC1000/CTC2000	1:1 000/1:2 000
IGP	National	ERMPT	1:250 000
		EGMPT	1:1 000 000
INSIEL	Regional	Dbprior_0203_Corso_acqua	1:10 000
RVEN	Regional	DBPrior10K	1:10 000
MAV	Local	GD010IDROLAGL1	1:5 000
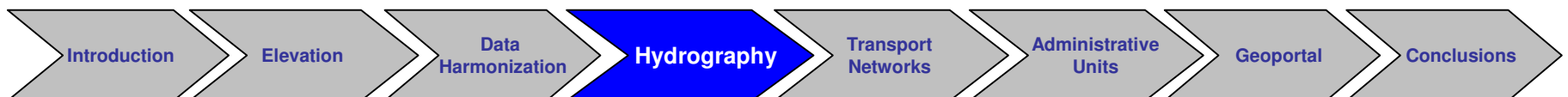
Data available

- 11 datasets from 9 data providers:

  – Local data at large scales
    - (1/1000, 1/2000 and 1/5000) (CGE & MAV)

  – Data using the DBPrior10k specifications
    - provided by regional data providers: (RLIG,RPIE/CSI,RVEN,INSIEL)

  – Data used for reporting in the context of the WFD
    - (VUGK – 1/50k)

  – Generic mapping data
    - from ICC (5k & 50k) and IGP (1/250k & 1/1M)
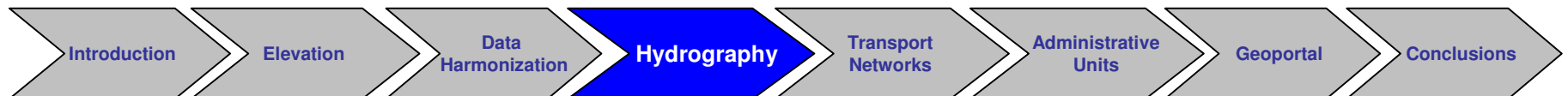
INSPIRE DM

- Following the methodology defined in DS-D2.6 INSPIRE DM built around 3 use cases:

    - Mapping:
        - basic map reference; it includes the representation of main physical waters and related objects.

    - Reporting:
        - in the context of the WFD reporting to the Commission about quality and quantity of water.

    - Spatial Analysis and Modelling:
        - derivation of information based on the hydrographic network using GIS techniques.
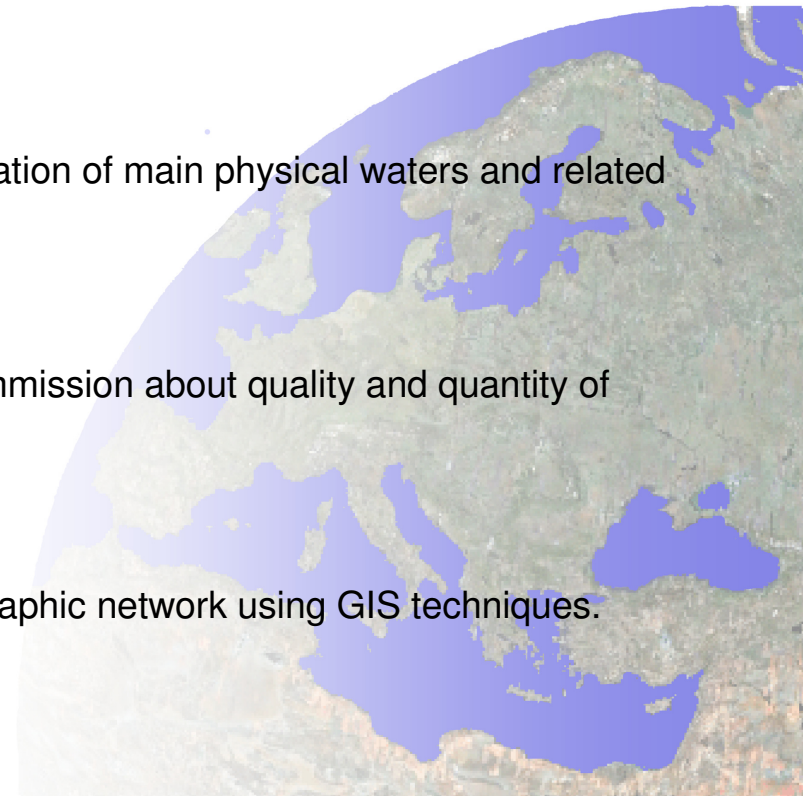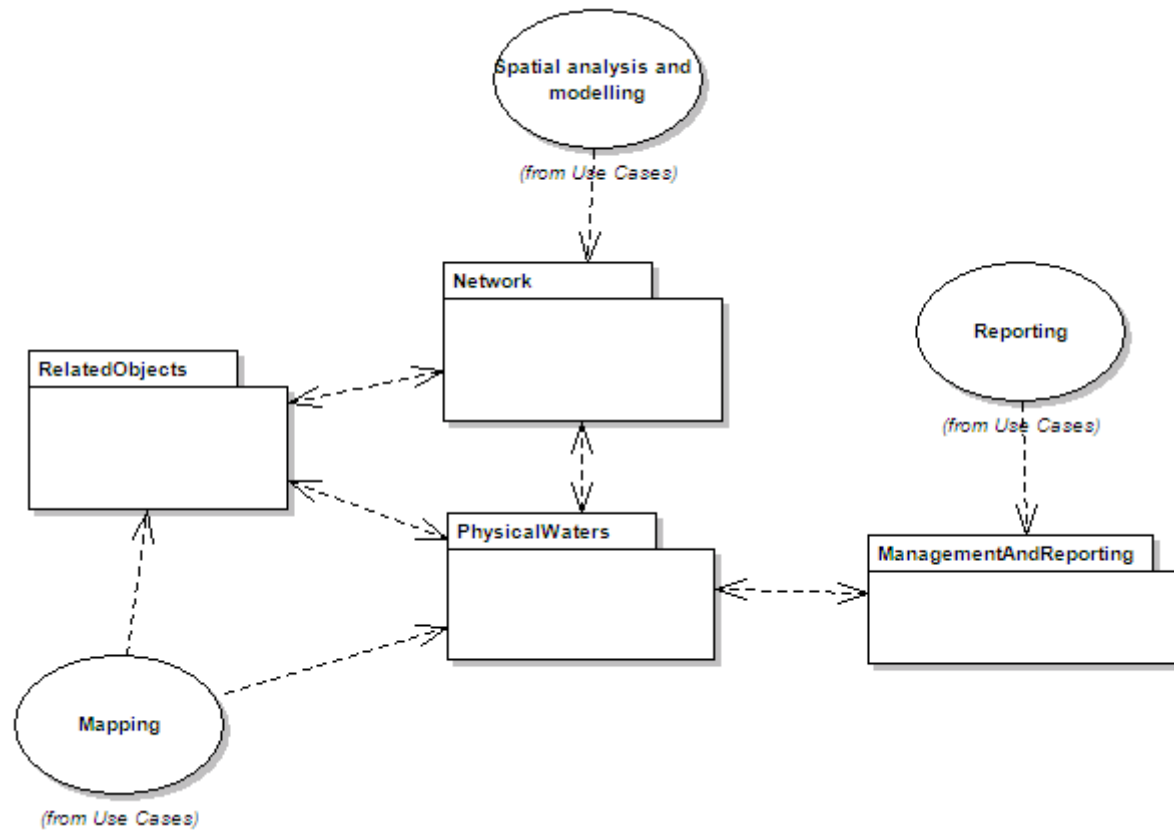
INSPIRE DM

- 4 packages:
  - <u>ManagementAndReporting</u>:
    - base feature type is WFDWaterBody,

  - <u>Network</u>:
    - nodes, links, aggregated links (to define routes) and areas.

  - <u>PhysicalWaters</u>:
    - 11 feature types (CatchmentArea, Basin, SurfaceWater, Watercourse, StandingWater, LandWaterBoundary, Sea, Foreshore, Riverbank, Wetland and GlacierSnowfield).

  - <u>RelatedObjects</u>:
    - 24 other features (some are placeholders for Annex III themes, e.g. MonitoringPoint).
   - 3 sub-packages: HydroFacility, HydroPointOfInterest and ManMadeObject.
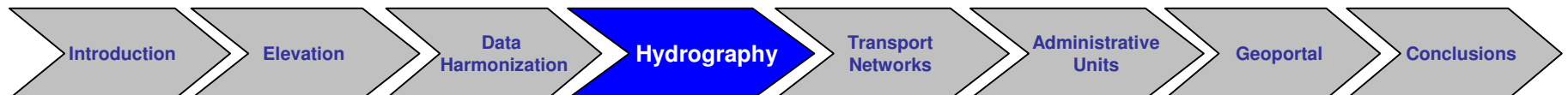
INSPIRE DM

Spatial analysis and modelling
(from Use Cases)

Network

RelatedObjects

PhysicalWaters

Reporting
(from Use Cases)

ManagementAndReporting

Mapping
(from Use Cases)

Results

Package	INSPIRE features matched	NOT matched
Network	WatercourseLink, WatercourseNode (2)	4
ManagementAnd Reporting	WFDSurfaceWaterBody (1)	5
PhysicalWaters	StandingWater, Watercourse, LandWaterBoundary, Sea, Foreshore, Wetland, Riverbank, CatchmentArea (8)	3
RelatedObjects	DamOrWeir, Embankment, ShorelineConstruction, DischargePoint, SpringOrSeep, Pipe, Ford, AbstractPoint, VanishingPoint, SubsurfaceCrossing, SurfaceCrossing (11)	13

Results
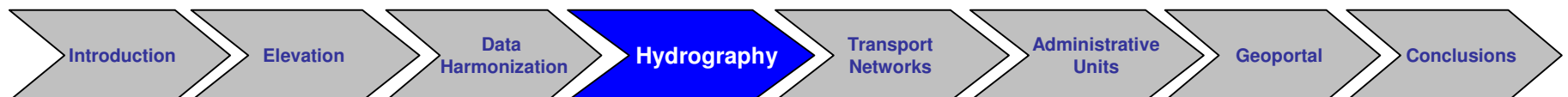
- Network package:
  - WatercourseLink
    - id,
    - geographicalName,
    - flowDirection ,
    - centerlineGeometry,
    - Length
  - WatercourseNode
    - id,
    - hydroNodeCategory

- PhysicalWaters package:
  - StandingWater
    - hydroid ,
    - id,
    - geographicalName,
    - Origin,
    - Elevation,
    - surfaceArea,
    - localType

Results
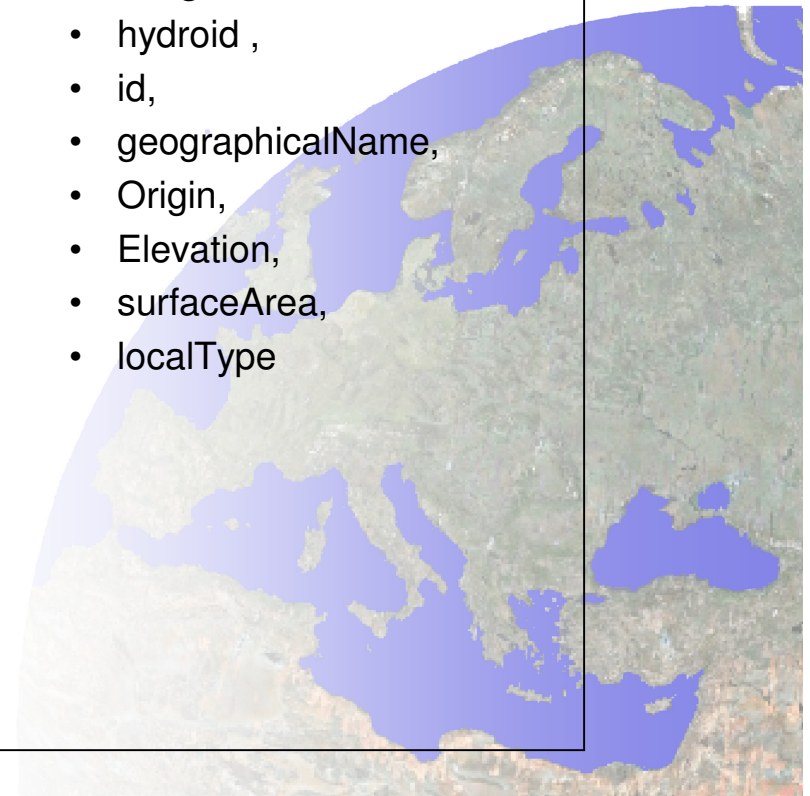
- PhysicalWaters package:
  - Watercourse
    - beginLifespanVersion,
    - endLifespanVersion,
    - Origin,
    - Condition,
    - Fictitious,
    - Level,
    - id,
    - geographicalName,
    - length,
    - LevelOfDetail ,
    - localType,
    - waterCourseHierarchy,
    - persistence

- PhysicalWaters package:
  - LandWaterBoundary
    - Origin,
    - waterLevelCategory,
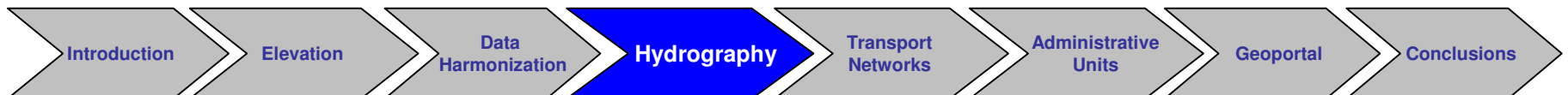   - id
  - CatchmentArea
    - area,
    - hydroid,
    - geographicalName
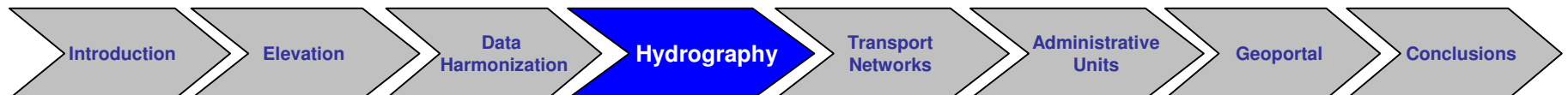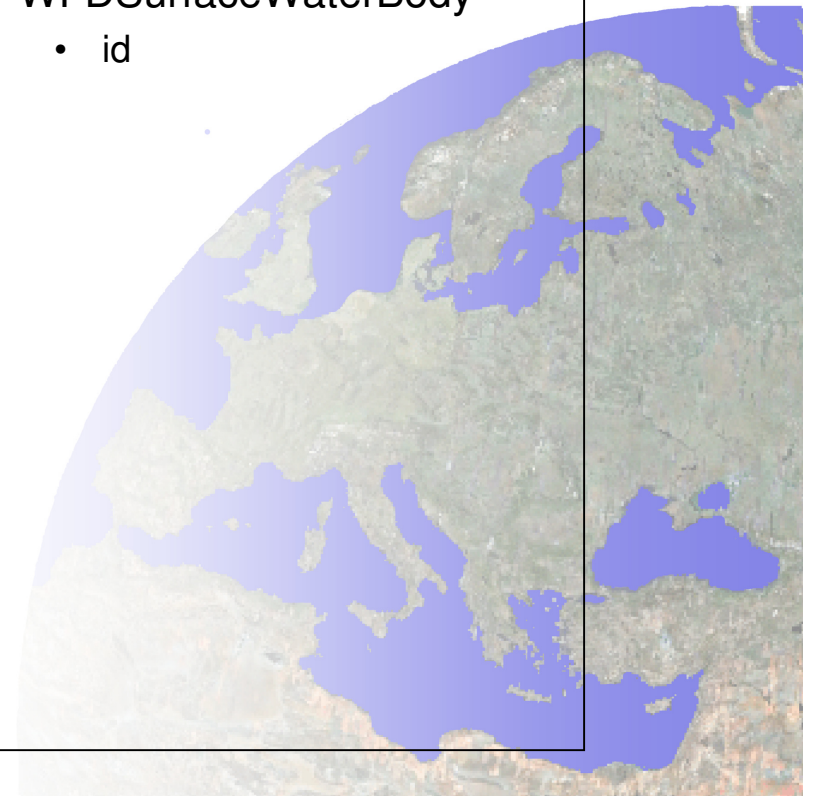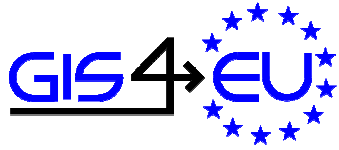 - Foreshore
    - geographicalName
  - Sea
  - Wetland

Results

- **RelatedObjects:**
  - DamOrWeir
    - condition
  - SpringOrSeep
  - Embankment
  - ShorelineConstruction
  - AbstractPoint
  - DischargePoint
  - Pipe
  - Ford
  - SubsurfaceCrossing
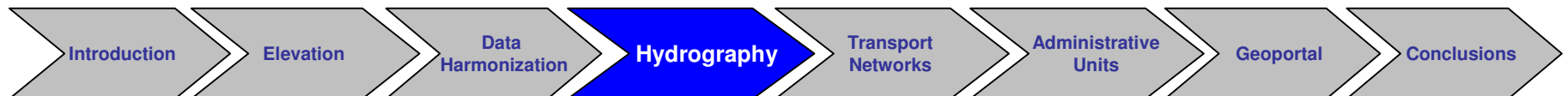 - SurfaceCrossing
  - VanishingPoint

- **ManagementAndReporting:**
  - WFDSurfaceWaterBody
    - id

Conclusions

- It was possible to find matchings for all features but one in two datasets

- It was possible to find matchings for most of the features for another two datasets

- Other datasets have more limited number of matchings
  - RLIG, RPIE, RVEN: each with 5 features matched
  - DBPrior10K, CGE, MAV, VUGK: no features from RelatedObjects package

- Some packages have almost no matchings:
  - ManagementAndReporting package: 1 match
  - Network package: 2 matches

Conclusions

- Most of the matchings are with the features of the packages derived from the Mapping use case (PhysicalWaters & RelatedObjects).

- Some data providers reported the need for specific features types (e.g. MAV=speed limit).

- No GIS4EU dataset has full INSPIRE feature catalogue.

- Which features are mandatory to be considered INSPIRE compliant?

Introduction Elevation Data Harmonization **Hydrography** Transport Networks Administrative Units Geoportal Conclusions