



# **ROADIDEA**

## **Data Collection**

René Kelpin

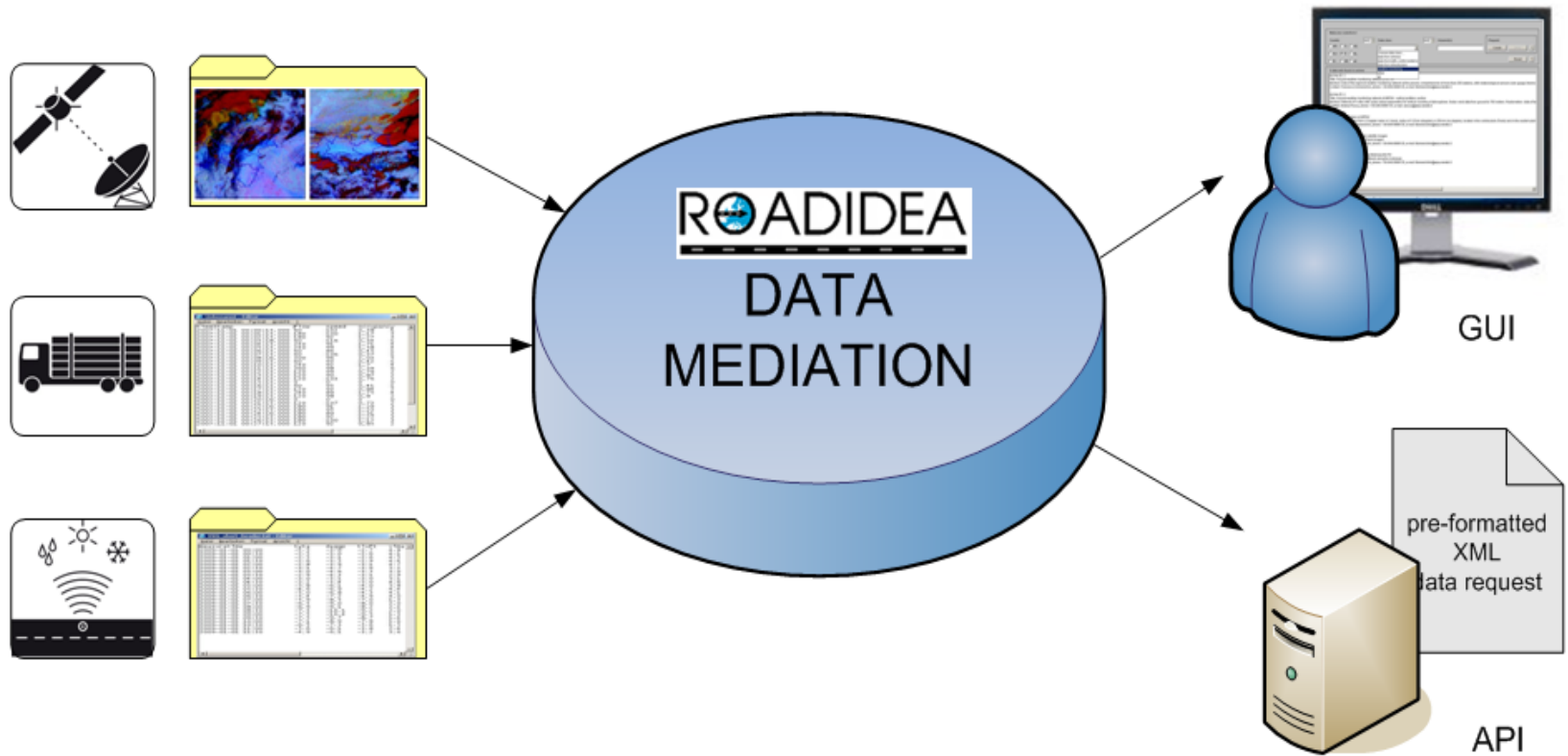
German Aerospace Centre,  
Institute for Transport Research

**15th International Road Weather Conference,  
Quebec City / Canada February 6th 2010**

# Objectives of data work package

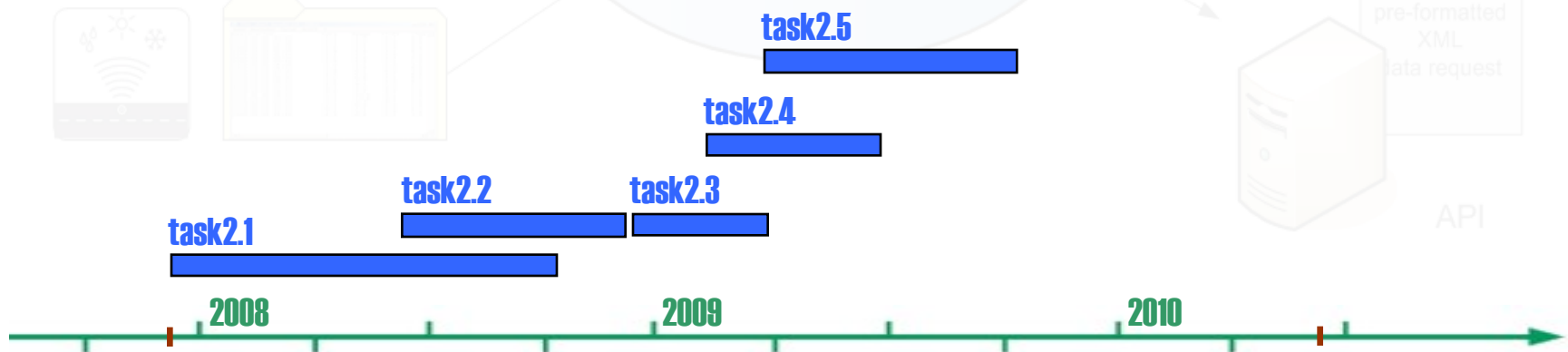
- Provision & mediation of data necessary for implementation of project pilots
- Comprises:
  - Data source investigation in Europe (Traffic & Weather)
  - Data integration
  - Definition of data format for project archive
  - Setup of Data Mediation platform

## Mediation Scheme



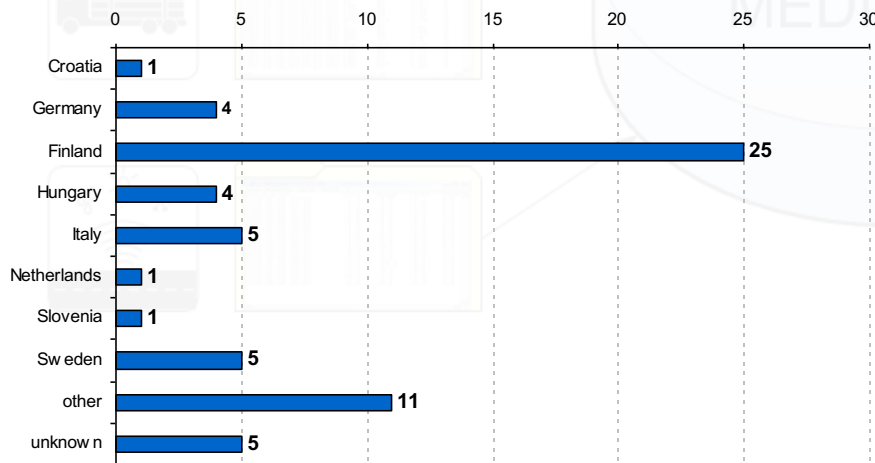
# WP2 Tasks overview

- Task2.1 Data source identification
- Task2.2 New types of data needs
- Task2.3 Integration of data
- Task2.4 Uniform data archive
- Task2.5 Data mediation



# Task1: data sources

- Identification of available data sources in Europe
- Preliminary storage in EPrints archive
- GoogleMaps visualisation

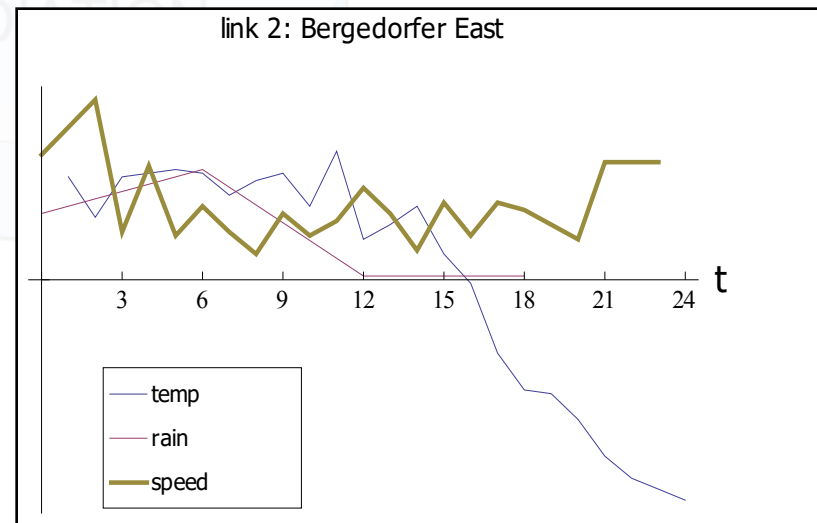
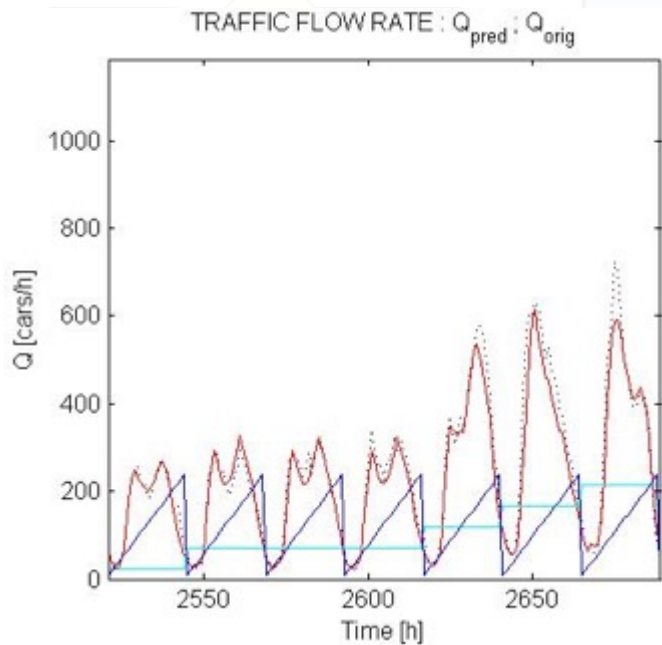


- Climate and Weather Conditions (15)
- Environmental Impact of traffic (3)
- Freight/Service Transport (0)
- Infrastructure (Geodata, Transport System) (2)
- Infrastructure (Public Transport Management) (2)
- Infrastructure (Transport Management System) (8)
- Public Transport and Passenger Information (2)
- Traffic Management (0)
- Traffic Monitoring (Road observation) (14)
- Traffic Monitoring (Vehicle Observation) (3)



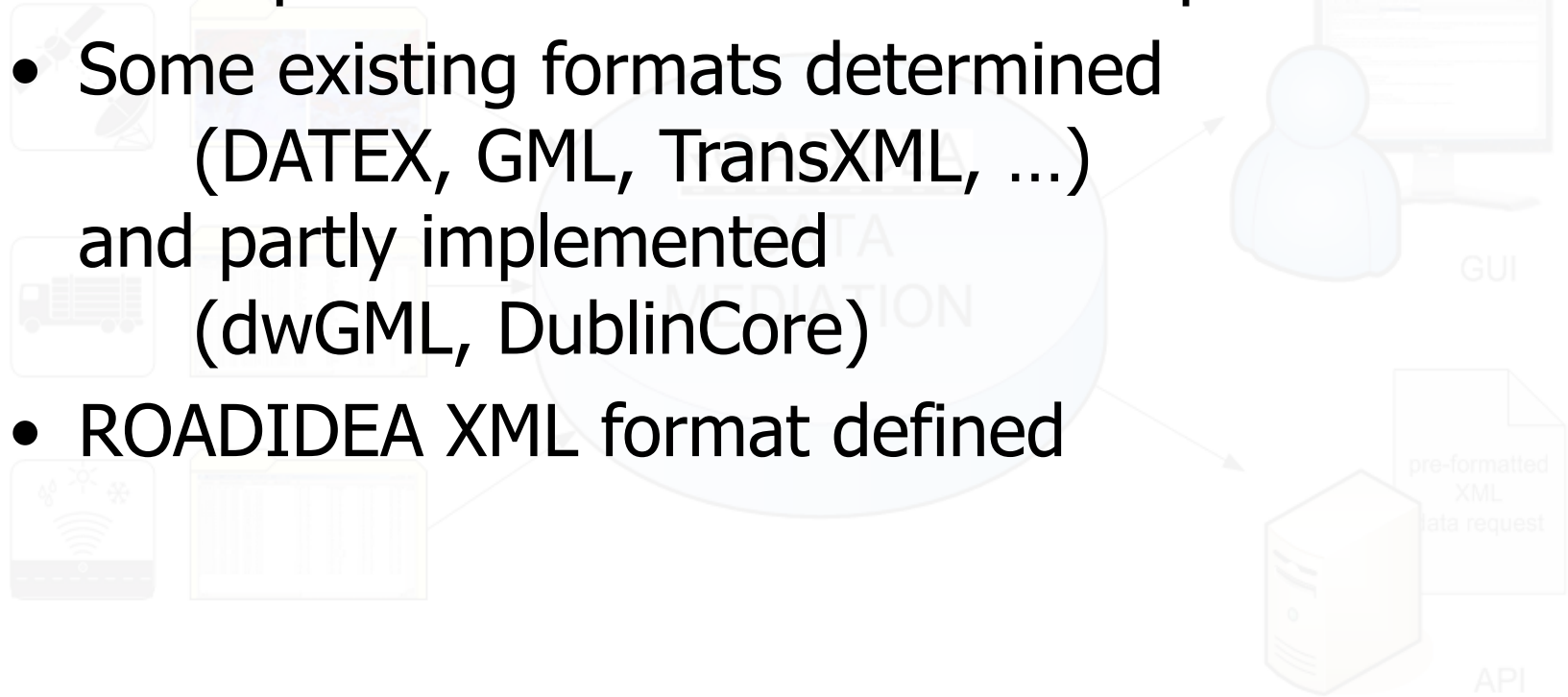
# Task2/3: data needs/integration

- Data needs for project pilots and ideas after first innovation seminar
- Description of data integration efforts

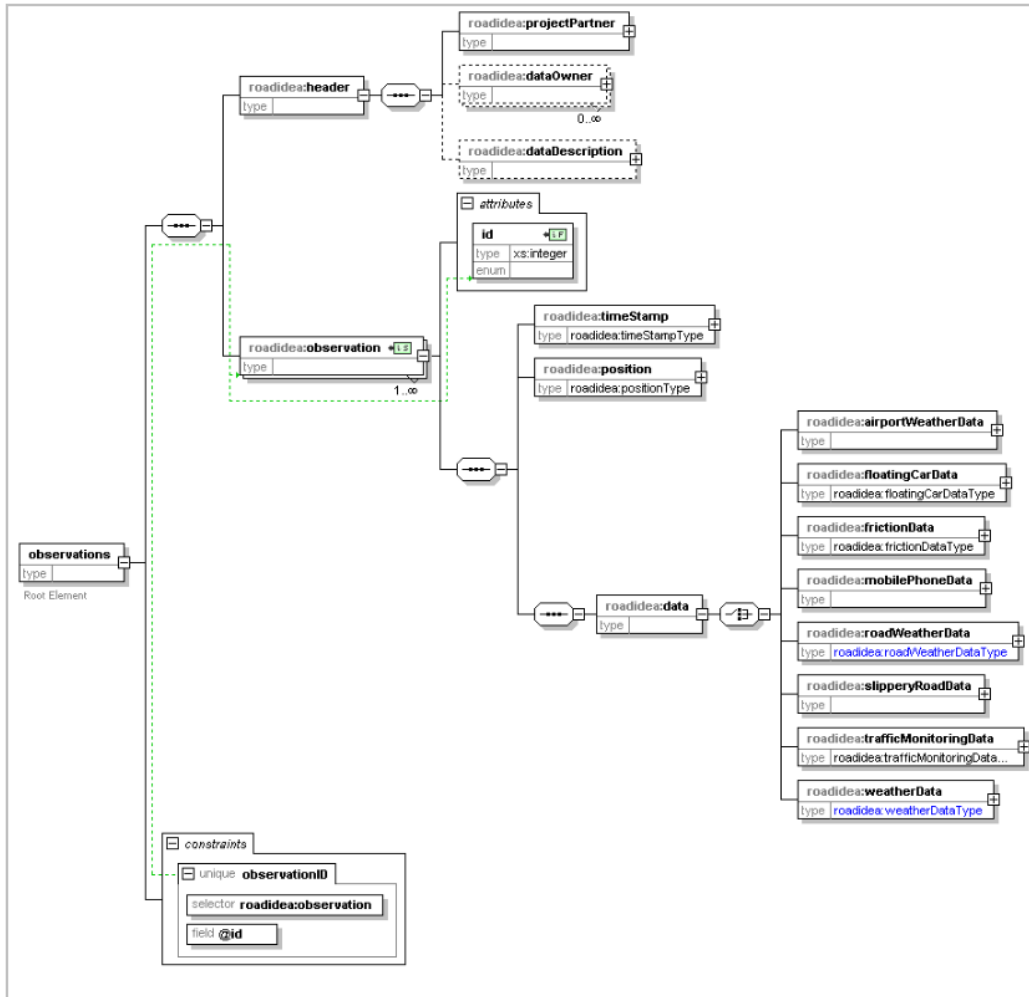


# Task4: data format

- Descriptive elements identified for pilots & ideas
- Some existing formats determined (DATEX, GML, TransXML, ...) and partly implemented (dwGML, DublinCore)
- ROADIDEA XML format defined



# Task4: data format

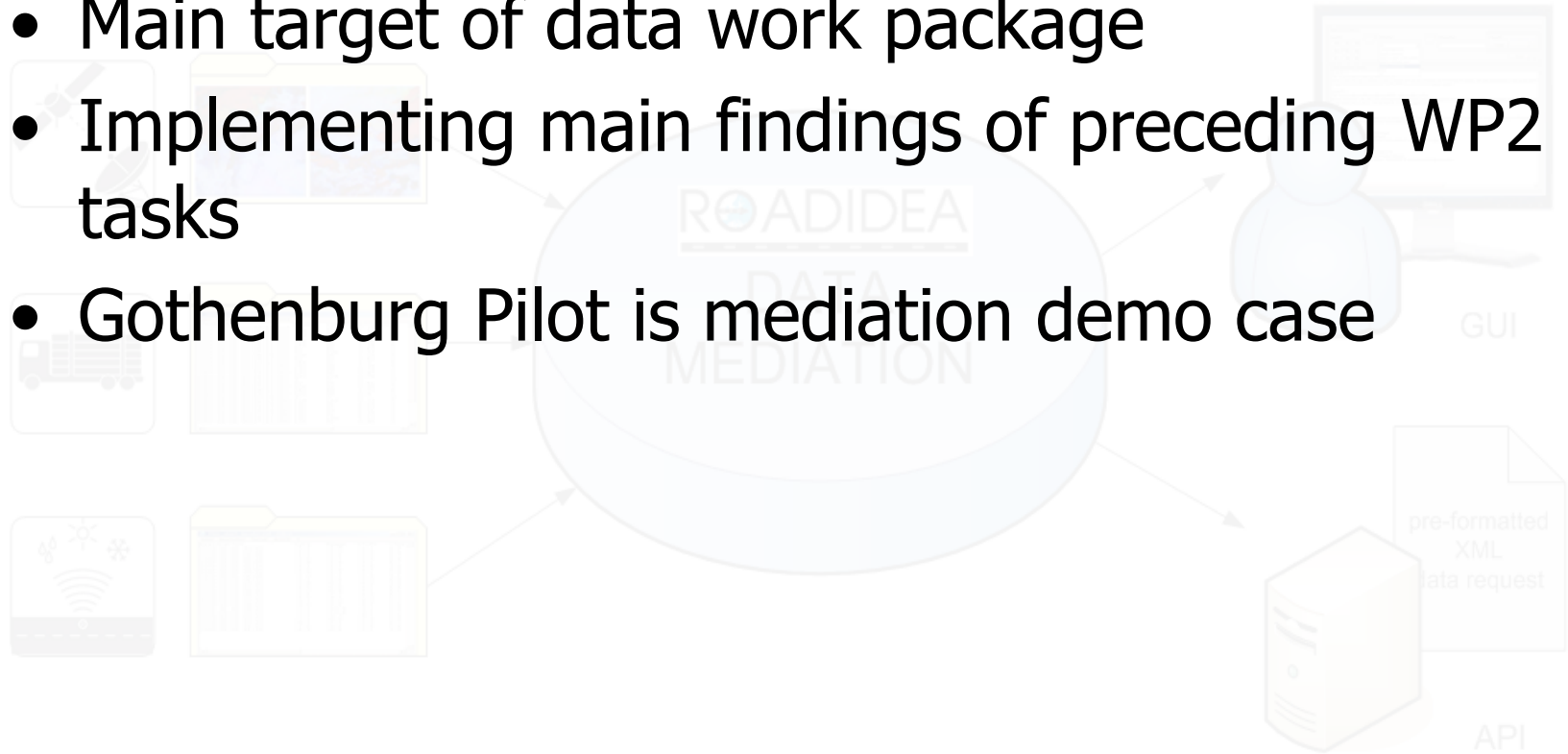


	Name	Needed data	ROADIDEA-XML covered
Pilot	Pulp Friction	Online and historical Road weather Data	✓
	Gothenburg	Various road traffic counting	✓
		Road weather	✓
	Port	Airport weather	✓
		Ship schedules and port logistics Port traffic counts	✗
Fog	Satellite data	✓	
	In-Situ observations	✓	
Idea	Cross Border Weather Alerts	Weather alerts, road weather alerts and observations	✓
	Mobile Phones as Sensors	Cell phone tracking	✓
	MyRoute Mobile Pocket Guide	Road traffic observations Weather (Current & forecasted)	✓
	MyTravel Toilet TomTom	Facilities and points of interest	✗
	In-Vehicle Information	Can bus vehicle data	✓
		Road traffic counting	✓
		Road weather	✓
		Airport weather	✓
	EUROADMAP	Road/Grid weather	✓
		Airport weather	✓
EYEAR	Friction data/ CAN bus data Vehicle positions	✓	
Traffic Forecast Models	Road traffic statistics	✓	
	Road weather	✓	
FREEDATA	General	✓	
RTFM	Acceptance, usability, economics	✗	
StayHome	Road transport service data	✓	

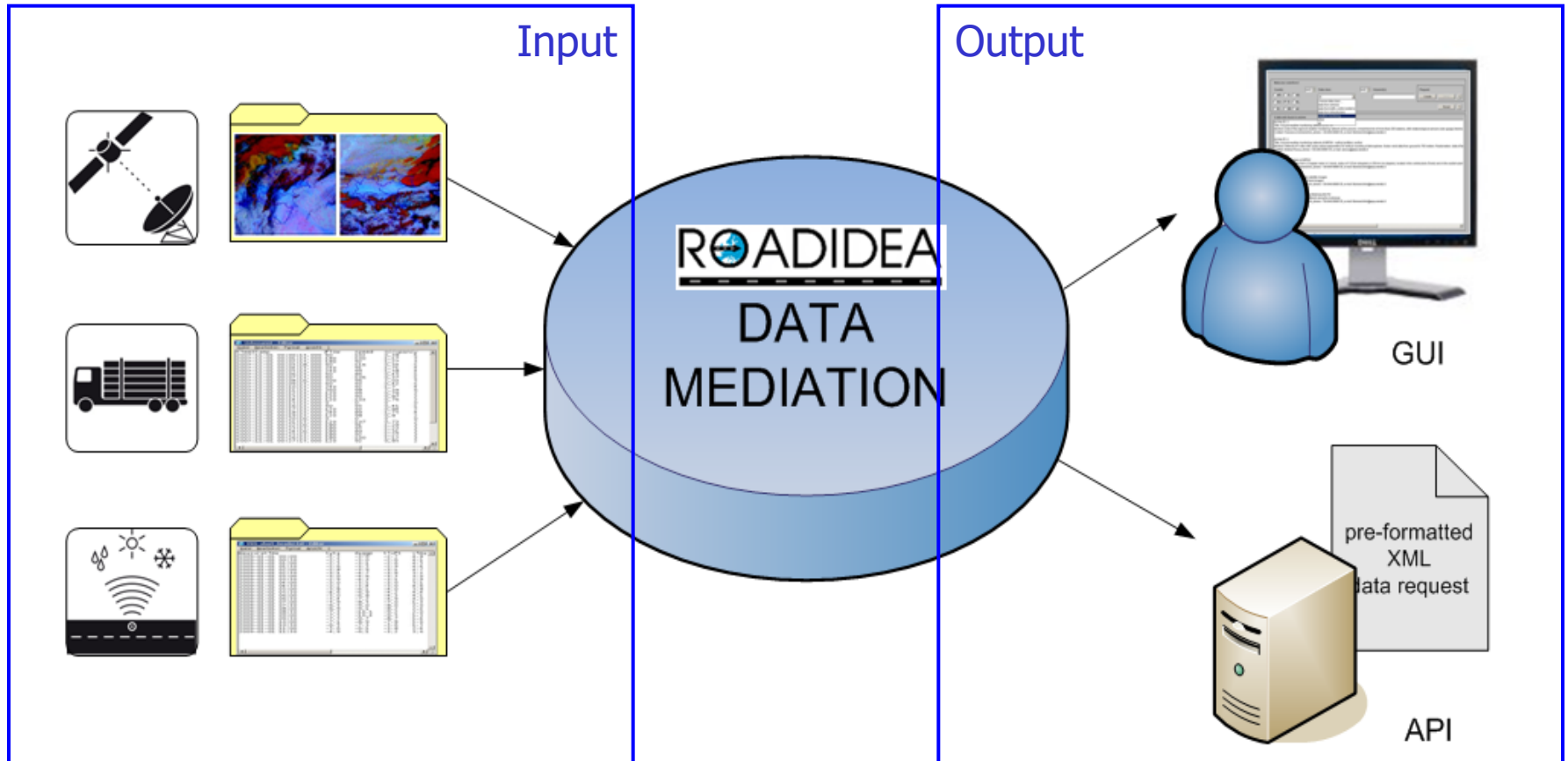


# Task5: data mediation

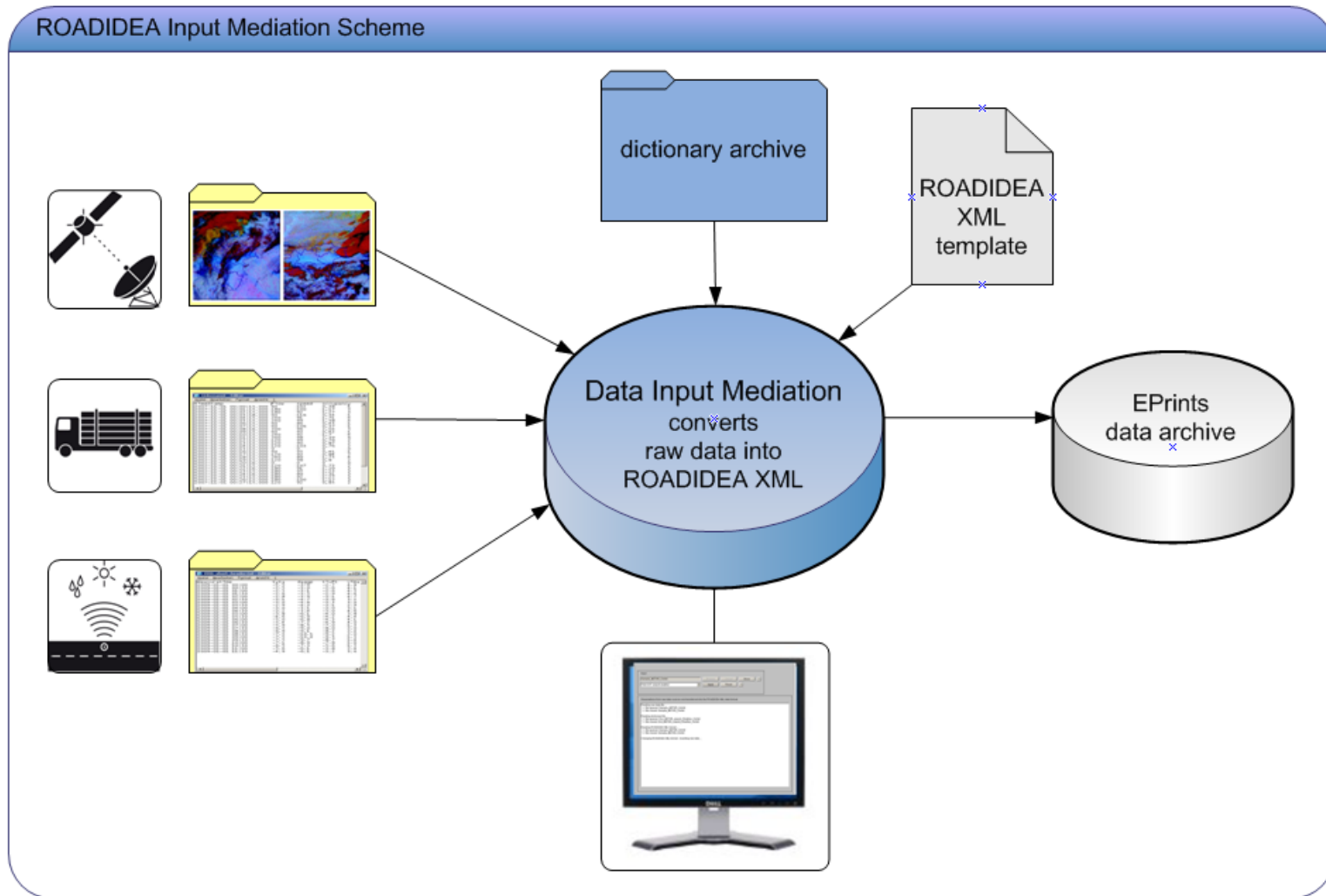
- Main target of data work package
- Implementing main findings of preceding WP2 tasks
- Gothenburg Pilot is mediation demo case



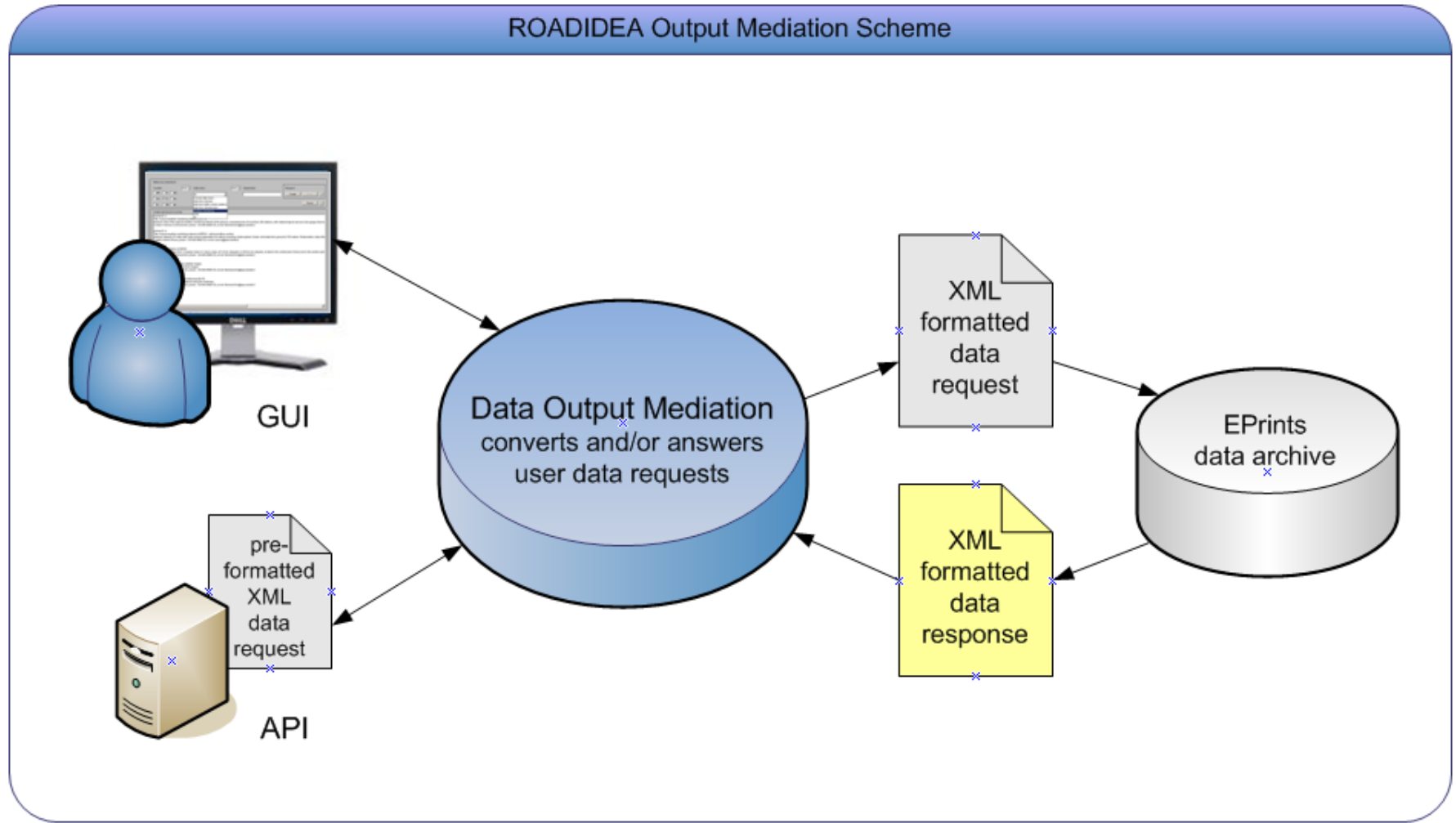
## Mediation



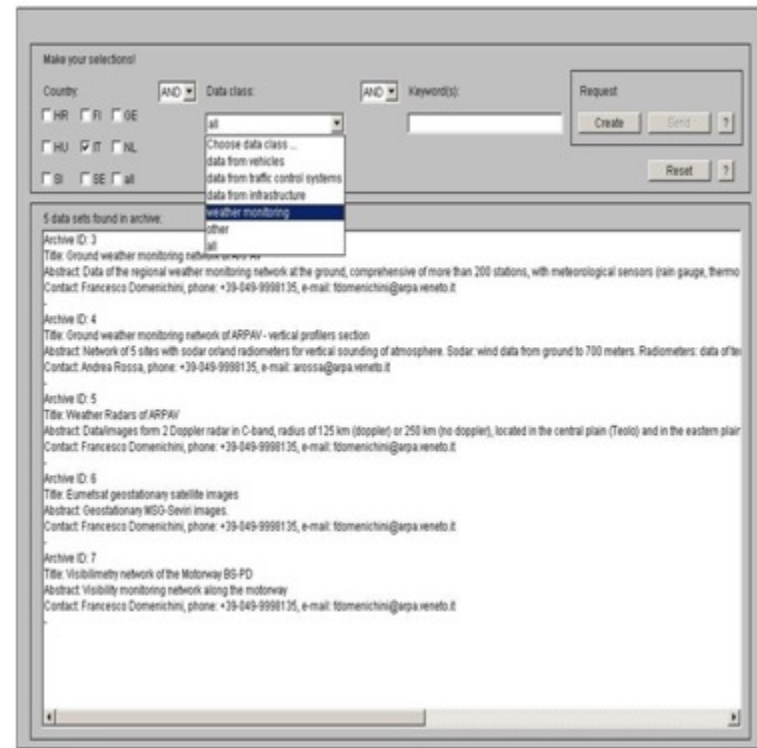
- Input scheme



- Output scheme



- Web implementation as JAVA front end
- Piloted Mediation Application  
<http://www.roadidea.eu/packages/wp2/mediation.aspx>



# Conclusion

- Data mediation concluded & piloted
- Problem:  
Partly weak or unclear data availability
- European implementation of general ITS services impossible by now
- Recommendation for ITS data catalogue
- European data issue obtained public awareness

# Questions?

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