

Hatay 1. Logistics Summit

Italian Freight Villages Trends and Challenges

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SAPIENZA
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CENTRO DI RICERCA
PER IL
TRASPORTO E LA LOGISTICA

The traditional Freight Village

It is a geographical grouping of independent companies (for example, freight forwarders, shippers, transport operators, customs) and public institutions.

It is served by a variety of transport methods (roads, rail, sea, inland waterways, air),

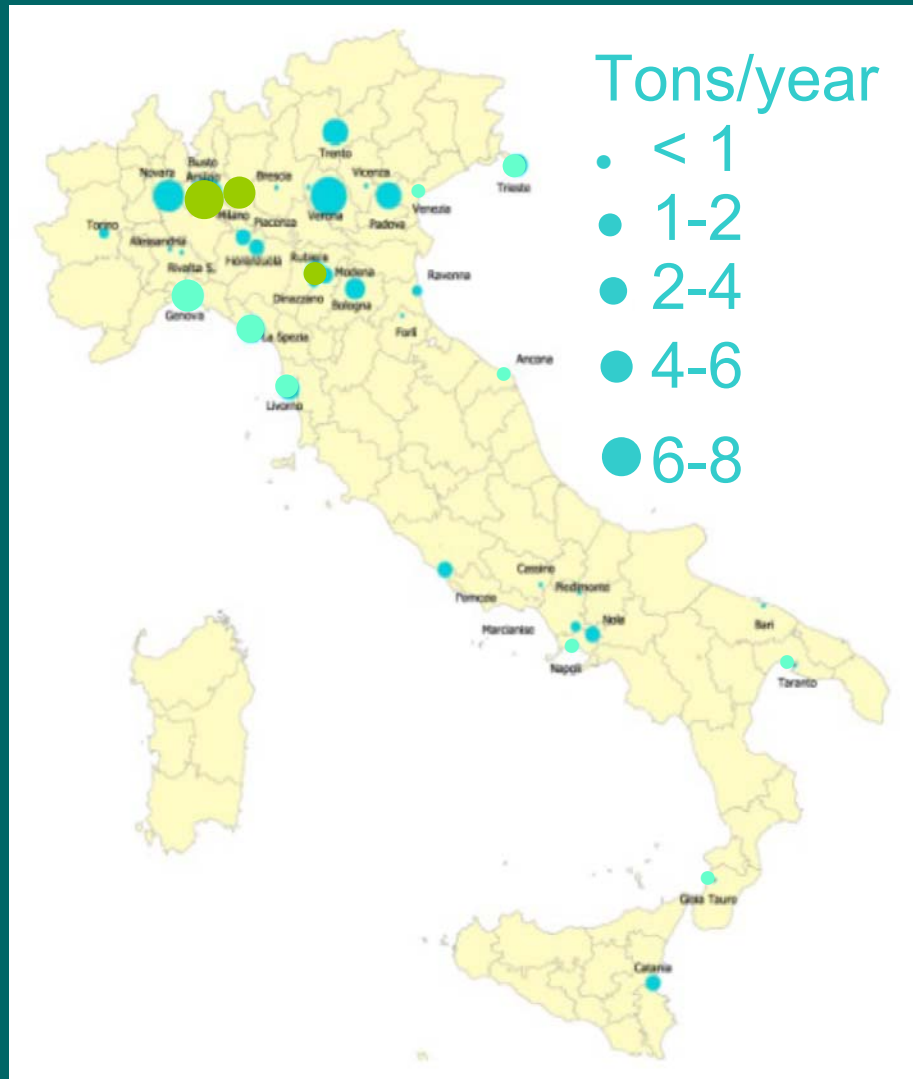
It carried out all the activities relating to transport, logistics and goods distribution.

It has accompanying services (for example, storage, maintenance and repair).

A distinguishing characteristic of a freight village is shared access to facilities, equipment, and services among firms located on site.

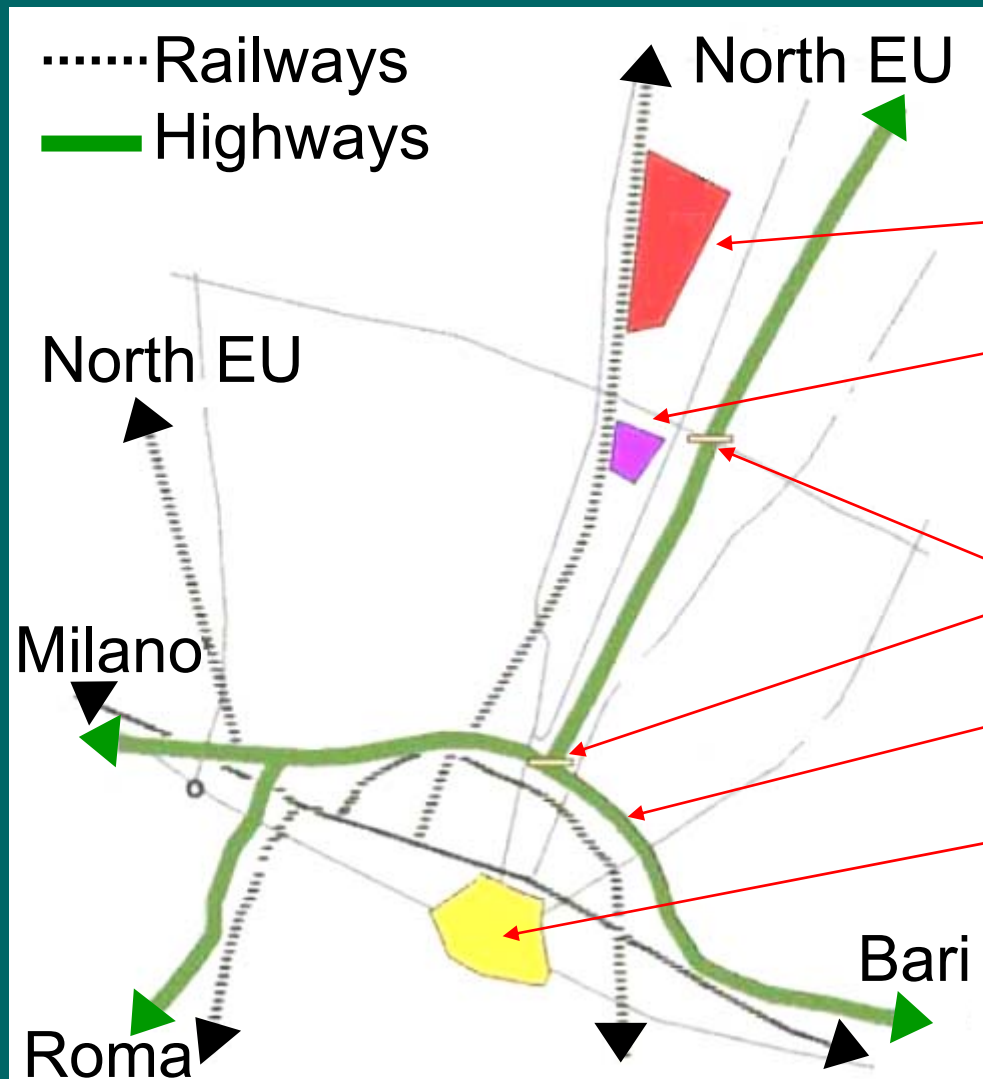
Nodes of Intermodal traffic

Ports – Freight Villages – Rail Terminals



Nodi	Tons 10 ⁶
Genova	3.9
La Spezia	3.0
Livorno	1.6
Trieste	1.1
Verona	6.1
Novara	5.0
Trento	3.4
Padova	2.4
Bologna	1.9
Busto Arsizio	8.2
Milano	4.3
Rubiera	1.5

Bologna FV – Accessibility



Bologna FV

Centergross

Toll gates

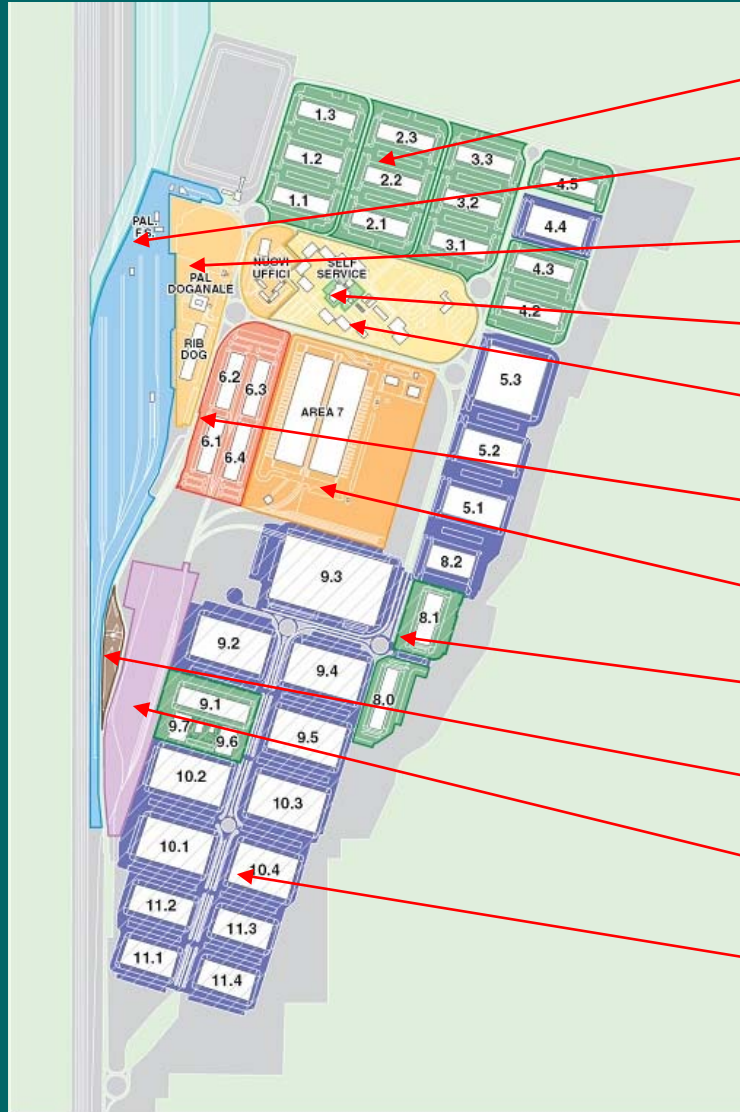
Ring road

City of Bologna

Bologna FV – Location



Bologna FV – Layout



Warehouses road-road

Terminal containers

Custom

Self services

Offices and services

Warehouses road-rail

Warehouses

Warehouses road-road planned

Fuel station and services

Shunting Yard

Warehouses for VAL planned

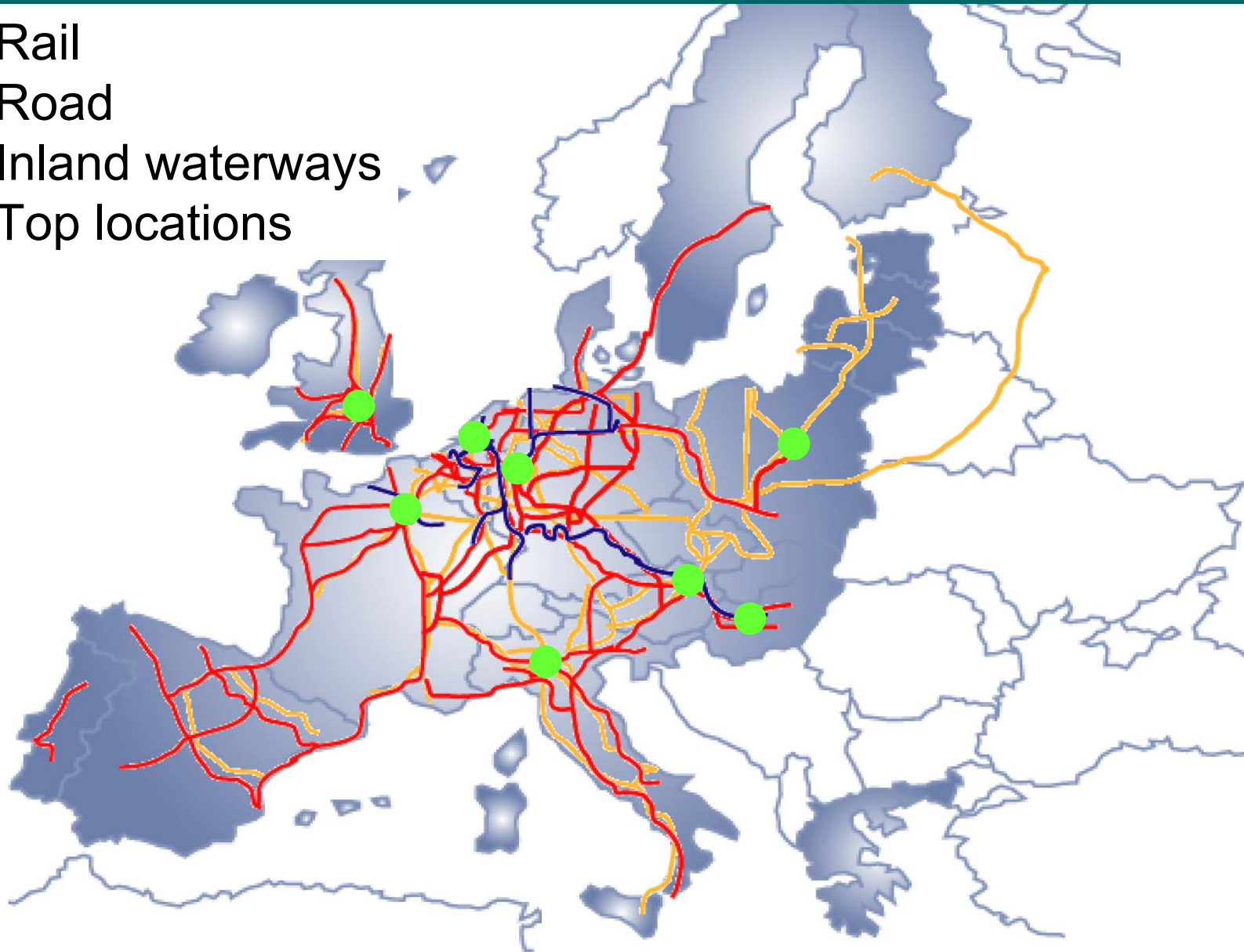
Trends and Challenges for FV

1. Intermodal Rail/Road
2. Intermodal Connections to Ports
3. Logistics added value services
4. Urban Logistics
5. ICT Transport Services
6. Global gateways

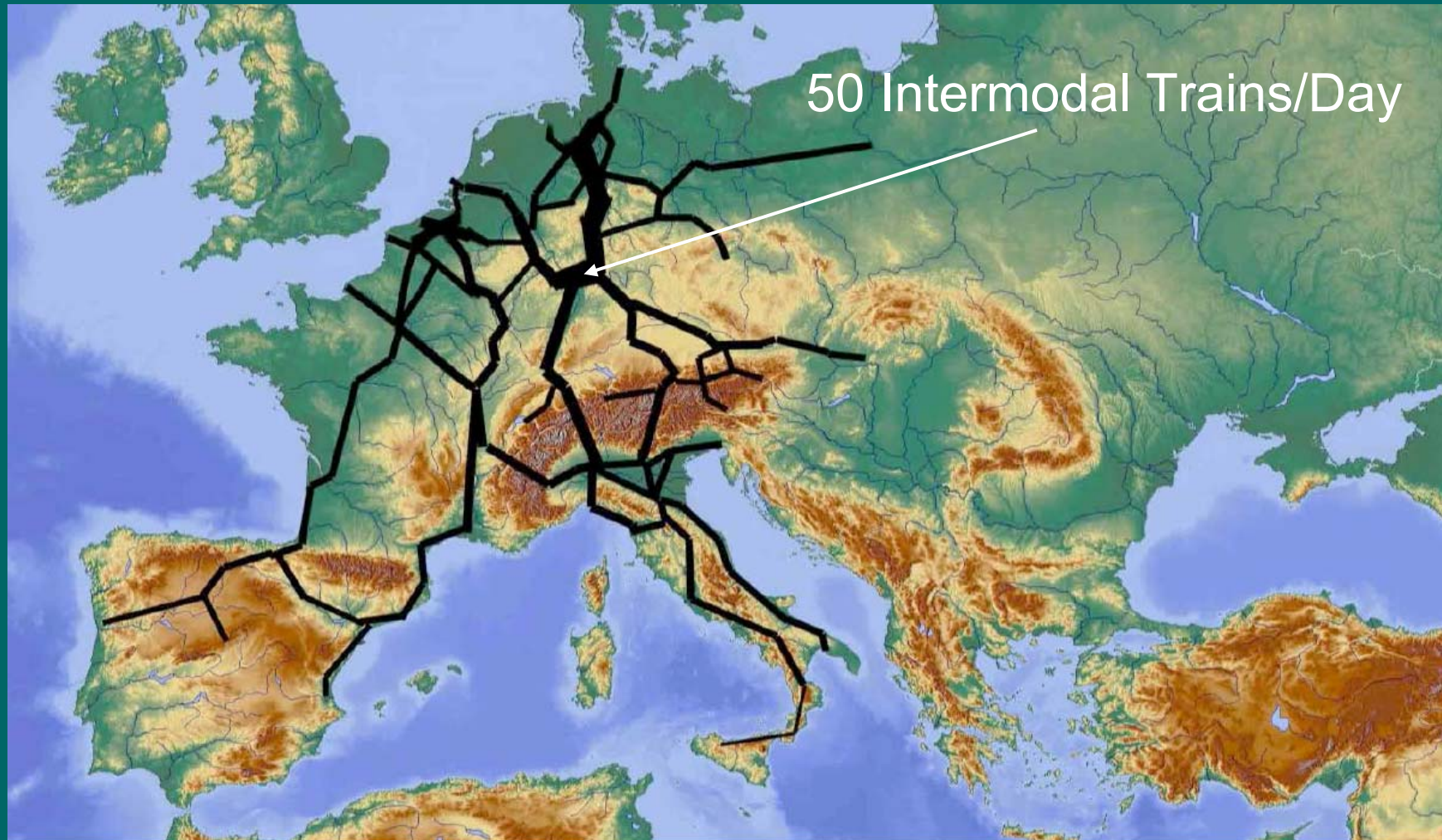
Intermodal Rail/Road

Major freight flows and top locations

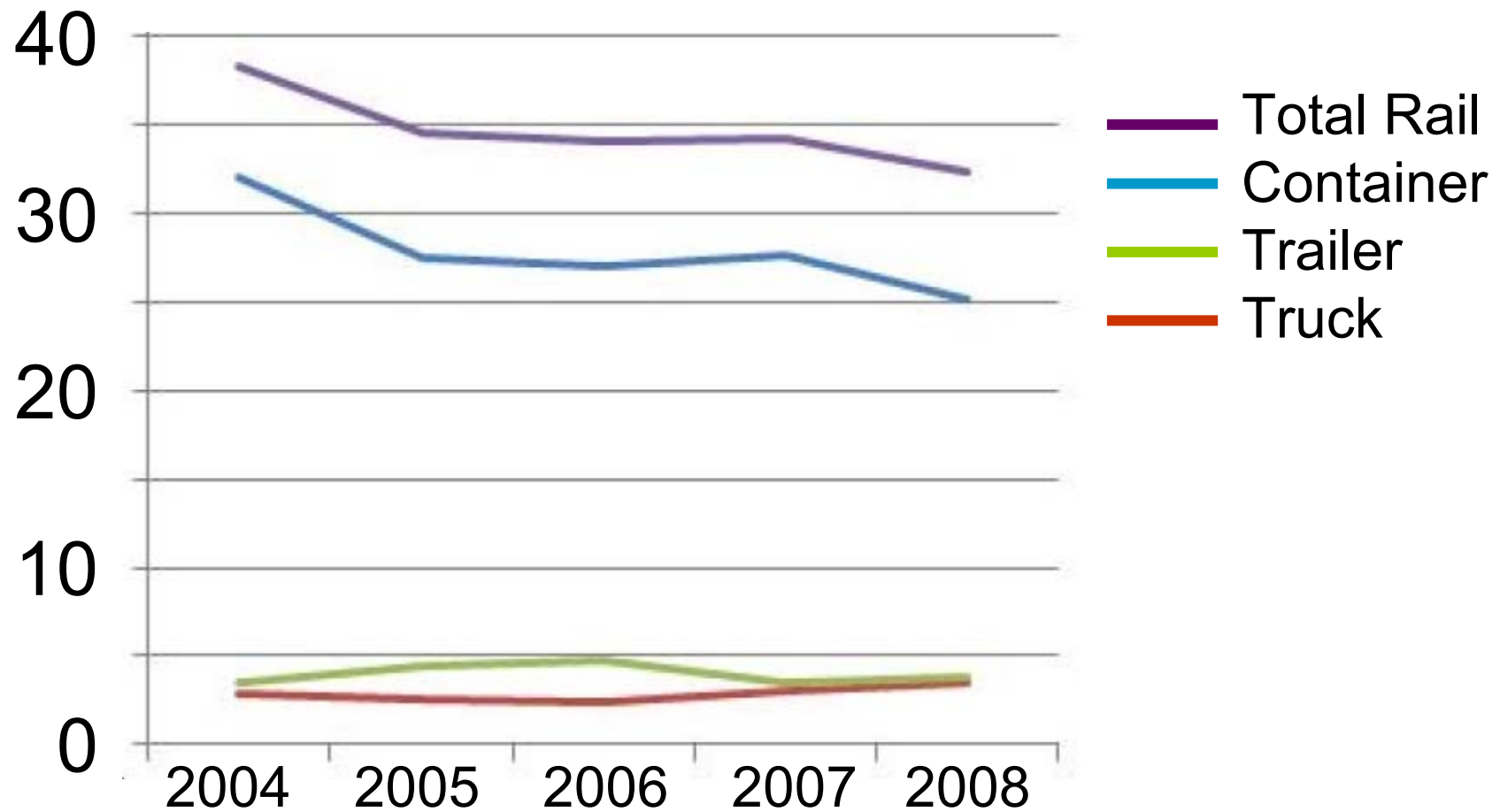
- Rail
- Road
- Inland waterways
- Top locations



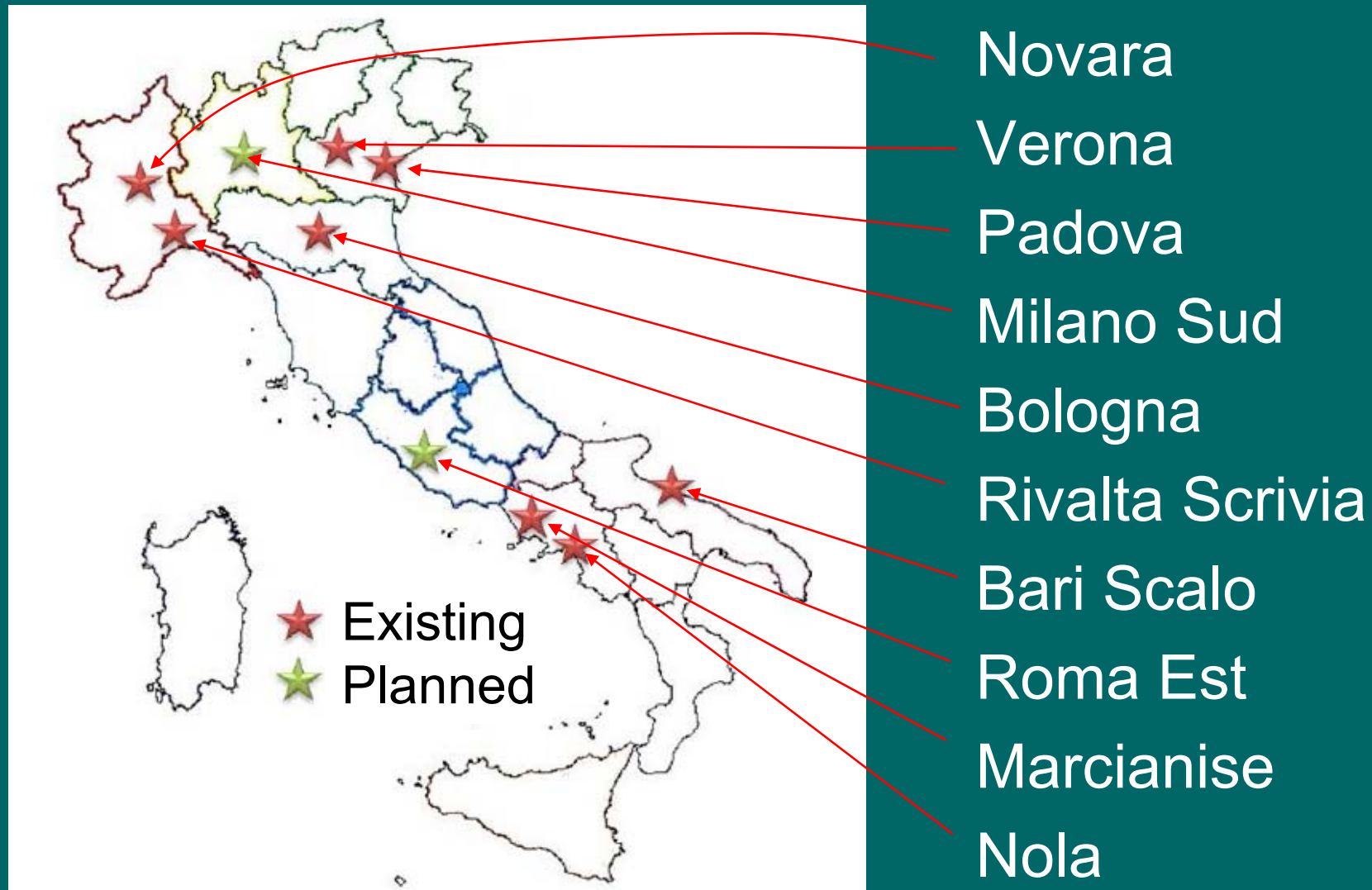
EU Intermodal Traffic



Italy rail intermodal traffics – Mtons/year

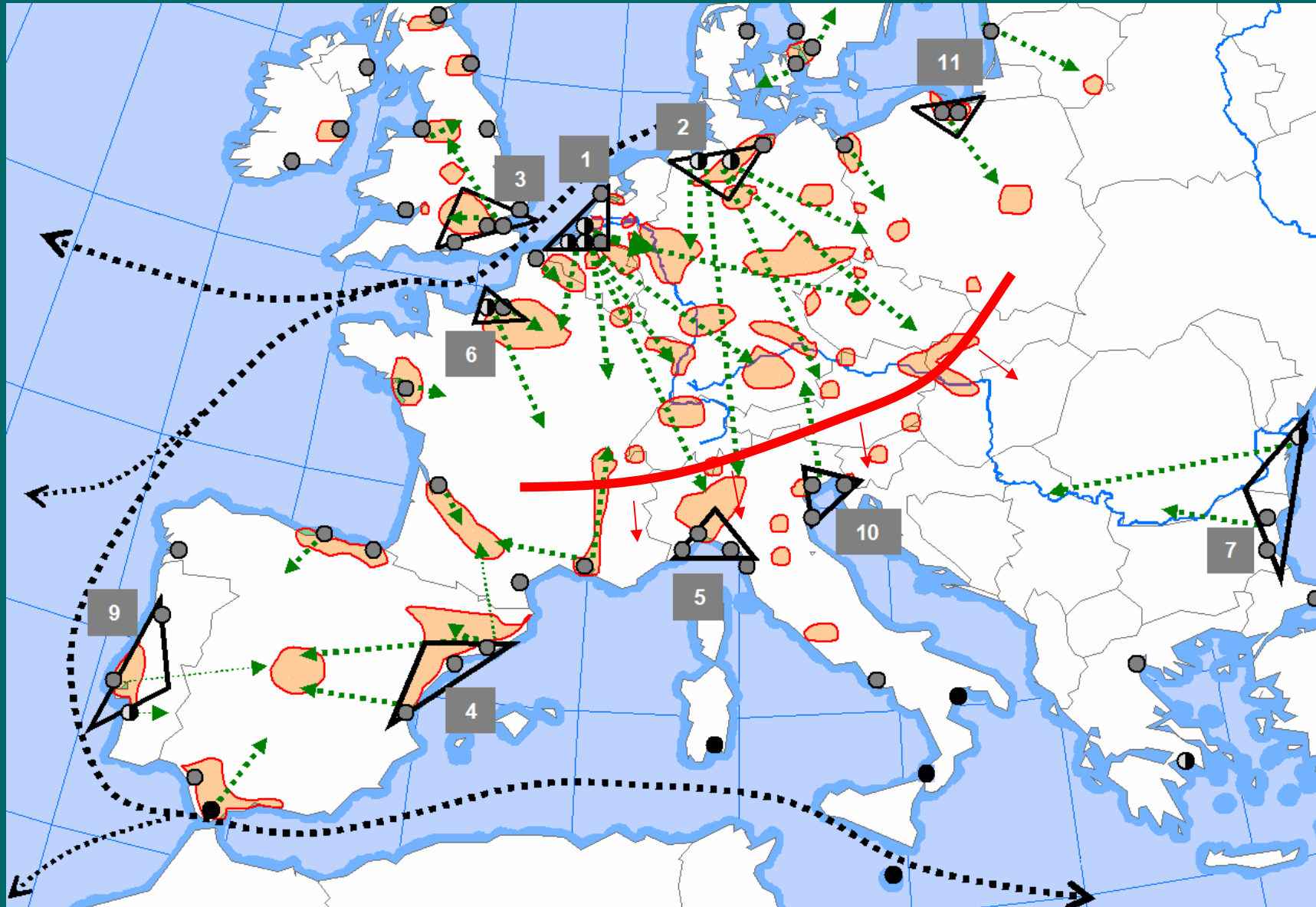


FV for intermodality in Italian Logistics Plan

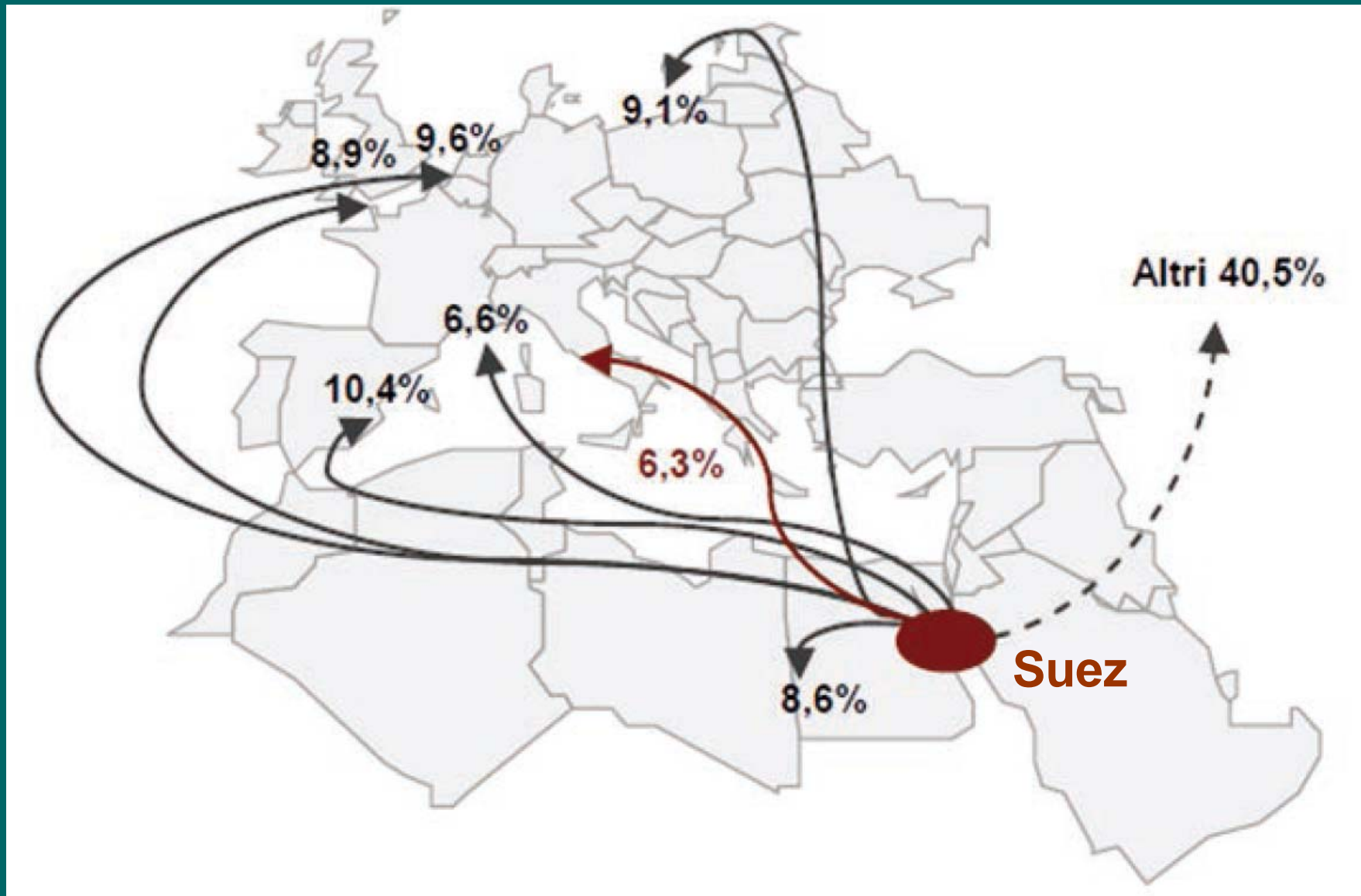


Intermodal Connections to Ports

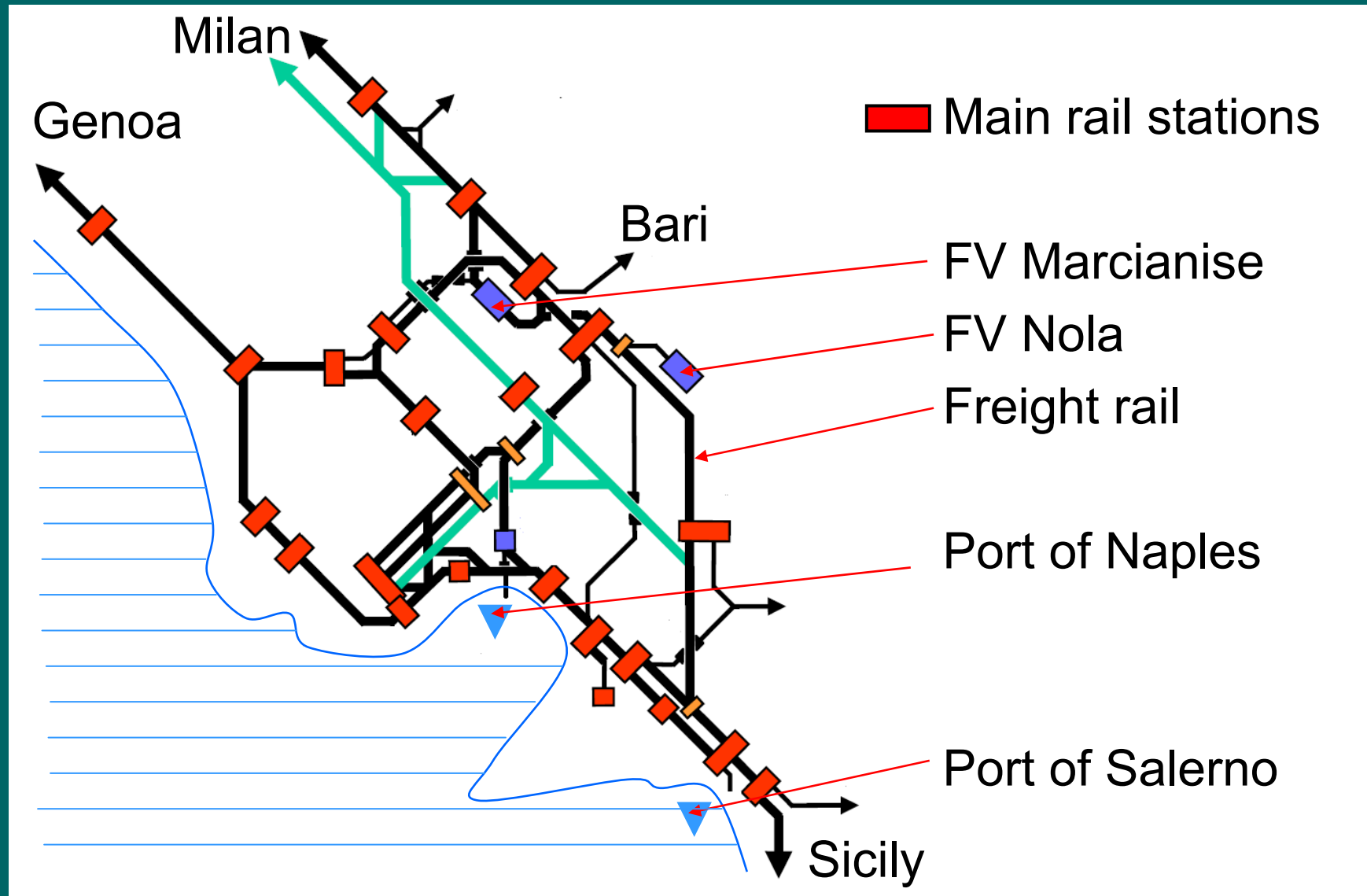
Port systems and logistical locations



Maritime Traffic Flows from Suez



Campania Region – Naples



Logistics added value services

Value-added Logistics (VAL)

Two main drivers:

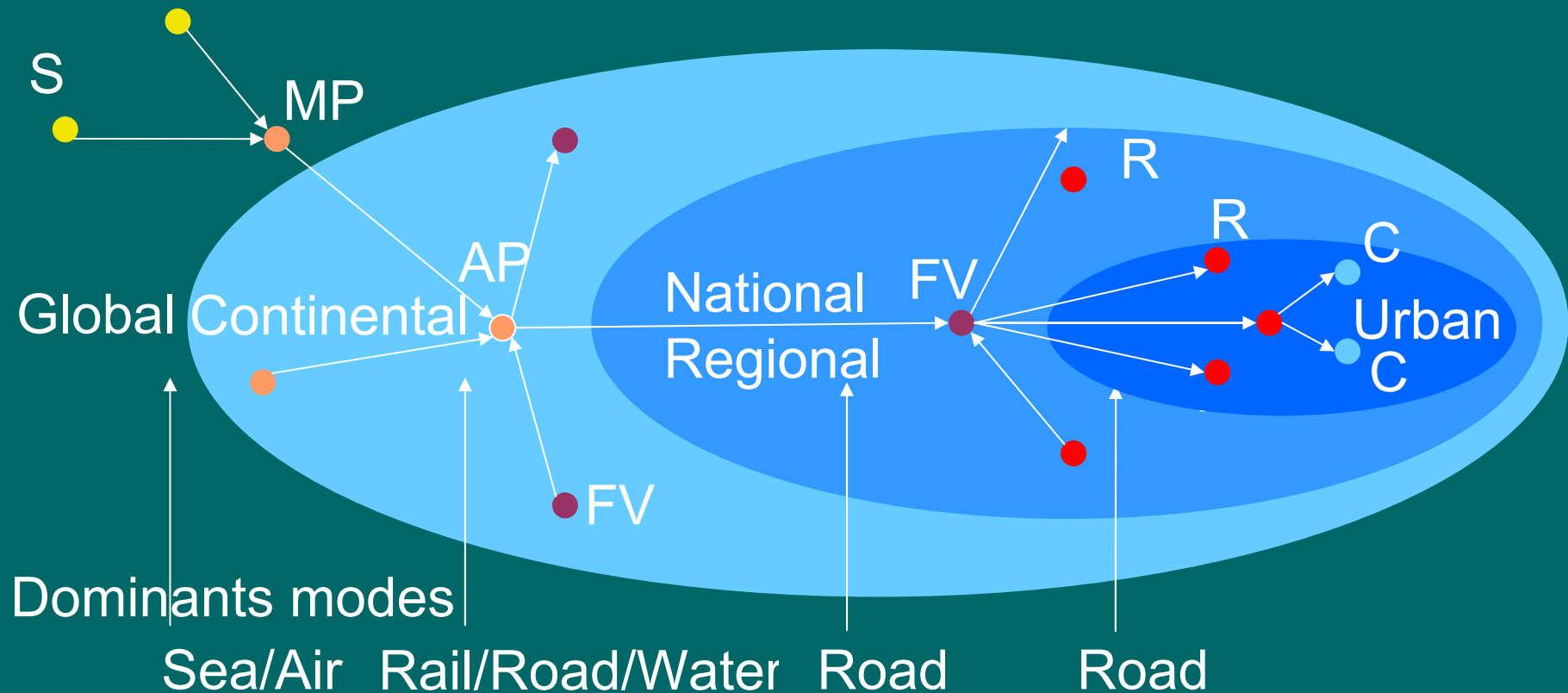
- customer requirements of more personalized products and better level of services;
- reducing logistics costs with postponement, pooling of resources, more flexibility and proximity to the market.

The main VAL activities

- Receiving goods, breaking shipments, preparing for shipment, returning empty packaging
- Simple storage, inventory replenishment, distribution, order picking
- Countrylizing and customizing, adding parts and manuals
- Assembly, repair, reverse logistics
- Quality control, testing of products
- Installing and instruction
- Product training on customer's premises

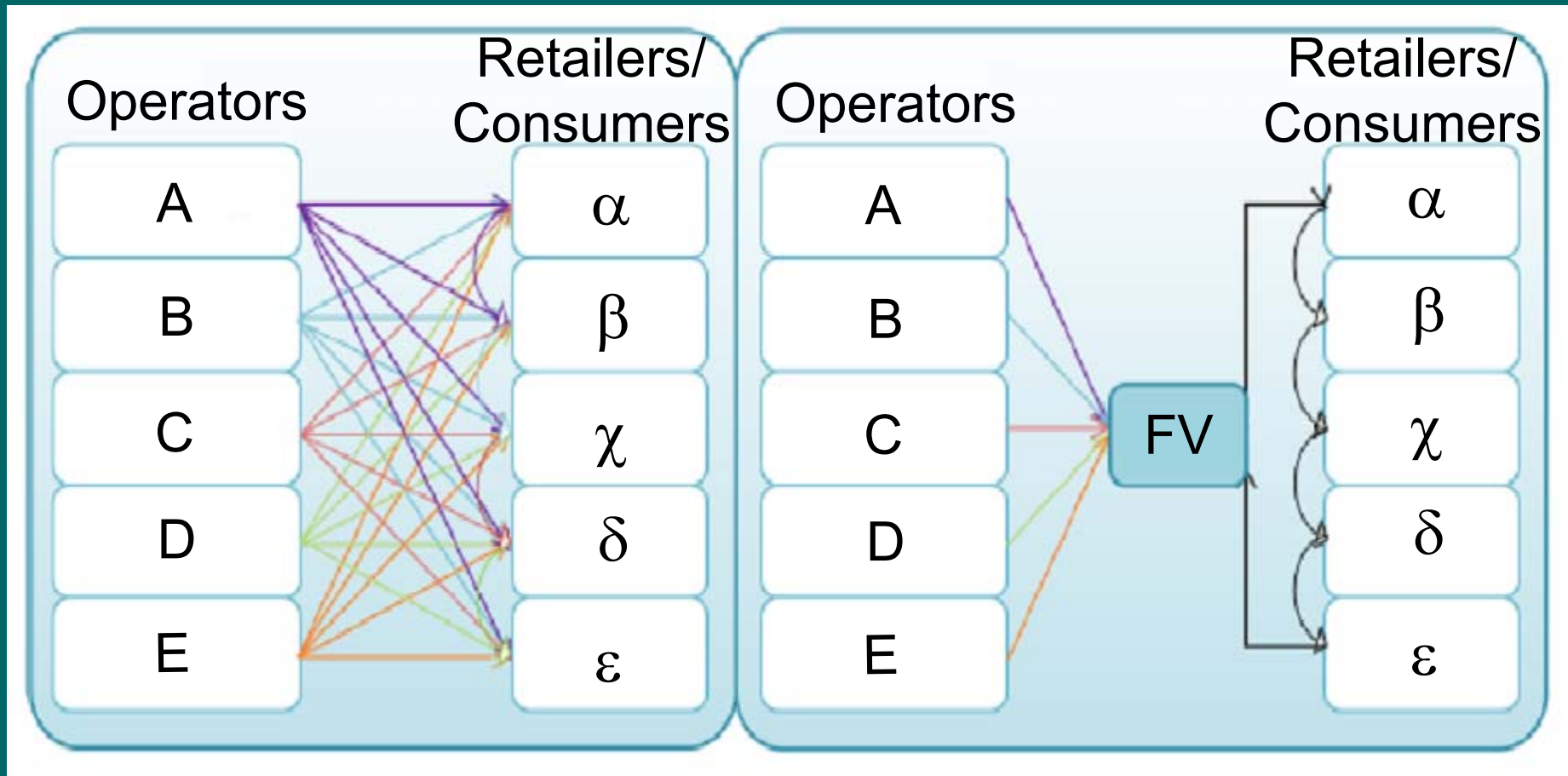
Urban Logistics

Logistics network of urban distribution



- Supplier; ● Manufacturing Plant/Assembly Plant;
- Freight Village; ● Retailer; ● Consumer

Deliveries with and without a FV



Efficiency problems

Urban freight transport affect the economic prosperity and livability of cities.

But it is responsible for a range of negative social and environmental impacts.

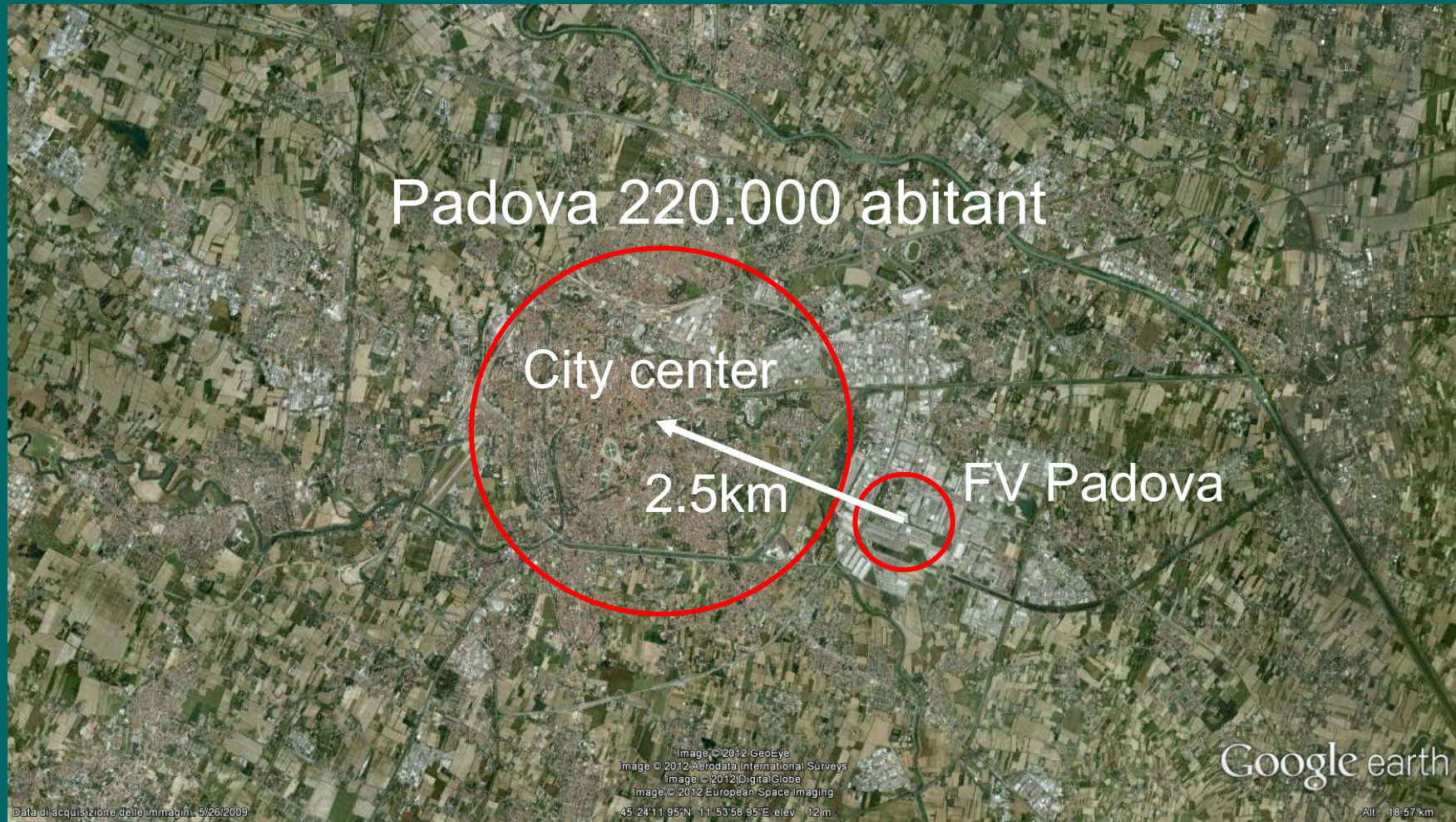
These are relatively well understood and include fossil fuel consumption, greenhouse gas emissions, air pollution, noise, visual intrusion, physical intimidation of pedestrians and cyclists, road safety and accidents, and road traffic congestion.

Cityporto, Padova FV

Last-mile urban freight distribution service

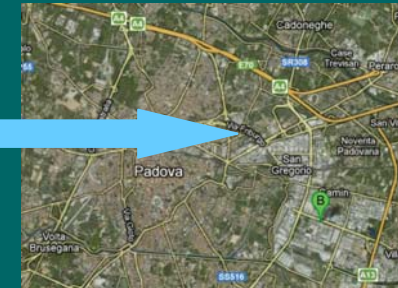
- promoted by a PPP and operating since 2004
- municipality supported the start up through incentives operated by Padova FV (Interporto di Padova Spa) on voluntary scheme
- central area served with environmentally–friendly vehicles
- FV acts as distribution and consolidation centre for different transport operators

Padova FV – Strategic location



The Logistics system

Logistics operators



Padova city center

The vans



The van in action



The business model

FV Padova

- strategic position
- availability of platforms
- technological and organisation support
- neutrality

Municipality support

- no access limitations and time windows
- Use of reserved lanes and dedicated parking lots

Voluntary scheme

The evaluation

Successful initiative:

- deliveries grew from 190,000 in 2005 to 350,000 in 2010 (+86%)
- customers use the service also for deliveries outside the central area
- public funds used initially to purchase vehicles
- today there is a surplus (revenues minus operating costs) used to purchase additional vehicles
- reduction of 1,216 km travelled by trucks per day
- Cityporto is operating also in Modena since 2007

ICT Transport Services

UIRNET

Objectives:

- to support the logistics activities in Italy with an Intelligent Transport System (ITS) based on the Information and Communication Technologies (ICT).
- to improve efficiency, safety, security and intermodality

Macroservices

Easy fleet: mission management, infomobility, path information, alternatives and warnings

Control tower: link between operators of schedule, time of arrivals

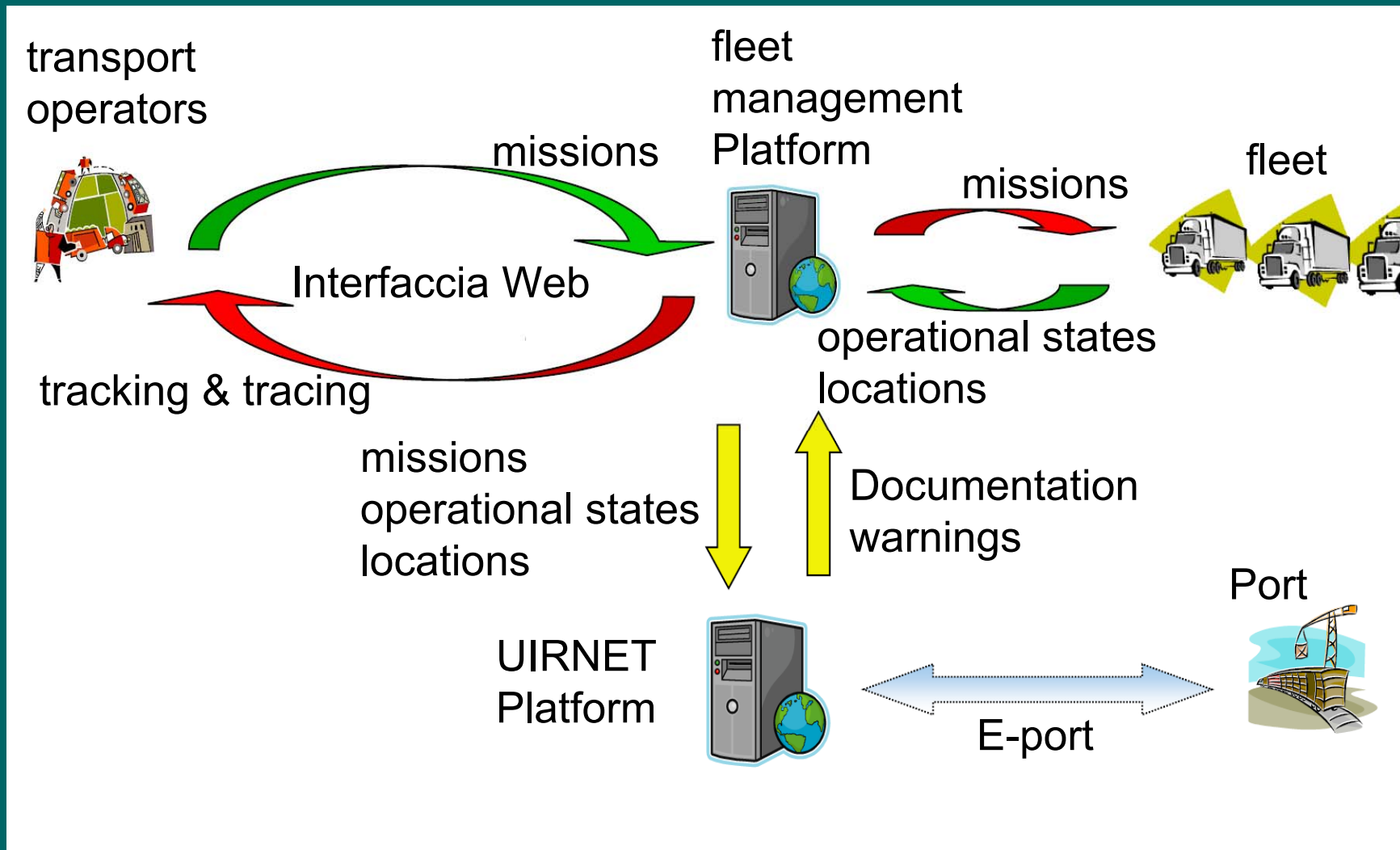
Freight taxi: matching demand-supply

Data analysis: models, time series for better forecast

Control Area in the multiport region



Architecture framework and components.



Global gateways

Italian situation

Two main gateways for containers:

- The multi-port gateway region in the North West centred in Genoa
- The second in the North East centered in Trieste

Three main trends

- Containerisation did not lead to more concentration in Italy.
- The local hinterland remains the backbone of ports' traffic positions.
- A growing demand for routing flexibility fuels competition for distant hinterlands between multi-port gateway regions.

Key features of gateways

Main port or multiport area through which the distribution of significant incoming and outgoing transport flows take place.

Intermodal hub with sea-rail, sea-road and sea-inland waterborne.

Strong agglomeration effects, network externalities, economies of scale, scope and density.

Added value by entering new regions/markets with the help of strategic nodal and multi-modal centers in a network.

FV Bologna strategic location

