



***“Risorse naturali e nuove tecnologie: politiche per una accresciuta cooperazione intraregionale, con l’Italia e con l’Europa”***

***“A joint EU-MENA Operational Plan  
for the Infrastructure of Mediterranean Region”***

***Convegno Internazionale “Medio Oriente. La regione dei destini incrociati”  
Roma, 26 Ottobre 2017***

**GRUPPO FERROVIE DELLO STATO ITALIANE**

## ***Mediterranean Sea, key for EU-MENA integration***

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Geopolitical, trade and infrastructural changes in the last years, together with globalization and an organization of trade exchanges that have favored sea routes, are the reasons for the **renewed international importance of the Mediterranean**. Particularly, economic performances in the Far East and in North African developing countries have determined a significant increase in exchanges by sea on trade routes from and to Europe, and between the **two rims of the Mediterranean**.

Therefore, the Mediterranean is gaining back a **key role** in the international context, because of **globalization** and of the modalities followed by trade, especially through **maritime transport**.

On this regard, there are developing projects for **expanding ports and logistic platforms**.

Since few years, the increased capacity of the **Suez Canal** favors new regular routes between the **Mediterranean and Red Sea** ports. Furthermore, the leading role being acquired by the **Persian Gulf area** in the international economic scenario encourages trade relations with the **Middle and Far East** on one side, and the **Mediterranean** on the other.

In this new scenario of “**Enlarged Mediterranean**”, there is a shared and urgent need for **institutional, technical and financial coordination**, in order to favor an organic development that would answer to the needs of the populations of the basin and to create a “bridge” of virtuous, tight and effective social, political and economic connections.

# Mediterranean and “The Blue Economy”

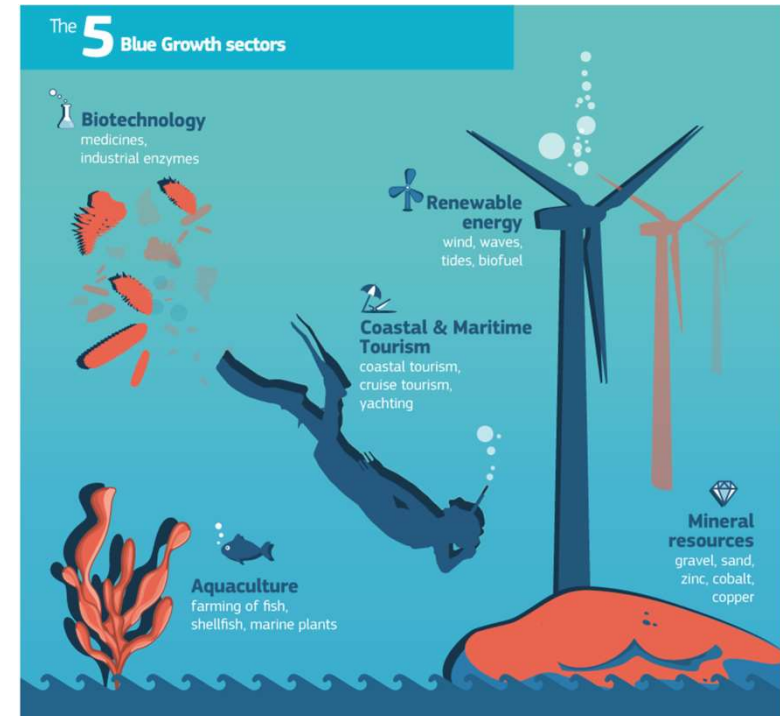
The **connection between land and sea** in the Mediterranean region is reflected on the extent of maritime activities which are developed through the years.

The uses connected to **marine and coastal areas** shape a type of a single and separate sector within the economies of Mediterranean countries known as the “**Blue Economy**” of the region.

It is estimated that European “Blue Economy” generates more than **5,4 million jobs** and a Gross Added Value of about **500 billion Euros in an annual basis**.

As it is clearly stated in the 2012 Commission’s Communication on “Blue Growth Opportunities for marine and maritime sustainable growth”, the growth of “Blue Economy” *“...represents the maritime dimension of the Europe 2020 strategy. It can contribute to the EU’s international competitiveness, resource efficiency, job creation and new sources of growth whilst safeguarding biodiversity and protecting the marine environment, thus preserving the services that healthy and resilient marine and coastal ecosystems provide...”*

**Maritime transport** lies amongst the uses with the highest importance of the region’s “Blue Economy”. Both **passenger and cargo flows** promote the socio-economic development of the Mediterranean while ensuring the **spatial cohesion** of insular and continental parts of the region.



## ***The “Union for the Mediterranean”***

The **Union for the Mediterranean (UfM)** is an intergovernmental organisation bringing together the 28 European Union Member States and 15 countries from the Southern and Eastern shores of the Mediterranean. It provides a **unique forum** to enhance regional cooperation and dialogue in the Euro-Mediterranean region.

It serves as a framework for policy dialogue and exchange of **project ideas**, experiences and best practices among governments, key international institutions and cooperation structures.

The UfM provides a unique platform to formulate **regional priorities** and decide on specific cooperation initiatives to be put in place.

Projects and initiatives are implemented within the framework of the UfM in **six strategic priority areas** which are business development, social and civil affairs, higher education and research, transport and urban development, water and environment, and energy and climate action.



Business Development

Transport and  
Urban Development

Social and  
Civil Affairs

Higher Education  
and Research

Water and  
Environment

Energy and  
Climate Action

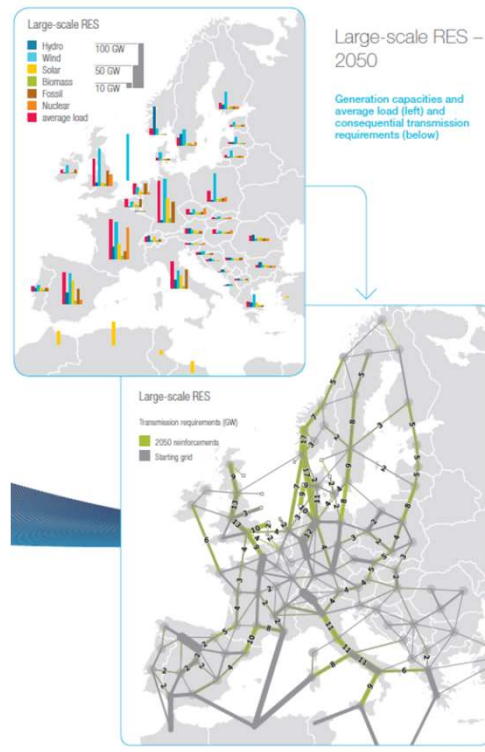
## MENA clean energy solutions

**MENA Countries**, highly vulnerable to the risks of climate change due to water scarcity, growing desertification, concentration of economic activities in coastal areas, a reliance on climate-sensitive agriculture and a demographic challenge (from 390 million people to 500 million by 2100), aim to rapidly adopt renewable energy, wind and solar, over the coming decades.

The MENA renewable energy transformation present a unique opportunity for **business partnership** with Europe, encompassing renewable energy joint ventures and PPP, joint research and development projects in solar technologies, and investment in a **North Africa-Europe energy corridor** linking Morocco, Algeria, Libya and Tunisia to Europe through Spain, France and Italy.

The electricity grid of Europe could be **linked to North Africa** and an integrated electricity market developed. The schema represents a possible scenario focusing on the deployment of **Large-scale Renewable Energy Sources** such as projects in the **North Sea and North Africa**.

Source: e-Highway 2050 Project Results, November 2015



**Ouarzazate, Morocco**, will produce enough electricity to power more than **one million homes** when it is completed in 2018. The power station will utilize **concentrated solar power (CSP)** technology, arraying parabolic trough mirrors around a central tower filled with fluid material, to generate 160 MW in the first phase. **The project will become one of the largest solar power projects in the world at full expansion.**



## ***Energy in Italian Cooperation Strategies***

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**Italian Cooperation Three-Year Program (2016-2018)** contains a specific chapter on the energy innovation, focusing on three themes: (i) distributed systems based on renewable sources, as off-grid solutions integrated into power grid; (ii) policies and regulatory mechanisms aimed at modernizing energy governance; (iii) training programmes to develop technical and managerial skills - and identifying those geographical areas, among them the Mediterranean's Southern rim, where there is a favorable environment to apply the Italian energy strategy.

The traditional presence of Italian **NGOs** in these areas fosters to test the effectiveness of partnership between businesses and non-profit organizations through the application of a **cooperation model**, in which **NGOs** can use their deep-rooted presence in the area and knowledge of local conditions and situations to identify and kick-start projects, whilst **businesses** should much of the responsibility for mobilizing the financial resources and collaborate with NGOs in the project implementation.



# European Fund for Sustainable Development (EFSD)

The **EFSD** is the main instrument for the implementation of the European external investment plan (EIP) to **support investment in African and neighbourhood countries**. The plan aims primarily at **creating jobs and addressing root causes of migration**. It will also contribute to the implementation of the Paris agreement on climate change (COP 21).

On the basis of an initial budget of **3,35 billion euros**, the fund is designed to **trigger up to 44 billion euro of investments**. This amount could double if member states and other donors match EU contributions.

The EFSD will operate as a "**one-stop shop**" to receive financing proposals from financial institutions and public or private investors and deliver a wide range of financial support to eligible investments. It will offer guarantees and use blending mechanisms to **encourage the private sector to invest in more risky contexts**, such as fragile states or conflict-affected areas.

## BUSINESS ENVIRONMENT AND INVESTMENTS IN FRAGILE COUNTRIES:

Foreign Direct Investment (FDI) and other private financial flows have declined across developing countries since the 2008 financial crisis.

**Only 6%** of overall Foreign Direct Investment (FDI) to development countries are going to fragile countries (2012). Of those investments, as much as **72%** concentrated in ten resource-rich countries.



The cost of setting up a business in fragile African countries is **3x higher** than in non-fragile African countries



## Example



### 200 MW WIND FARM PROJECT GULF OF SUEZ

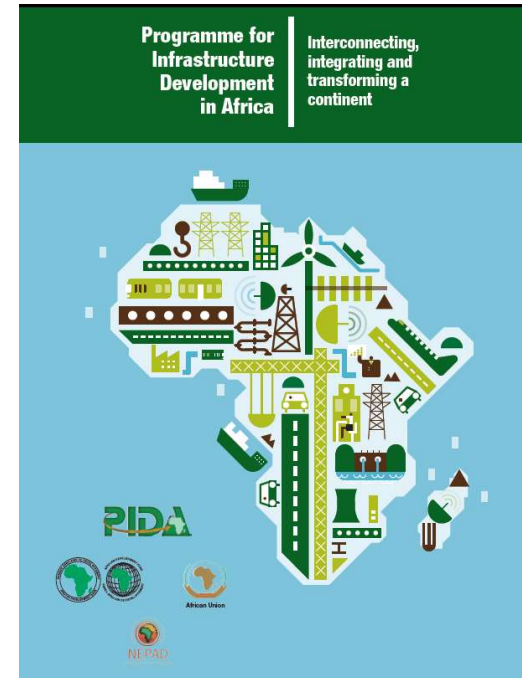
The 200 MW Wind Farm in the Gulf of Suez will use wind-power to secure energy supplies by producing economically viable and environmentally sustainable electricity. The project will cover the electricity needs of about 370 000 consumers and support the Egyptian energy sector, where renewables to date account for only 1% of total capacity. The EU grant contributes decisively to bringing generation cost down preparing the sector for replication and private investment.

## ***Programme for Infrastructure Development in Africa (PIDA)***

The **Programme for Infrastructure Development in Africa (PIDA)** is a Multi Sector Programme covering **Transport, Energy, Information and Communication Technologies and Trans-boundary Water Resources**.

It is dedicated to facilitating continental integration in Africa through improved regional infrastructure and it is designed to support implementation of the **African Union Abuja Treaty** and the creation of the **African Economic Community**.

The PIDA initiative is being led by the African Union Commission (AUC), NEPAD Secretariat and the **African Development Bank (AfDB)**, which is the **Executing Agency** for the Programme, and covers the responsibility for contractual, financial, technical and administrative management including procurement procedures, budget management and disbursements.



The overall PIDA Programme is comprised of a set of **high-priority projects, policy actions and capacity-building actions**.

It is designed to cover the short, to 2020, and long-term, up to 2040. The PIDA short term programme is called the **Priority Action Plan (PAP)**.

The **PIDA PAP** is designed to be a **rolling set of priority projects and programmes**, which are redefined every **4-5 years**, with new projects added as initial projects are completed.

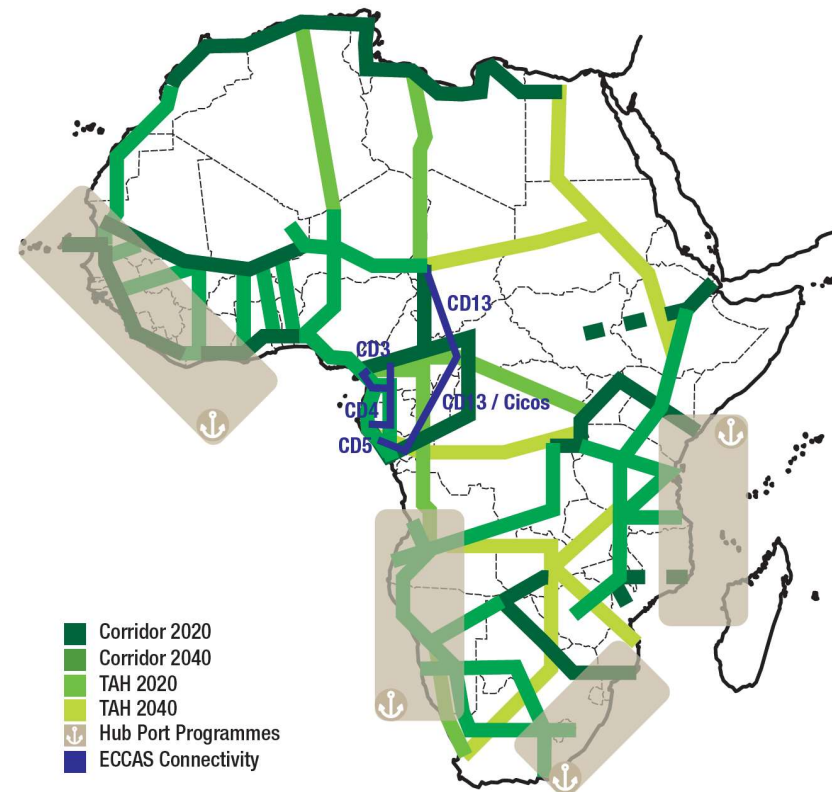


# ***Africa Regional Transport Infrastructure Network (ARTIN)***

The **Africa Regional Transport Infrastructure Network (ARTIN)** is a core network that serves the existing and future development poles of Africa.

ARTIN's purpose is to link large African centres of consumption and production (large cities, mining centres, large agriculture production projects, and so on) with the rest of the world via modern and efficient regional transport infrastructure networks and gateways, which includes:

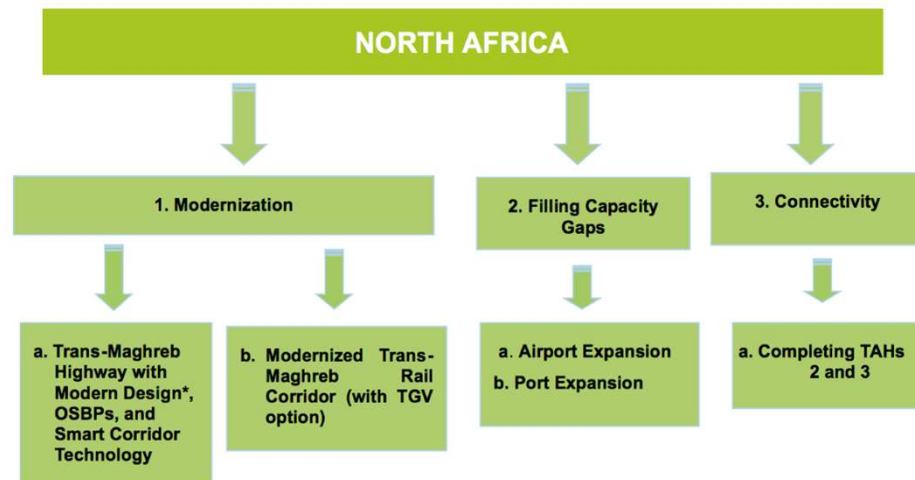
- **40 principal international freight corridors** (road, rail, river modes and major sea ports),
- the **Trans-African Highway network (TAH)**,
- the major **international airports** (one per country), and
- the high-level **air traffic control system**.



## PIDA long-term strategy for North-Africa

The recommended long-term strategies proposed by the PIDA for North Africa regard:

- the **modernization** of the existing network, by modernizing about **800 km** of Trans-Maghreb Highways, by implementing a **SMART(\*) corridor** system along the whole infrastructure and by building **5 one stop border posts**, and about **8.100 km** of existing rail tracks, studying and implementing **high speed trains** where feasible.
- filling the gaps** to satisfy the expected transport demand, improving the capacity on about **800 km** of the Trans-Maghreb Highways by the construction of **additional lanes**, constructing **500 km** of new rail tracks and developing capacity on 5 regional airports
- completion, for the connectivity strategy**, and in coordination with the continental level, of the two **TAHs 2 and 3** crossing the region (**about 2.300 km**).

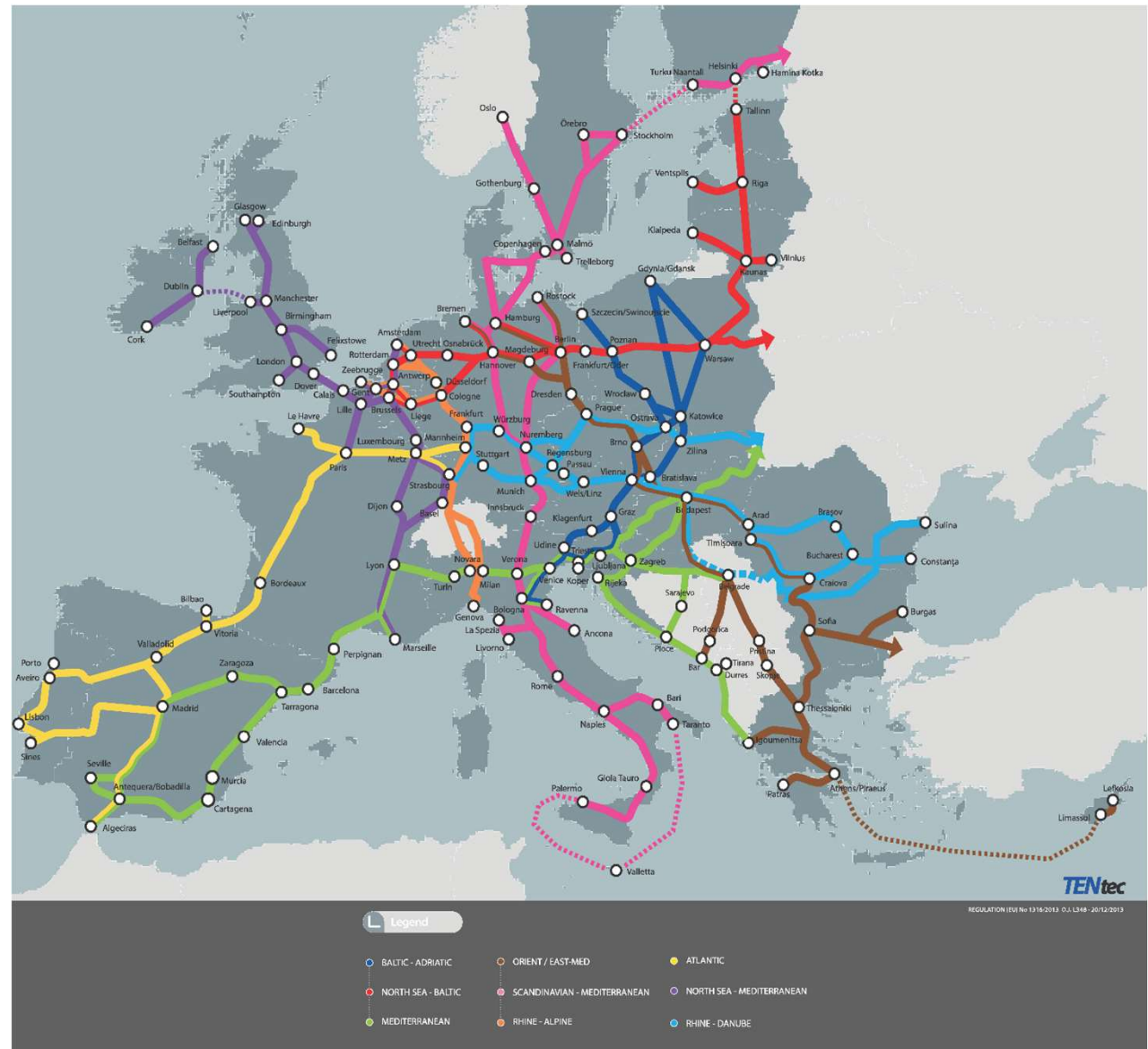


(\*)**SMART** stands for “**Safety, Mobility and Automated Real-time Traffic Management**”: a modal or multimodal surface transport corridor with quality infrastructure and logistic facilities, between two or more countries, used to carry intraregional and international cargo and passengers facilitated by the latest trade facilitation tools and conducive policies; the corridor includes innovative Intelligent Transport Systems (ITS) aimed at facilitating trade through simplification of transport administrative processes and providing real-time information to the key corridor stakeholders to monitor cargo clearance and movement.

## The European Strategy: nine TEN-T Corridors

Also the European transport strategy is based on an **integrated approach** to transport infrastructures and in particular, on **the nine transnational Corridors** forming the Core of Trans-European Transport Network (TEN-T).

For implementing these Corridors a **governance structure** was determined, including a European **Coordinator**, a **Secretariat** supporting the Coordinator and a **Corridor Forum** with a consultative role, which is explored as a new tool for bringing **stakeholders** together, progressively reaching an increasing number of stakeholders, including users of infrastructure in future stages.



## ***An integrated Mediterranean implementation strategy***

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**PIDA and EU implementation strategies** give us ideas about the possible model that could be adopted to put in place a multi-level structure for transport integration between **European Union and MENA Countries**, in which:

- **African Union Commission (AUC)** and the **Union for the Mediterranean** could assume the joint responsibility for defining policies and strategies aimed at increasing regional integration specifically for the Mediterranean and North Africa;
- **NEPAD Planning and Coordinating Agency (NPCA)**, as a technical body of the AU, and the **Secretariat of the Union for the Mediterranean (UfMS)**, as operational body of the UfM partnership, could establish a joint programme to facilitate and coordinate the implementation of **concrete priority programmes and projects** for the Mediterranean and North Africa.
- The UfMS, through its permanent network of key experts, actors and Financial Institutions, could mobilise resources and partners in support of the implementation of programmes and projects; **European Investment Bank, African Development Bank, The World Bank and Islamic Development Bank** could jointly be the assume the role of Executing Agency, including the already existing mechanisms as well as **EU-AITF** and **EFSD**.

## ***An integrated Mediterranean implementation strategy***

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The model to apply could be the “**SMART Corridor**” one, including highways, railroads, ports, airports, logistics centers and maritime services with “Motorways of the Sea” standards.

**Improve synergies with energy, water and ICT investments** would involve (i) identifying and introducing synergies in a joint infrastructure planning stage for the Corridor (**e.g. fiber optic cables along corridors**), (ii) planning power supplies for border posts and smart corridor components using **modern energy options**, and (iii) planning and designing ICT aspects of smart corridor with the **communications and information** sectors.

**Increase synergies with other economic investments** would involve (i) taking into account the **spatial development aspects** of corridor improvements in a **joint infrastructure planning process**, and (ii) **private and public partners** working together for corridor investment planning.

The corridor development organization could contribute, among others, to **harmonization** of national policies, motivate **logistics improvements** for shippers and industries, promoting infrastructure improvements and use of the Corridor.



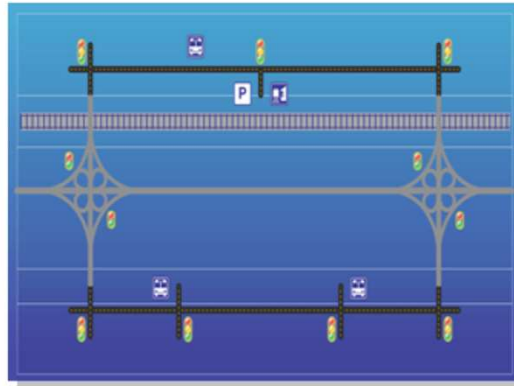
# The “Integrated Corridor Management (ICM)”

- Integrated management of freeway, arterial, transit and parking systems within a Corridor.
- Management of the Corridor as a **system**, rather than the more traditional approach of managing **individual assets**.

## ICM System (ICMS)

An **ICMS** is the set of procedures, processes, and information systems that support transportation system managers in making coordinated decisions involving the **optimal performance of transportation networks in a corridor**.

- Manage demand and balance loads across the networks by facilitating
  - Mode shifts
  - Route shifts
  - Departure/arrival time shifts
- Respond to events with coordinated multi-agency actions
  - Incidents
  - Construction
  - Special Events
  - Weather



## ***An integrated Mediterranean implementation strategy***

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- An innovative use of **domestic, public and private, sources** these is needed, in order to **leverage investments (infrastructure bonds, loan guarantees)**.
- **Private investment** must be attracted ensuring a competitive market based on clear **legislation and regulations**, improvement of **local skills**, better understanding of **PPP risk allocation**, enforcement of commercial law and **transparency in procurement**.



***Thank you for your time  
and your attention!***

***Salvatore D'Alfonso  
Rete Ferroviaria Italiana  
Innovative Projects***