The Medgrid initiative for the development of the Mediterranean Grid

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Medgrid

The Context

- **The MSP and the export of RES to EU**
- **Development of a euro-mediterranean grid**

- ***CO2 savings / climate protection***
- ***Reduction of cost – operation and investment***
- ***Reliability - interconnection an answer to intermittence***
- ***Security of supply – diversification of sources***
- ***Help funding RES investment in SEMCs***

A strong and smart grid is most efficient in the fight for climate change

Medgrid objective

Promote and facilitate the development of the Mediterranean Grid

- Prove that the grid is viable and prepare an environment conducive to investments

- Promote developments: technology, regulation, funding

- Support investors' initiatives

- **In cooperation with SEMCs**

A consortium of EU & SEMCs companies (TSOs, generators, manufacturers, financing institutions, investors)

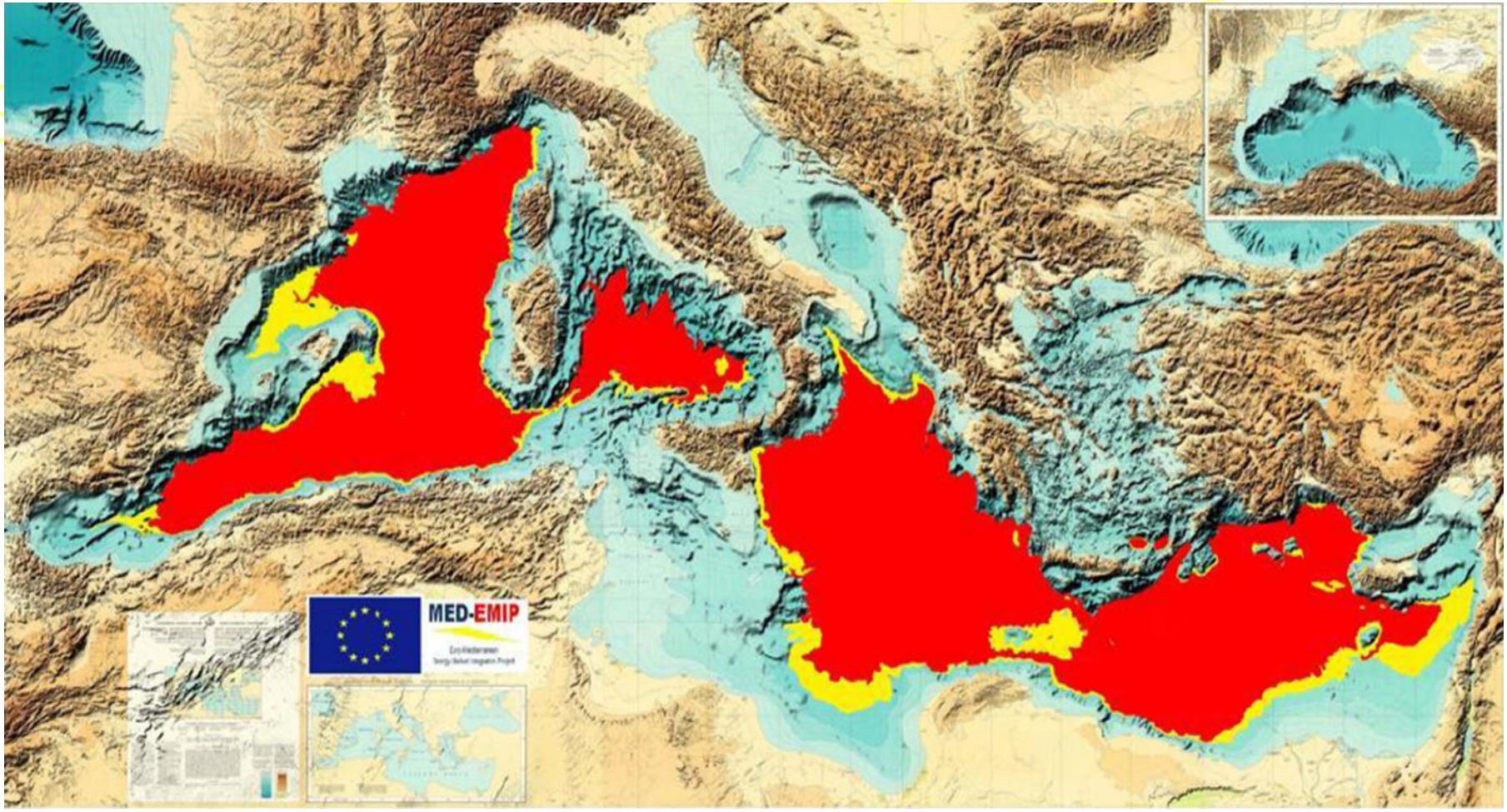
How?

- **We will define an reference optimal grid : the grid which enables the most efficient operation of the interconnected systems by 2020**

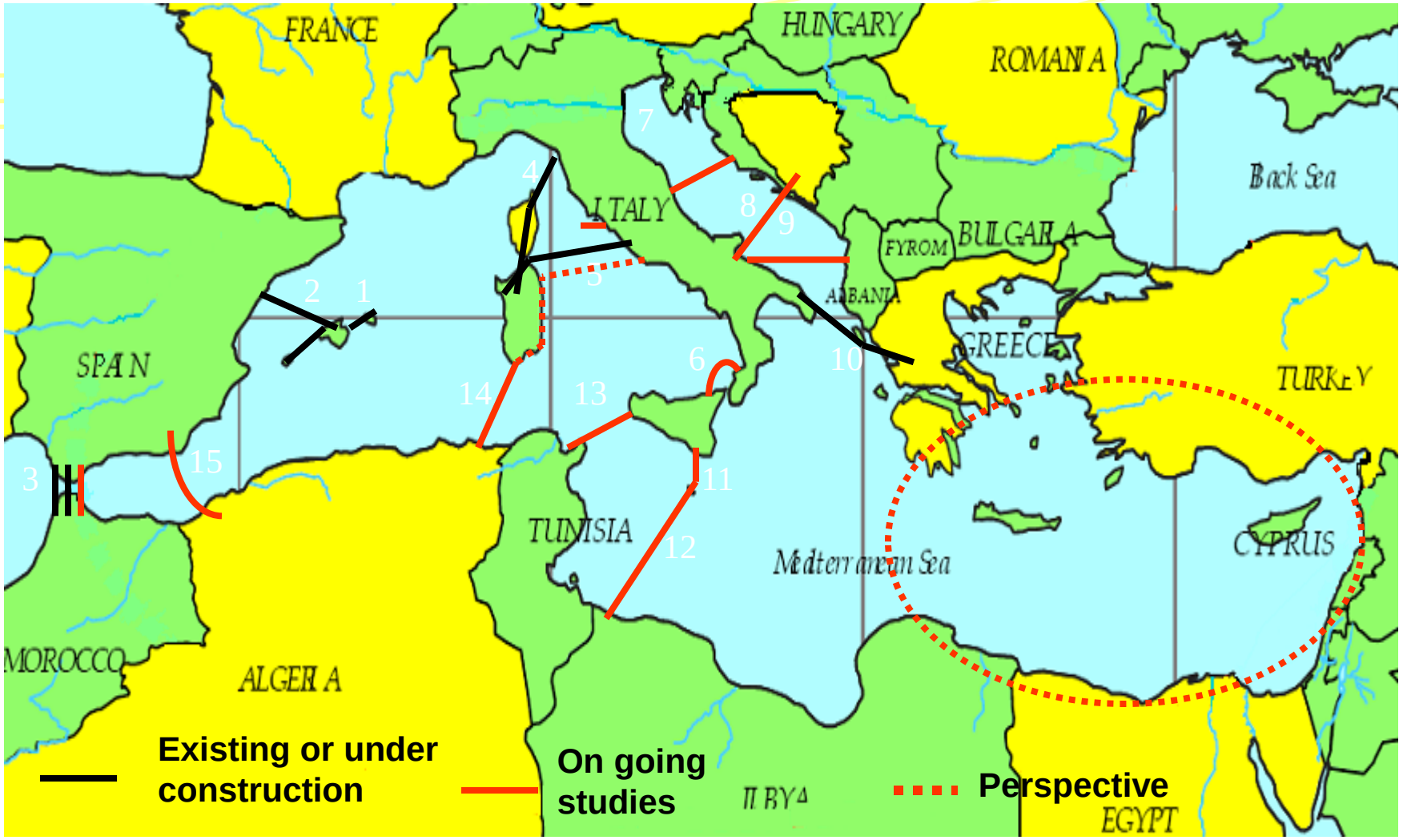
- ***Load and Generation "profiles" in EU and SEMCs 2020***
- ***Optimize generation ⟹ power flows in both directions***
- ***Costs of infrastructures, including induced reinforcements in transit systems***

Grid which results in minimum cost (Generation + Transmission)

The feasible submarine routes



Feasible submarine links



Assess the viability of the grid

- **Economical analysis**

  - ***Global benefit / social welfare***
  - ***Power flows and return on grid investment***
  - ***Robustness against hypotheses - scenarios***

- **Impact of funding conditions**
- **Impacts on local economies**

Assess the viability of the grid

- **Make exchanges with the EU possible**

- Promote basic regulations in SEMCs

- Analyze Art. 9 rule

- **Status of Transmission and cost of wheeling**
- **Technological developments**

- Laying cables in deep waters: > 2000m against 1650 m SAPEI

Results by end 2013 - mid 2014

www.medgrid-psm.com