MEDGRID, a co-development project for the exchanges of electricity in the Mediterranean basin (Part 2)

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Contents

🥝 Organisation

✦ On going activities
  ✦ Technical feasibility and technology studies
  ✦ Economic analysis
  ✦ Regulation and finance issues
Organisation

Close cooperation with the authorities of the countries involved, the EC, the scientific community, development banks & funds, NGOs.

5 working groups
Technical feasibility studies

- **Corridor approach**: West, Centre and East

- **Study cases**: how to increase the net transfer capacities of each corridor by 1, 2 or 3 GW by 2020-2025

- **Assessment of the technical and environmental feasibility**, including new interconnectors and reinforcements of existing systems
Existing submarine links and potential transmission projects

- Existing or under construction
- On going studies
- Perspective

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North-South corridors crossing the Mediterranean Sea

Red painted areas are below 2000 meter depth

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The three Mediterranean power corridors

Existing or under construction

On going studies

Perspective

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• **Awareness** of existing transmission technologies and future trends

• **Infrastructure cost assessment**, for investment and operation

• **Feasibility study** of submarine cable systems for depth of 2000 meters
Submarine HVDC Cables technologies

3D dynamic cable shapes are important
Working Group « Economic analysis »

- General economic and environmental scenarios for 2020 – 2025 set up.

- Data collection of Mediterranean power systems and grid.

- Simulation tool to assess potential economic flows between the Mediterranean power systems
Economic power flows simulation tool
Analysis of existing regulation frameworks in the Mediterranean countries and recommendations for harmonization.

Answers to European consultations (CEER, renewables, TYNDP, PIC…)

Support to projects of Associates: solar plant with exports from Morocco to France.

Report on grid utilization costs for MA-FR power exchanges.
Solar power transfer project between Morocco and France

Contracts between stakeholders:
- Generators
- MASEN
- ONE
- REE
- RTE
- Power traders
- Customer
- …

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Working Group « Finance »

- Legal analysis

- Recommendations for financing schemes and tools to finance power interconnections in the Mediterranean region:
  - Regulated vs merchant
  - Need for inter states agreements
  - Long term supply contracts vs groups of buyers
  - Diversification of finance sources
  - Construction of business and financing models
Conclusions

• Design of an economic and environmental analysis model for the Mediterranean system launched in 2011.

• Technical and environmental corridor feasibility studies launched in 2012.

• Global optimization study results expected beginning of 2014.

• Recommendations on regulations for grid investments.

• Business model and finance tools for grid investments.
Thank you for your attention.

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