EuroMed Economic Cooperation: Promises, Barriers and Opportunities

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Euro-Mediterranean Energy Forum was established in 1997. The purpose of the Forum covers both the objectives of reinforcing political dialogue between the Mediterranean Partners and, at the more technical level, promoting projects and measures of common interest.

A first Action Plan, covering the period 1998-2002 and approved during the Euro-Mediterranean Ministerial Conference held in Brussels in May 1998, set several priorities and initiatives. Among those, the creation from 2000 of three ad-hoc working groups, on the topics of Energy Policy, Interconnections and Economic Analysis, was foreseen.

The three main objectives around which the actions and priorities should focus in the energy sector are identified in the Action Plan 1998-2002 as the following:

- security of supply, through the development and diversification of energy sources and a close international co-operation;
- competitiveness of the energy industry, in view of the free-trade area planned by 2010 and through enhanced industrial production;
- Protection of the environment, by securing safe and clean production, transport and use of energy, and by encouraging energy efficiency and renewables.

The so-called **Trans-Euro-Mediterranean Networks, to ensure gas and electricity interconnections South-South and South-North in the region, have been identified as a clear priority.**

The Mediterranean Electricity ring will link all the countries of the Euro-Med process. This ring is not yet completed. This ring needs to be complemented and strengthened by direct links between a number of Med-Ring countries and the EU. It is important to make rapid progress on a number of links that will complete the ring, and a number of lines that will provide effective levels of connection between the ring and the EU. Regarding the latter, the following links are the most important, and have been identified in the Ad Hoc Energy Groups and the EUROMED Energy Forum:

- reinforcement of the capacity between Morocco and Spain;
- reinforcement of the capacity between Greece and Turkey;
- interconnection between Algeria and Spain; and
- interconnection between Italy and Tunisia.

The Mediterranean Electricity Ring should be viewed as Priority Projects of European Interest, and should be eligible for support under the TENs programme and MEDA, together with a number of projects necessary for the completion of the Mediterranean Ring set out in annex 1 to this Communication.

Euro-Mediterranean

– Links between France and Spain to Algeria creating a second “Medgaz”

– Links between Algeria to Italy and France through Sardinia and possibly Corsica;

– An EU - Arab gas link in five parts (Egypt-Jordan; Syria; Lebanon; Cyprus and Turkey), necessitating an agreement between the participating parties;

– Supply to the enlarged European Union and, in particular the Baltic region, of LNG from Egypt and Algeria;

– A Turkey-Greece-Italy interconnection drawing in the countries of South East Europe directly or indirectly, which would in time bring the resources of the Caspian region and Iran to the enlarged EU market and the Balkans:

– Interconnexion gazière Libye-Egypte pour compléter l’anneau gazier méditerranéen.

Oil

A number of pipelines already link the European Union with Russia and it is important to ensure that not only are these fully utilized, but also that new pipeline infrastructure are considered instead of new maritime-based projects.

Other pipelines could ensure that the resources from Saudi Arabia (transiting via Egypt), Iraq (via Turkey), the Caspian Basin, Algeria and Libya could reach the European Union market.

ANNEX I – EU-MEDITERRANEAN PROPOSED ELECTRICITY PROJECTS.

Electricity Projects to be declared Priority Projects of European Interest or Pan-European Interest (as applicable)

In order to ensure the full interconnection between the European Union and its neighbouring countries the following projects merit Community support:

1.1. Morocco - Spain

The project will reinforce the interconnection between the Moroccan power grid (Mellousa s/s) and the Spanish power grid (Puerto de la Cruz s/s) by a second AC link passing through the Straight of Gibraltar.

The project is in the engineering and design phase, the interconnection being expected to be in operation by 2005. The total cost of the project is estimated

to be 120 M€. The Morocco investment amounts to 58 M€ (ONE 18,7%, BEI 38,7%, BAD 26,6% and AFD 16%). 1.2. Morocco - Algeria
The addition of a 400 kV line between Morocco (Bourdim s/s) and Algeria (Hassi Ameur) is foreseen for 2003 with reinforcement of the internal connections (from East to West) at 400 kV by 2005. This infrastructure will promote the market and commercial relations among these two countries and will permit transit of Algerian new production.
Estimated cost 40 million €
1.3. Algeria – Tunisia
Tunisia is presently interconnected with Algeria through 4 lines (one at 225 kV, one at
150 kV and two at 90 kV). The fifth interconnection, which is under construction, is
rated at 400 kV but will be temporally operated at 225 kV (by 2002). The link is rated for
1720 Amp. Internal reinforcements are foreseen in Algeria so as to arrive to the closure
of the 400 kV ring from West to East. Estimated cost 13 million€
30 See Annex X for futher details of the projects in question.
34
1.4. Algeria – Spain
The study of a HVDC connection from Algeria (Terga s/s) to Spain (Litoral de Almeria
s/s) through submarine cable (connection of about 200 km) is on a prefeasibility stage.
Such a cable is particularly relevant as the construction of 2000 MW of new generation is
planned in Algeria, 1200 MW of which for export. The cable is envisaged to have a
capacity 500 kV with a first phase of 1000 MW to be commissioned by 2005 and a
second phase to be commissioned by 2010. Estimated cost 700 million€
1.5. Algeria – Italy
The project of a potential interconnection link between Algeria (Skikda s/s) and Italy
(Cagliari Sud s/s) is on a pre-feasibility stage. An agreement has been signed between the
two countries for allowing the respective grid operators, GNERC and SONELGAZ to

carry out a feasibility study. The cable is envisaged to have a capacity of 400-500 kV and could be in operation by 2010. Estimated cost 535 million €

1.6. Tunisia - Libya

The electric interconnection of Tunisia and Libya is beneficial for the electric power systems not only of the two countries directly involved, but also of other countries in the region, as it will allow for the transfer of electricity between Eastern and Western Mediterranean countries. A reinforcement of the existing interconnection is presently under study. Estimated cost 40 million €

1.7. Tunisia - Italy

This potential project for the interconnection of the Tunisian and the Italy electric grids would be rated for 400 or 500 kV and would be in operation by 2010. Estimated cost 500 million €

1.8. Libya - Egypt

The existing interconnection between the electric grids of Libya and Egypt needs to be significantly reinforced. The project is under study, considering a link of 162 km, which could be in operation by 2010 with an expected transfer capacity of 500 MW. Estimated cost 77 million €

1.9. Egypt – Jordan

The existing 400 kV interconnection between Egypt and Jordan through submarine cable, with a current transfer capability of 300 MW, needs to be reinforced, probably doubling the present interconnection capacity. The new link rated for 400 kV could be in operation by 2008. Estimated cost 110 million €

1.10. Jordan - Syria

A second stage of the Jordan - Syria interconnection is expected to be commissioned by 2010. The feasibility study was carried out in 1992 and updated in 1995 for the Egypt-

Iran-Jordan-Syria-Turkey (EIJST) interconnection. The total cost of the project amounts to 1,8 MUS$. estimated cost 33 million €

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1.11. Lebanon – Syria

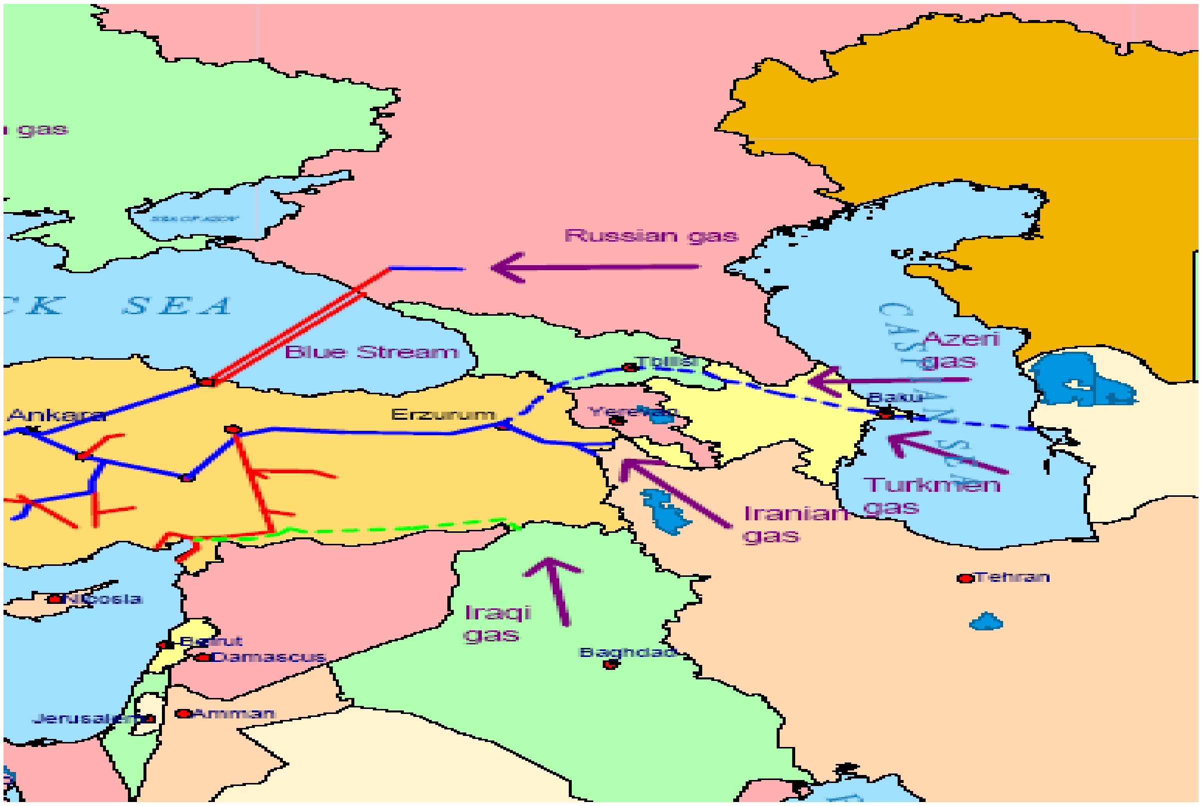
The two countries, already interconnected at the 230 kV level, will be linked with a double circuit 400 kV OHL. This new line, to be commissioned during 2003, will help in relieving the energy deficit of Lebanon. Estimated cost 11 million €.

1.12. Syria - Turkey

The connection between the Syrian and Turkish electric grids has been delayed since the end of 1997, with the completion of the Turkish part of an interconnector. When completed, the countries will be connected by a single 400 kV. The commissioning of the link requires the completion of the line in Syria. Estimated cost 50 million €

1.13. Turkey – Greece

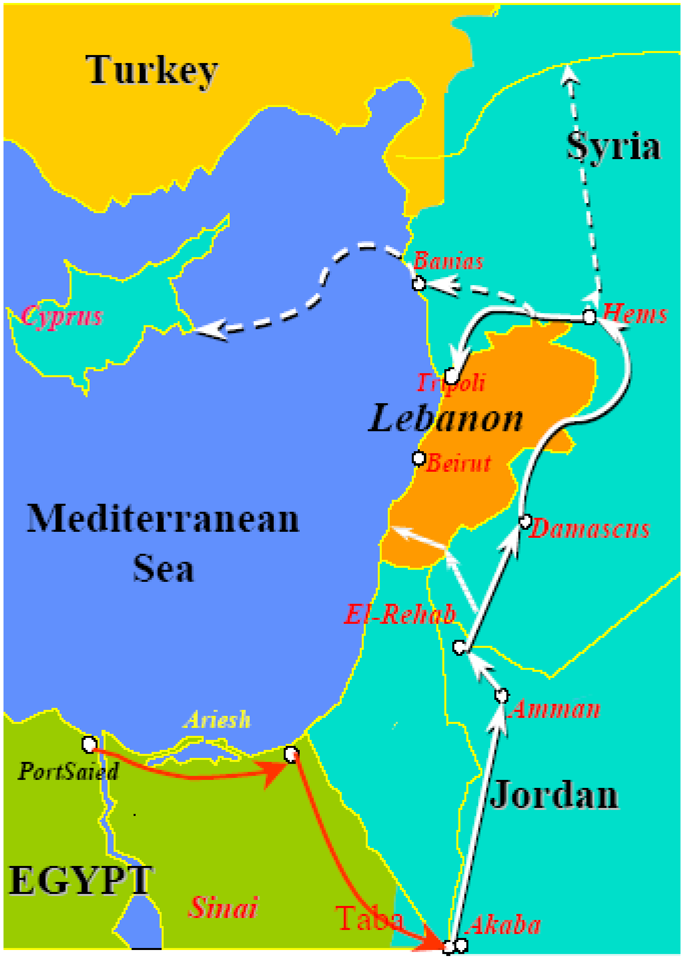
The study on "Feasibility and Evaluation of the Electricity interconnection Greece -Turkey", partially financed by TEN program has been completed. Based on the very promising results of this study, a Memorandum of Understanding was signed on 28th March 2002 in Ankara, for construction of Babaeski - Filippi 400 kV tie line between Greece and Turkey which is to be completed before the end of 2006. Estimated cost 54€ million.



10.4.2 Baku-Tbilissi-Ezurum Pipeline

Link :	**Azerbaidjan to Turkey**		
Gas source:	**Shah Deniz field**		
Capacity:	**22 Bcm**		
Average flow	**7.6 Bcm committed**		
Estimated Cost pipeline an compression	**875 million €**		
Pipeline Route	Length Km	Diameter inches	
Baku- Georgia border	455	48''	
Georgia border- Turkey	245	48''	
Turkish border –Erzurum	225	48''	
	925		

10.7 NG7 – East Mediterranean Gas Ring



10.7.1 Arab gas pipeline from Egypt (NG7b)

Project description

Link :	**Egypt to Mashreq countries**	
Gas source:	Egypt fields Nile Delta	
Capacity:	10 Bcm	
Phase 1	Egypt to Jordan	Port Said- El Arish -Aqaba
Phase 2	Jordan	Aqaba –Amman -Rehab
Phase 3	Jordan to Syria	El Rehab –Damascus -Homs
Phase 4	Syria to Lebanon	Damas -Zahrani
Phase 5	Syria to Cyprus	Banias -Cape Greco
Phase 6	Syria to Turkey	
Total estimated cost	**1.6 billion €**	

Pipeline Route	**Length Km**	**Diameter inches**
Phase 1	441	30"
Phase 2	370	30"
Phase 3	450	30"
Phase 4	195	30"
Phase 5	266	16"
Phase 6	380	

Project Status

o Phase 1 completed:Port Said –El Arish line (Sinai line) completed in March 2000, El Arish Aqaba completed end 2003

o Phase 2 Aqaba –Amman –Rehab ready to start construction and completion expected by early 2005

o Agreement signed in August 2002 between Energy Ministers of Egypt, Jordan, Syria, and Lebanon to monitor phases 3 and 4 to Lebanon and Syria.

10.4.6 Gas supplies from Iran.

With almost unlimited natural gas production potential, Iran is looking to export large
volumes of gas. Besides Turkey, potential customers for Iranian gas exports include: Greece,

Italy, Balkans countries, Bulgaria and Ukraine. Exports could be either via pipeline or by
LNG tanker, with possible LNG export terminals at Asaluyeh or Kish Island. Iran reportedly
is developing three LNG plants. Liquefaction Plant Cost around 1.0 billion € an tanker's
development around 350 million €. (for an average flow of 5 bcm)
Exports of Iranian natural gas to Turkey were at about 105 Bcf in 2002, rising to 350 Bcf per
year by 2007.
Greee and Iran signed an agreement in March 2002 which calls for extending the natural gas
pipeline from Iran to Turkey into Greece. The line would connect Ankara to Komotini in
northern Greece. After that, gas could be transported to Europe via Bulgaria or via an
undersea pipeline to Italy, where gas demand -- especially for electric power generation -- is
expected to grow rapidly in coming years.
In December 1997, Turkmenistan launched the $190-million Korpezhe-Kurt Kui pipeline to
Iran. The 124-mile pipeline, which had an initial capacity of 141 Bcf, will have a peak
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capacity of 282 Bcf of natural gas per year. In 2000, Iran imported 106 Bcf from
Turkmenistan via the pipeline, with that figure increasing to 154 Bcf in 2001.
All those interconnections will allow in the near future imports of gas from the Caspian
region to the enlarged European Union.
10.5.1 Interconnections from Iraq.
Iraq contains 110 trillion cubic feet (Tcf) of proven natural gas reserves, along with roughly
150 Tcf in probable reserves. Since most of Iraq's natural gas is associated with oil, progress
on increasing the country's oil output will directly affect the gas sector as well.
Main sources of associated natural gas are the Kirkuk, Ain Zalah, Butma, and Bai Hassan oil

fields in northern Iraq, as well as the North and South Rumaila and Zubair fields in the south.
Iraq's only non-associated natural gas production is from the al-Anfal field (200 Mmcf/d of
output) in northern Iraq. Al-Anfal production, which began in May 1990, is piped to the
Jambur gas processing station near the Kirkuk field, located 20 miles away. Al-Anfal's gas
resources are estimated at 4.5 Tcf, of which 1.8 Tcf is proven. In November 2001, a large
non-associated natural gas field was discovered in the Akas region of western Iraq, near the
border with Syria, and containing an estimated 2.1 Tcf of natural gas reserves.
Besides al-Anfal, Iraq has four large non-associated natural gas fields (Chemchamal, Jaria
Pika, Khashm al Ahmar, Mansuriya) located in Kirkuk and Diyala provinces. In February
2000, Iraq's Oil Ministry named Agip and Gaz de France as leaders on a project to develop
these fields, which have total recoverable reserves of more than 10 Tcf.
Currently, Iraq has a major natural gas pipeline with the capacity to supply around 240
MMcf/d to Baghdad from the West Qurna field. The 48-inch line was commissioned in
November 1988, with phases II and III of the project never completed due to war and sanctions. The last two phases of the pipeline project were meant to supply Turkey. Iraq's Northern Gas System, which came online in 1983, was damaged during the Gulf War as well as by the Kurdish rebellion of March 1991.

10.6 NG6 - Gas supplies from Libya.
Potential exists for a large increase in Libyan gas exports to Europe.
A joint venture between Eni and NOC on the Western Libyan Gas Project (WLGP) aimed at
developing and exporting large volumes of natural gas to Italy, is moving ahead. Overall, the
WLGP calls for Libya to export 8 billion cubic meters (280 Bcf) per year of natural gas from

a processing facility at Melitah to Italy and France over 24 years, beginning in 2004, via a 370-mile underwater pipeline (called "Green Stream") under the Mediterranean to southeastern Sicily and the Italian mainland.
To date, Italy's Edison Gas has committed to taking around half (140 Bcf) of this gas, and to use it mainly for power generation in Italy. Besides Edison, Italy's Energia Gas and Gaz de France have each committed to taking around 70 Bcf of Libyan gas. As part of the overall WLGP, Agip-ENI is set to develop huge Libyan gas reserves in offshore Block NC-41 in the Gulf of Gabes, as well as in the Wafa onshore gas (and oil) field on the Algerian border.
Feasibility studies have been completed on Wafa and NC-41, and gas is expected to begin flowing by mid-2004. The project also is expected to produce condensates estimated at around 70,000 bbl/d oil equivalent.
Agip-ENI also has promoted linking the reserves of both Egypt and Libya to Italy by pipeline.
An agreement in principle to link Egypt and Libya's natural gas grids was reached in June 1997, following a visit to Libya.
Yet another proposal is to build a nearly 900-mile pipeline from North Africa to southern Europe. Such a pipeline could transport natural gas from Egypt, Libya, Tunisia and Algeria, via Morocco and into Spain (a pipeline between Morocco and Spain already exists). Also, Tunisia and Libya agreed in May 1997 to set up a joint venture which will build a natural gas pipeline from the Mellita area in Libya to the southern Tunisian city and industrial zone of Gabes. In late 1998, Tunisia and Libya signed an agreement for around 70 Bcf of gas per year to be delivered from Libyan gas fields to Cap Bon, Tunisia beginning in 2003.
No estimated cost available yet.

FEMIP
Financing in Mediterranean Partner Countries

Established following the Barcelona European Council (March 2002), the EIB's FEMIP (Facility for Euro-Mediterranean Investment and Partnership) accords special priority to the development of private-sector economic activity and to projects contributing to the creation of a favourable climate for private investment. Its aim is to assist the Mediterranean Partner Countries (MPCs) in meeting the challenges of social and economic modernisation and improved regional integration, looking ahead to the Euro-Mediterranean free trade area planned for 2010.

FEMIP represents a major development of the Euro-Mediterranean Partnership. The Council's decision to entrust the EIB with strengthening the financial component of the Euro-Mediterranean Partnership was grounded in the EIB's long-standing experience in the MPCs: between 1974 and 2001, the Bank lent a total of EUR 12.6 billion in these countries. FEMIP's objectives are:

Extensive involvement of the MPCs in FEMIP policy with the creation of the Ministerial Committee Meetings and opening of regional offices in the Mashreq and Maghreb countries;
Primary focus on development of a wealth and job-creating private sector;
Promotion of investment in human capital;
Greater technical assistance for the design of quality projects and the process of economic reform in the MPCs;
Deployment of innovative financial products and risk capital;
Gradual increase in the annual volume of EIB activities in the MPCs from EUR 1.4 to 2 billion.
By 2006, the EIB plans to invest between EUR 8 and 10 billion in the MPCs via existing Mediterranean lending mandates, risk capital resources from the EU budget, as well as technical assistance and investment aid funds provided by the Union.

FEMIP is implemented by the EIB in close cooperation with all participants in the region's development: the European Commission, the banking community in Europe and the beneficiary countries, World Bank, IFC, AfDB, and other multilateral and European bilateral development finance institutions.

The Euro-Mediterranean financial partnership (FEMIP)

In 2003, the first full year of activity since the launch of the Facility for Euro- Mediterranean Investment and Partnership (FEMIP), lending in the 10 Mediterranean Partner Countries (MPC) reached the record figure of almost Euro 2.1 billion, confirming the Bank's position as a major player in fostering the region's economic development and stability.

Focus on the private sector and infrastructure

· EIB activity in the Mediterranean region reflects the high priority accorded to FEMIP's objectives: more than one third of operations directly promoted the growth of private businesses, through support for foreign direct investment (Turkey, Tunisia) or joint ventures resulting from cooperation between MPC promoters (Algeria), or through SME financing via creation of a regional venture capital fund.

· Loans also targeted infrastructure projects, including in the energy and environment sectors, underpinning private sector development in Morocco, Algeria, Egypt, Lebanon and Syria.

FEMIP represents a major step forward in economic and financial cooperation between the Union and the MPC. Its priorities include:

· Extensive involvement of the MPC in FEMIP policy-making through the holding of ministerial-level meetings (Policy Dialogue and Coordination Committee – PDCC) and opening of regional offices;

· Development of the private sector;

· Promotion of investment in human capital;

· Greater technical assistance;

· Deployment of innovative financial products and risk capital;

· Gradual increase in the annual volume of EIB lending in the region.

In December 2003, the Brussels European Council decided to augment FEMIP, by means of a number of measures in support of private sector development:

· Allocation of a maximum of 200 million from the Bank's reserves to the expansion of risk-sharing operations up to 1 billion, and better structuring of lending to mitigate private sector risks (special FEMIP envelope);

· Improved dialogue on the structural reform process to enhance the environment for private sector activity.

A decision on whether to incorporate an EIB majority-owned subsidiary dedicated to the Mediterranean Partner Countries will be taken in December 2006 on the basis of an evaluation of the reinforced FEMIP's performance and taking account of the outcome of consultations with the Barcelona Process partners.

ME Reconstruction & Development bank

Lessons for emerging countries

1. Financial Mechanisms for Accession can Contribute towards Convergence between the Rich and Poor Countries and Regions if they are Effective and Provided in Adequate Levels

2. Countries joining the European Union have been able to Influence the terms of their Accession

3. **Institutional Innovation will be Important and Decentralization of Decision-making and Distribution is a Key Success Factor**

Policies designed to improve economic and social cohesion among member states are also very important in political terms. First, they help to unite member countries around a common goal. In the European context, for example, there has always been a strong sense of a European model of society, comprising elements such as a social market economy, free trade, democratic systems and social cohesion. The financial mechanisms to support regional integration in the EU are very much based in upholding this model of society. Second, cohesion policies are important in order to maintain the support of poorer and weaker states and regions for the trade integration project.