

The Euro-Arab Mashreq Gas Market Project



Project Summary



contribute to the integration of the gas markets of Egypt, Jordan, Lebanon & Syria in view of creating a regional internal gas market to be integrated with the EU Internal Gas Market”

Duration

33 months, from 1st February 2006 to 31st October 2008

Budget

€7 million, of which EU grant €6 million, beneficiary countries €1 million in kind contributions

Beneficiaries

Egypt, Jordan, Lebanon, Syria (Iraq and Turkey as observers)

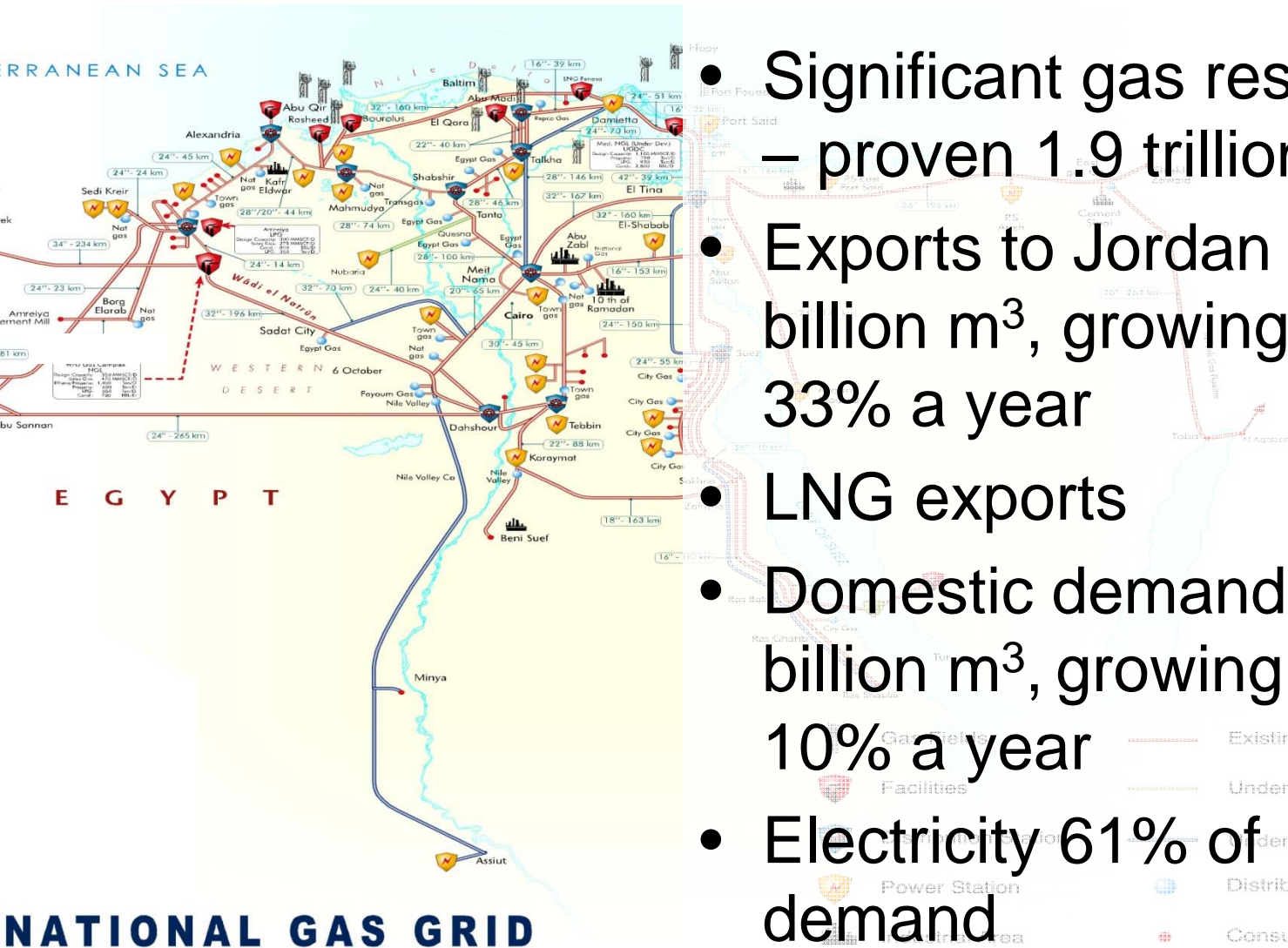
Implementing Mechanism

The Euro-Arab Mashreq Gas Co-operation Centre, headquartered in Damascus

Methodology

Gas Master Plan, Legislation/Regulation, Know-How Transfer

Snapshot of the Gas Sector - Egypt



- Significant gas reserves – proven 1.9 trillion m³
- Exports to Jordan 1.5 billion m³, growing at 33% a year
- LNG exports
- Domestic demand 34 billion m³, growing at 10% a year
- Electricity 61% of demand

Snapshot of the Gas Sector - Jordan



Gas Balance 2004	billion m ³
Gas Production	0.27
Domestic Consumption	1.45
Imports	1.18
Exports	0
Gas In Electricity Generation	1.24

- Small domestic production – reserves 0.007 billion m³
- Imports from Egypt via AGP
- Consumption driven by electricity demand, forecast to grow at 2.8% a year
- Transit country for AGP

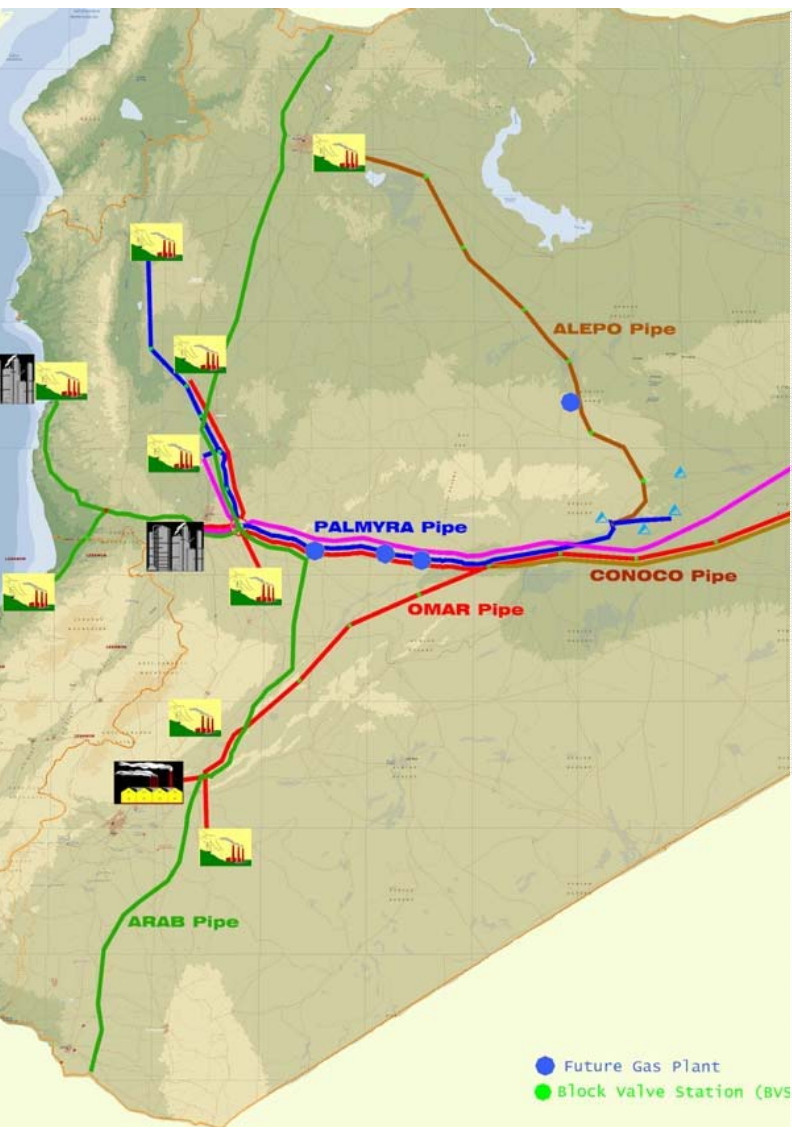
Snapshot of the Gas Sector – Lebanon



- No gas reserves
- No gas consumption as yet – energy costs very high
- Will import from Syria and Egypt to supply Beddawi and Zahrani power stations - up to 2.2 billion m³ a year



Snapshot of the Gas Sector - Syria



- Proven reserves 0.34 trillion m³
- Domestic demand 6.29 billion m³
- Electricity 87% of demand, growing at 6% a year
- Exports to Lebanon yet to start

Syrian Gas Network

PHASE I	PHASE III
OMAR TO TRISHIN	BVS 908 TO WAHARDA
LENGTH: 120 KM	LENGTH: 205 KM
DIAMETER: 24 INCH	DIAMETER: 18 INCH
CAP: 150 MMSCFD	CAP: 150 MMSCFD
DESIGN PRESSURE: 110BAR	DESIGN PRESSURE: 110BAR
OPERATING PRESSURE: 102BAR	OPERATING PRESSURE: 102BAR
ARAK, HOMS, TARA, ZAIDON	TOTAL LENGTH: 520KM
LENGTH: 325 KM	DIAMETER: 30INCH
DIAMETER: 24 INCH	DESIGN OPERATING PRESSURE: 50bar
CAP: 6 MMSCFD	MAX CAP: 2.0MMSCFD
DESIGN OPERATING PRESSURE: 75 BAR	
Homs-Tripoli Pipeline	INTEGRATED DEIGAS Pipeline
305km-24"	240km-18"
Homs Banias Pipeline	Palmyra-Aleppo Pipeline
135km-24"	240km-24"
DESIGN PRESSURE: 75 BAR	DESIGN PRESSURE: 75 BAR

Arab Gas Pipeline



**A strategic priority
for the region**

**Third Stage
Rehab-Damascus
Damascus-Homs -
Turkey
Homs-Baniyas/Lebanon
Border**

**Second Stage
Aqaba/Rehab**

**First Stage
Aresh/Taba/Aqaba**

Arab Gas Pipeline



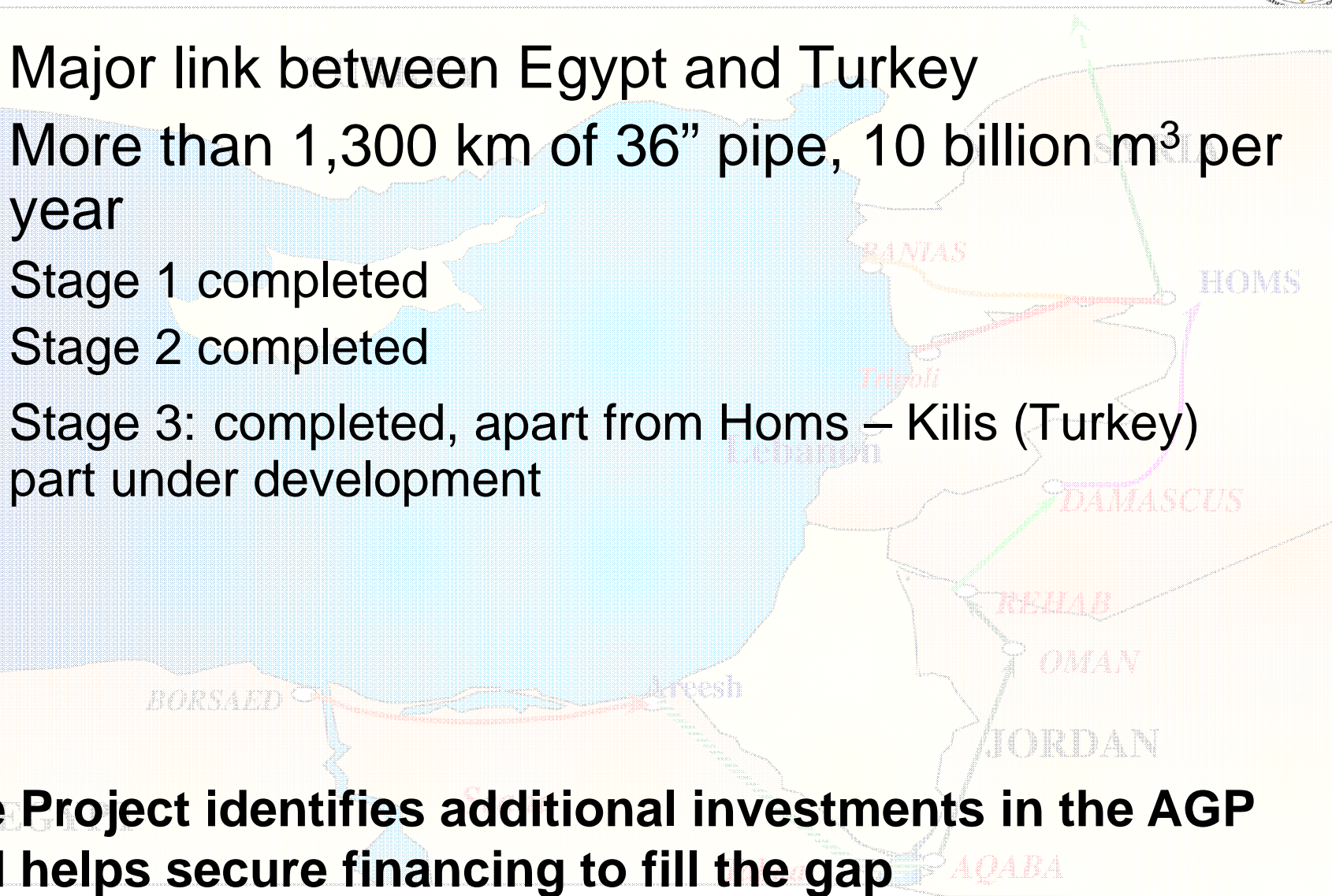
Major link between Egypt and Turkey

More than 1,300 km of 36" pipe, 10 billion m³ per year

Stage 1 completed

Stage 2 completed

Stage 3: completed, apart from Homs – Kilis (Turkey)
part under development



Project identifies additional investments in the AGP
helps secure financing to fill the gap

Other Projects



AGP, while very important, is not the only potential investment

Future Iraq and Iran could become major gas suppliers

There is also potential for links to the southern gas fields (Iraq, Saudi Arabia...)

The Project identifies and prioritises the most important infrastructure requirements

Project Objectives

Objectives of the Project



- Complete connecting infrastructure
 - Identify and develop strategic infrastructure projects
 - Improve market structure
 - Align regulatory frameworks
 - Facilitate trade
 - Expand business opportunities
- Promote the efficient use of gas
 - Encourage industrial/commercial conversion to gas
 - Increase technical knowledge
 - EU technology, culture & best practice
 - Improve technical & management skills
 - Know-how transfer

Benefits of the Project



Everybody wins!

Egypt

- New markets for gas
- Export earnings

Jordan

- Access to gas supplies
- Transit earnings

Lebanon

- Access to gas supplies
- Cheaper and cleaner energy

Syria

- New markets for gas
- Transit earnings

EU

- New source of gas
- Improved energy security

Methodology

Methodology



Component 1: Gas Master Plan

Task 1: Gas Master Plan

analyse gas sector
market studies
generation studies
demand analysis
supply analysis
supply vs demand
regional institutional
framework
scenarios
optimal strategies
A, investment needs

Task 2: Network Development Strategy

- Infrastructure
- Prioritise key projects
- Economic/financial analysis
- Investment & financing plans
- Recommended projects
- Present to IFIs

Task 3: Feasibility Studies

- Complete AGP
- Other key projects
- Present to IFIs

Include:

- Technical/engineering
- Environment
- Market
- Cost
- Institutional
- Economic/financial
- Risk analysis

Methodology



Component 2: Legislation

Task 4: Legislation Survey

analyse gas, other relevant legislation
legislative survey

Identify:
commonalities
conflicts
gaps
compatibility with EU

Task 5: Reform Proposals

- Market organisation (including regulation)
- Security & safety standards
- Tariffs
- Conflict resolution
- Sector unbundling

➔ Proposals for legislative & regulatory reforms

Task 6: Prepare Reforms

Legal assistance to facilitate the reforms

Include:

- Examples of legislation
- Workshops

Methodology



Component 3: Know-How Transfer

Task 7: Establish EAMGCC

Establish EAMGCC Work Programme & Budget Partner countries

Task 8: Know How Transfer Programme
Identifying needs analysis
Know How transfer programme

Identify EAMGCC and its stakeholders

Task 9: EU Internal Market Legislation

Task 10: Creation of New Production-Transport-Distribution-Supply System

Tariffs	Billing & customer accts
Organisation & Training	Planning
Management & accounts	Contracts

Task 11: EU Gas Sector Technology

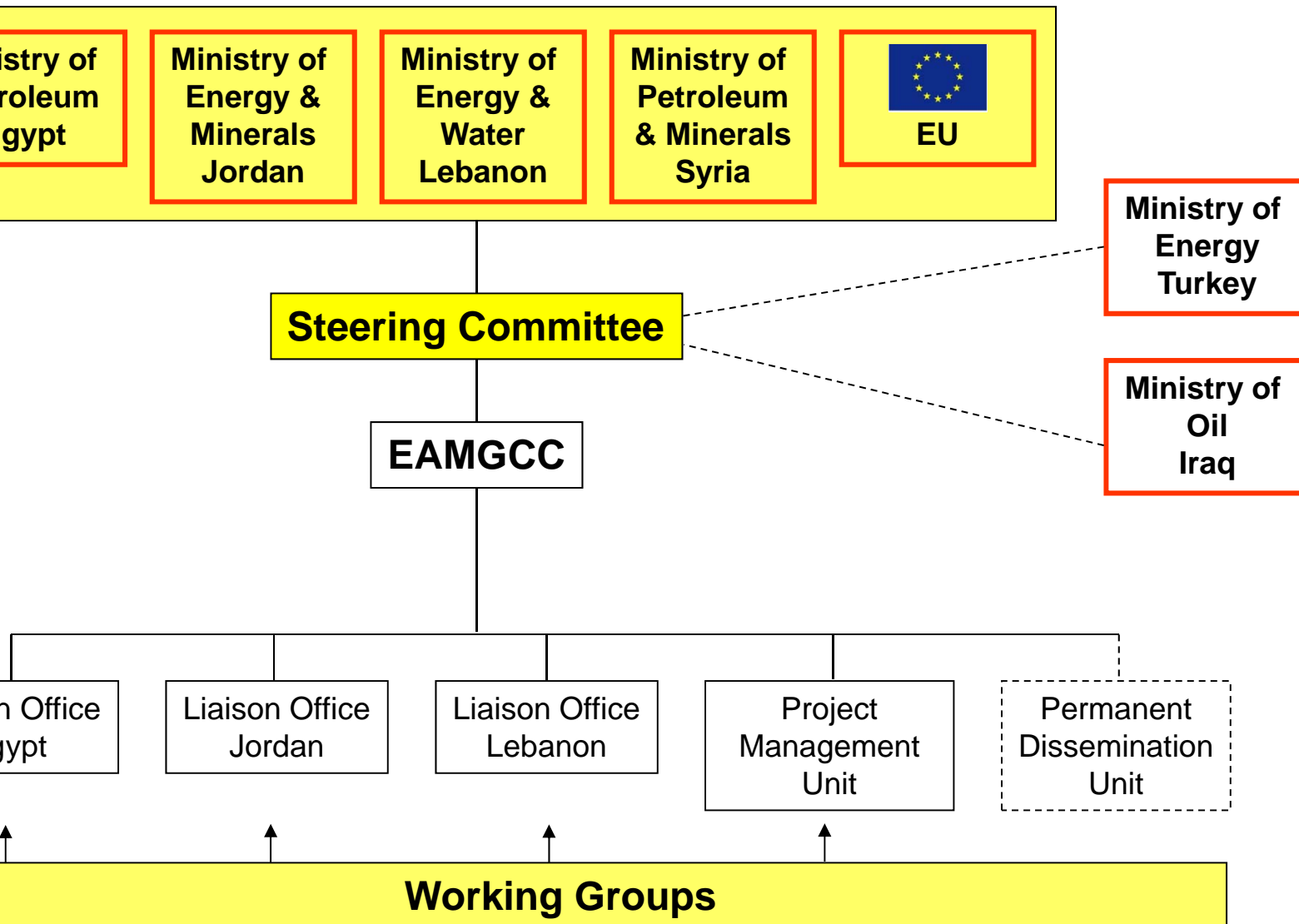
Task 12: Advice/Exchange of Information Agreements

Task 13: Permanent Dissemination Unit

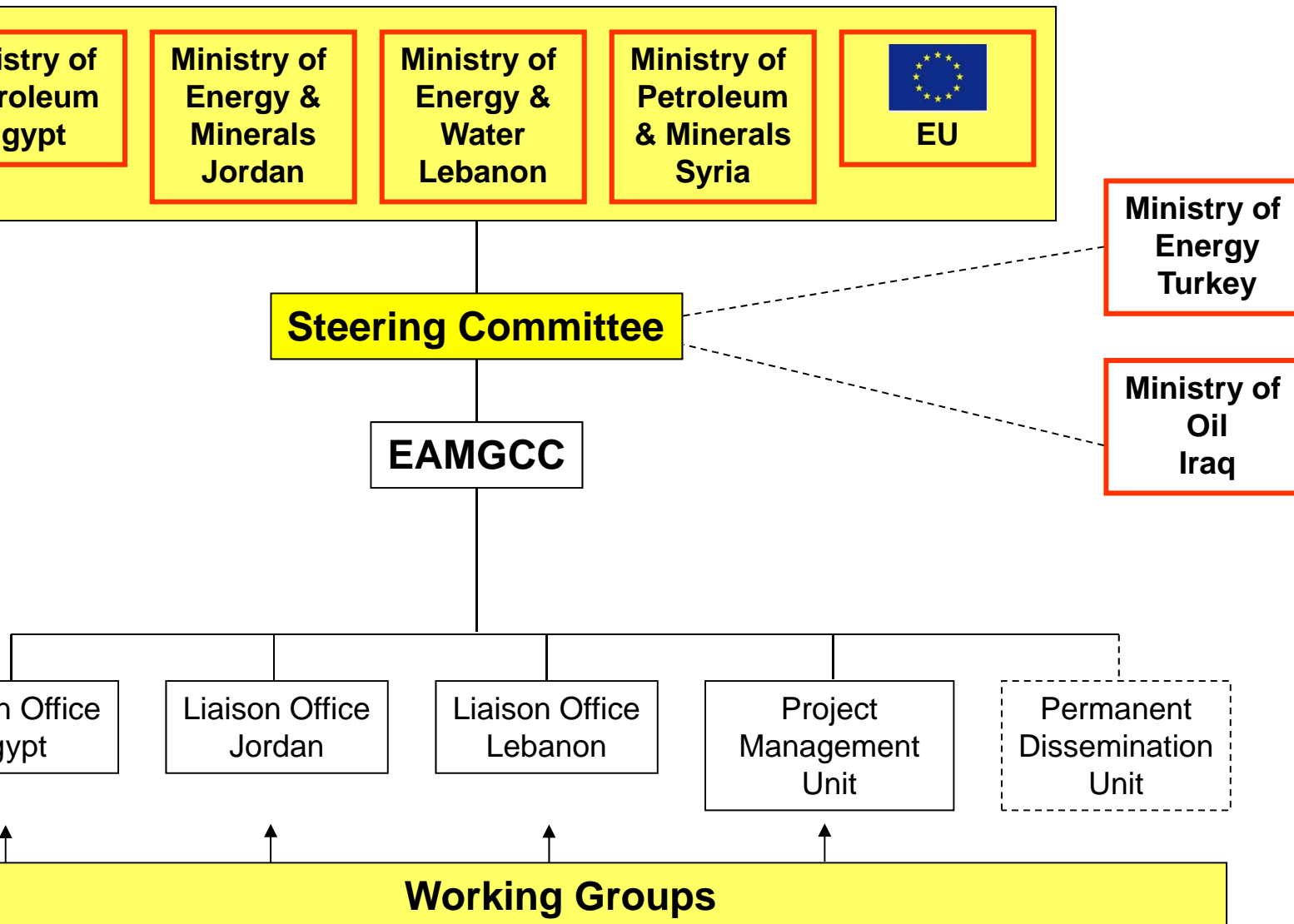
Round Tables

Organisation

Organisation



Organisation



e Consortium



Technical assistance is provided by a highly qualified team



design, implement
gas & electricity
markets
largest practice in
Europe
skills in law,
regulation, finance,
economics
Part of Dar Al
Handasah Group



- Leading independent engineering & design
- Specialise in oil & gas
- Skills in project planning, finance, management, engineering & operations
- Part of Dar Al Handasah Group



- Part of the prestigious National Technical University of Athens
- Multidisciplinary scientific unit
- Expertise in training and knowledge transfer